

THE ISRAELI AIR STRIKE

HEARINGS
BEFORE THE
COMMITTEE ON FOREIGN RELATIONS
UNITED STATES SENATE
NINETY-SEVENTH CONGRESS
FIRST SESSION
ON
THE ISRAELI AIR STRIKE
AND RELATED ISSUES

JUNE 18, 19, AND 25, 1981

Printed for the use of the Committee on Foreign Relations



U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON: 1981

81-843 O

5381-40

COMMITTEE ON FOREIGN RELATIONS

CHARLES H. PERCY, Illinois, *Chairman*

HOWARD H. BAKER, JR., Tennessee

JESSE HELMS, North Carolina

S. I. HAYAKAWA, California

RICHARD G. LUGAR, Indiana

CHARLES McC. MATHIAS, JR., Maryland

NANCY L. KASSEBAUM, Kansas

RUDY BOSCHWITZ, Minnesota

LARRY PRESSLER, South Dakota

CLAIBORNE PELL, Rhode Island

JOSEPH R. BIDEN, JR., Delaware

JOHN GLENN, Ohio

PAUL S. SARBANES, Maryland

EDWARD ZORINSKY, Nebraska

PAUL E. TSONGAS, Massachusetts

ALAN CRANSTON, California

CHRISTOPHER J. DODD, Connecticut

EDWARD G. SANDERS, *Staff Director*

GERYLD B. CHRISTIANSON, *Minority Staff Director*

(II)

CONTENTS

Hearing days:	Page
June 18, 1981-----	1
June 19, 1981-----	101
June 25, 1981-----	183
Statement of—	
Akins, Hon. James, former U.S. Ambassador to Saudi Arabia-----	255
Bingham, Hon. Jonathan, a Representative in Congress from New York-----	184
Carnesale, Albert, John F. Kennedy School of Government, Harvard University, Cambridge, Mass-----	159
Kouts, Dr. Herbert, chairman, Department of Nuclear Energy, Brookhaven National Laboratory, Upton, N.Y-----	104
Kratzer, Myron, International Energy Associates, Ltd., Washington, D.C-----	162
Lantos, Hon. Tom, a Representative in Congress from California-----	196
Mallison, William Thomas, professor of law and director of the International and Comparative Law Program, George Washington University, Washington, D.C-----	219
Malone, Joseph J., president, Middle East Research Associates, Inc., Washington, D.C-----	257
Markey, Hon. Edward J., a Representative in Congress from Massachusetts-----	193
Martin, Ben L., University of Missouri, Columbia, Mo-----	270
McFarlane, Robert, counselor, Department of State, accompanied by Nicholas Veliotes, Assistant Secretary of State for Near Eastern and South Asian Affairs; Ronald Spiers, Director, Bureau of Intelligence and Research; and James Michel, acting legal adviser-----	30
Moore, John Norton, Walter L. Brown professor of law and director, Center for Law and National Security, University of Virginia, Charlottesville, Va-----	237
Pipes, Daniel, University of Chicago, Ill-----	278
Richter, Roger, former inspector, Middle East region, International Atomic Energy Agency-----	108
Selden, Dr. Robert W., division leader, Applied Theoretical Physics Division, Los Alamos National Laboratory, Los Alamos, N. Mex-----	102
Stoessel, Hon. Walter J., Jr., Acting Secretary of State, accompanied by Nicholas Veliotes, Assistant Secretary of State for Near Eastern and South Asian Affairs; Ronald Spiers, Director, Bureau of Intelligence and Research; James Michel, acting legal adviser; and John Boright, Acting Deputy Assistant Secretary for Nuclear Affairs, Bureau of Oceans and International Environmental and Scientific Affairs-----	3
Insertions for the record:	
Has IAEA Role Been Impaired?—submitted by the Department of State-----	6
Letter to Senator Percy from Hon. Arthur J. Goldberg, dated June 17, 1981, relating to the bombing by the State of Israel-----	36
Nuclear Facilities in the Middle East—submitted by the Department of State-----	40
Iranian Nuclear Facility—submitted by the Department of State-----	42
U.S. Military Supply Pipeline to Israel—submitted by the Department of State-----	45

IV

	Page
Iraq Nuclear Program, submitted by the Department of State.....	57
Letter to Senator Percy from Secretary of State Haig, dated June 10, 1981, concerning information pursuant to the Arms Export Control Act.....	57
Report from the Congressional Research Service, Library of Congress, which includes quotations regarding Iraqi nuclear intentions..	58
The Israeli Raid Into Iraq, a report by the Congressional Research Service, Library of Congress.....	68
Letter to Senator Percy from the American-Israel Public Affairs Committee, dated June 16, 1981, detailing principal arguments supporting positions they have publicly taken.....	80
Sections 3, 4 and 42(e) of the Arms Export Control Act.....	89
Biographical sketch of Dr. Robert W. Selden.....	102
Prepared statement of Roger Richter.....	120
How Long Would It Take for Iraq To Obtain a Nuclear Explosive After Its Research Reactor Began Operation, a report by the Congressional Research Service, Library of Congress.....	153
Possible Contamination of Baghdad From Bombing of the Iraqi Reactor—a report by the Congressional Research Service, Library of Congress.....	154
State Department comments on the statement of Hon. Alan Cranston..	156
Chart showing location of all research reactors of the Third World—submitted by Senator Mathias.....	191
Prepared statement of Hon. Tom Lantos.....	199
Biographical sketch of Prof. William T. Mallison.....	218
Prepared statement and attachment of Professor Mallison.....	225
Biographical sketch of Prof. John N. Moore.....	236
Prepared statement of Prof. John N. Moore.....	244
Letter to Senator Percy from Prof. William T. Mallison in response to Professor Moore's analysis of the requirements of the Arms Export Control Act.....	249
Prepared statement of Joseph J. Malone.....	259
Views of the National Association of Arab Americans on the Israeli attack on the Iraqi nuclear research facility.....	272
The Old Social Classes and the Revolutionary Movements of Iraq, from the Princeton University Press.....	284
State Department's responses to additional questions submitted by Senator Hayakawa.....	294
Appendix:	
IAEA comments on the testimony of Roger Richter on June 19, 1981, before the Senate Foreign Relations Committee.....	297

THE ISRAELI AIR STRIKE

THURSDAY, JUNE 18, 1981

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D.C.

The committee met, pursuant to notice, at 9:05 a.m., in room 318, Russell Senate Office Building, the Hon. Charles H. Percy (chairman of the committee), presiding.

Present: Senators Percy, Baker, Lugar, Mathias, Kassebaum, Boschwitz, Pressler, Pell, Biden, Glenn, Sarbanes, Zorinsky, Tsongas, Cranston, and Dodd.

OPENING STATEMENT

The CHAIRMAN. Mr. Secretary, we welcome you here this morning with your distinguished colleagues.

On June 8, 1981, 14 U.S.-built Israeli aircraft left Etzion Air Base in the Sinai and after flying at low altitude over Jordan and Saudi Arabia, bombed a French-built nuclear research reactor south of Baghdad. While the United States had no prior knowledge of the raid, its impact on U.S. interests is potentially significant.

Thus far, the Reagan administration has "condemned" the Israeli air strike and has suspended delivery of four F-16 aircraft. They have transmitted a report to the Foreign Relations Committee stating that because of the raid a substantial violation of the Arms Export Control Act "may have occurred." The administration appears to be willing to support a United Nations resolution which condemns the raid but stops short of sanctions. That resolution is under negotiation right now.

The purpose of this morning's hearing is to review several questions in order to help Congress determine the possible consequences of Israel's action. These questions include the following:

Did Israel act in self-defense, or was its action a violation of U.S. law governing the use of U.S. arms?

Did Iraq have the capability and intention to build a nuclear weapon aimed at Israel, the development of which could not be halted through peaceful means?

What are the implications of the raid for U.S. interests in the Middle East?

What are the implications of the raid for international law concerning preemptive strikes?

What are the implications of the raid for worldwide efforts to control nuclear proliferation?

The Foreign Relations Committee already has had several briefings on these issues in executive session. There are, however, many aspects of this situation that can and should be discussed in open session.

This morning we have with us Walter J. Stoessel, the Acting Secretary of State. Secretary Stoessel will make a brief opening statement. Thereafter, we will use the 5-minute rule to assure that each member of the committee has an opportunity to question the witness. About 10:30 we will move into executive session to hear testimony from CIA Director William Casey. This afternoon State Department witnesses will return to continue testimony.

Tomorrow, the committee will continue its hearings with two panels of expert public witnesses who will address issues related to Iraqi nuclear capabilities and the raid's impact on nuclear non-proliferation policy.

Next week, additional hearings will be scheduled to review the international legal situation and the role of Iraq in the Middle East region. If necessary, the hearings would be continued after the July 4th recess.

Because of the limited time that we have this morning, I will ask that Senators make whatever opening comments they have as a part of their first 5-minute round. I know that the distinguished assistant minority leader has an opening statement, Senator Cranston, and he has thoughtfully been agreeable to incorporating that as a part of his opening question period.

Senator Pell, do you have an opening statement on behalf of the minority?

Senator PELL. Thank you, Mr. Chairman.

At least on behalf of myself, I think it is easy to second guess, to try to figure out what any of us would have done had we been in the role of chief of government of a beleaguered state, as Mr. Begin found himself. Nevertheless, the action which he took was a blow to the peace process, a blow to the Camp David process, a blow to Ambassador Habib's mission, and a blow to the Non-Proliferation Treaty [NPT].

I think it is obviously likely that the Arabs will make an effort to retaliate and if history is any lesson, recent history at least, the effort would probably bungle. If all were told, what Israel has done here is to achieve a short-term gain from their viewpoint but, I am afraid, a long-term loss.

The purpose of these hearings is to get at the facts and degree of threat that Iraq poses to Israel and also the perception of that threat by Israel.

The CHAIRMAN. Thank you, Senator Pell.

Senator Hayakawa is necessarily absent from the Senate today, and has requested that his prepared statement be inserted in the record. Without objection, it will be inserted at this point.

PREPARED STATEMENT OF HON. S. I. HAYAKAWA

Mr. Chairman, longstanding commitments in California prevent me from participating in these hearings today and tomorrow.

As you know, Mr. Chairman, I was quite anxious that we hold these hearings because I felt it incumbent upon us to fulfill our congressional responsibilities both to the public and the administration.

Certainly this specific incident—the Israeli attack on the Iraqi facility—has raised many issues such as nuclear proliferation, the prospects for peace in the Middle East, our strategic interests in the Persian Gulf region, and current U.S. law on the use of American weapons by foreign governments. In particular, I think we should examine our international agreements and domestic policies regarding the dissemination of nuclear materials.

The extensive investigation to be conducted by this Committee is an essential element in such deliberations, and I look forward to participating fully next week.

The CHAIRMAN. Secretary STOESSEL, would you care to make an opening statement?

STATEMENT OF HON. WALTER J. STOESSEL, JR., ACTING SECRETARY OF STATE, ACCOMPANIED BY NICHOLAS VELIOTES, ASSISTANT SECRETARY OF STATE FOR NEAR EASTERN AND SOUTH ASIAN AFFAIRS; RONALD SPIERS, DIRECTOR, BUREAU OF INTELLIGENCE AND RESEARCH; JAMES MICHEL, ACTING LEGAL ADVISER; AND JOHN BORIGHT, ACTING DEPUTY ASSISTANT SECRETARY FOR NUCLEAR AFFAIRS, BUREAU OF OCEANS AND INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AFFAIRS

Ambassador STOESSEL. Thank you, Mr. Chairman. I appreciate this opportunity to report to the committee on the June 7, 1981, Israeli air attack against a nuclear reactor under construction in Iraq.

You have received the Secretary's June 10, 1981, letter on this attack pursuant to section 3(c)(2) of the Arms Export Control Act. In his letter the Secretary notified Congress that a substantial violation of the Mutual Defense Assistance Agreement of July 23, 1952 with Israel may have occurred and indicated that we were conducting a review of this entire matter which is the subject of our session today.

The Mutual Defense Assistance Agreement with Israel includes assurance by Israel that U.S. weapons provided under the terms of the agreement would be used solely to maintain internal security, meet legitimate self-defense needs, or permit it to participate in the defense of the area of which it is a part, or in United Nations collective security arrangements and measures. The agreement also provides that Israel will not undertake any aggression against any other State.

Israeli Air Force units participating in Israel's attack were equipped with defense articles furnished to Israel by the United States under the Foreign Military Sales program pursuant to the 1952 agreement with Israel.

Israel contends that the Iraqi reactor was intended to produce the required weapons-grade material for use in atomic weapons. Israel notes that a state of war exists between the two countries and has further contended that Iraq had made clear its intention to produce such a weapon for use against Israel. Israel indicated its belief that the reactor would become operational very quickly. Israel has pointed out that once the reactor became operational, an air attack would have been impossible since it would have exposed the inhabitants of Baghdad to massive lethal radioactive fallout. Israel also indicated that it had exhausted all diplomatic remedies prior to the attack. The Israelis, therefore, sincerely believe that their attack was an act of legitimate self-defense and not in violation of their 1952 agreement with the United States.

Iraq denies that its nuclear program has any application other than the peaceful uses of nuclear energy. It points out that it has ratified the Non-Proliferation Treaty and notes that Israel has

not, and that Iraq's reactor and supply of enriched uranium were subject to International Atomic Energy Agency [IAEA] controls. Iraq further points out that no violations were found and that all enriched uranium supplied to Iraq was accounted for. Iraq, therefore, believes that Israel's action was unprovoked aggression.

The United States is deeply concerned about nuclear proliferation. We have long been concerned about the Iraqi nuclear facility because it could give Iraq the capability to build atomic weapons if other elements were added. Furthermore, Iraq has made no secret of its enmity toward Israel. We have shared these concerns in the past with appropriate governments and made clear our view that global adherence to and respect for the most stringent safeguards is essential.

Senator SARBANES. Mr. Chairman, I do not want to interrupt, but are copies of Secretary Stoessel's statement available to members of the committee?

The CHAIRMAN. There were only two copies available, as I understand it. Copies are being made and will be distributed as quickly as we have them.

Senator SARBANES. Copies are being made?

The CHAIRMAN. Yes.

Ambassador STOESSEL. While the NPT and IAEA safeguards regime are still critical to any nonproliferation effort we can all agree that we should work to strengthen today's safeguards to further allay the kind of suspicion and mistrust that contributed to Israel's action.

It is also important to understand that although safeguards are vital, there are other critical elements required to deal with the proliferation problem. For example, material that is in a nearly weapons-usable form presents special dangers and should be minimized or avoided. This is why we believe that suppliers must exercise care in their nuclear exports activities and particularly so in volatile areas of the world. The nonproliferation policy guidelines we will soon be discussing with you take explicit account of these facts.

The United States was not consulted in any way about any phase of the Israeli action, nor were we informed of it in advance. Although we had concerns about the potential of Iraq's nuclear program, we do believe that the Israelis had not exhausted all the diplomatic options available for alleviating their concerns.

We further believe that the unprecedented character of the Israeli air attack could not but seriously add to the already tense situation in the area and seriously complicate our effort to resolve the various problems in the area through peaceful means. For these reasons, we condemned Israel's attack. In addition, the President decided to suspend the scheduled delivery of four F-16's to Israel while the Congress considered the issue and while we consulted with Israel and others.

Neither our condemnation nor the suspension of delivery of the four aircraft implied that we had reached any determination of the legal questions under the Arms Control Act that may have been raised by Israel's action. We have not made such a determination under the act. Nor should our condemnation be construed as implying that we did not ourselves have serious misgivings regarding the ultimate character and direction of the Iraqi nuclear program.

We are concerned by the damage that resorting to violence does to the cause of peace in the region. But we also must note that Iraq has not recognized the legitimacy of Israel, has refused to ascribe to U.N. Security Council Resolutions 242 and 338, and rejected the Camp David Accords and has not played a constructive role in the peace process.

We continue to believe that force and hostility are not the answers to the problems of the Middle East. The people of the Middle East yearn for peace so that the vast human, natural and technical resources of the region can be turned to the pursuits of peace and so that this area can become a model for coexistence and cooperation among nations. This yearning only can be realized through redoubled efforts by all parties to find negotiated solutions to the problems they face. The issues before us today only accentuate this fact.

Since the attack, we have been engaged in consultations with Israel and other appropriate governments. Our consultations are continuing, and we are not prepared today to render any judgments on the merits of the issues or reach any determinations. We believe that the issue, in its essence, is political rather than legal. And for this reason our efforts are directed toward political solutions. This is a grave matter that must not be treated in haste. Therefore, our efforts and our review are continuing.

Mr. Chairman, we will keep the committee informed as we continue our review of the issues. I would now welcome any questions that you or other members of the committees may have. Thank you.

The CHAIRMAN. Thank you very much, Mr. Secretary.

1952 MUTUAL DEFENSE ASSISTANCE AGREEMENT

Could you tell the committee if the administration has now made a final determination with respect to the question of whether the Israeli action did violate the terms of the 1952 Mutual Defense Assistance Agreement, and if not, what is your best estimate as to when that final determination will be made?

Ambassador STOESEL. Mr. Chairman, we have not arrived at any final determination. We have this whole matter under review. We are in consultation with Israel. We value our exchanges with this committee about the subject. We feel that this process is a very important one which should not be rushed. And I could not at this point predict a time frame for the resolution or the outcomes of this process.

The CHAIRMAN. Would you tell the committee what factors led up to the decision by the administration to condemn Israel for the raid, in its statement of June 9, considering that a final determination certainly had not been made by that date?

Ambassador STOESEL. Mr. Chairman, we were concerned by the fact of the raid itself, the resort to violence, the use of American equipment in connection with the action. We were concerned that we had no advance knowledge, there was no consultation with us about the immediate concerns of Israel in this respect. We were concerned about the fact that, in our view, all diplomatic channels had not been exhausted by the Government of Israel with regard to its concerns about the Iraqi nuclear development.

We were also concerned about the effect which this action could have on the whole very tense situation in the Middle East, on the peace process, on the Habib mission. So all of these factors went into our decision to make a condemnation of the action itself.

SUSPENDING SHIPMENT OF F-16'S

The CHAIRMAN. Could you tell us what factors were taken into account then with respect to suspending the shipment of F-16's and what factors might be taken into account in either a resumption of shipment or a continued suspension of shipment of F-16 aircraft?

Ambassador STOESSEL. I think many of the same factors applied to the decision to suspend the shipment of the four F-16 planes. We felt that in the circumstances this was a prudent action to take. I cannot predict what the outcome will be as to further consideration of this suspension. But we obviously wish to continue our review and our consultations with the Government of Israel about the overall situation.

The CHAIRMAN. Is the suspension of any other military equipment in the pipelines being given consideration?

Ambassador STOESSEL. Mr. Chairman, my understanding is that other elements in the pipeline continue to be delivered.

IAEA SAFEGUARDS REGIMES

The CHAIRMAN. The Government of Israel has placed a particular emphasis on its view that the safeguard regime of the International Atomic Energy Agency could not be relied upon to prevent Iraq from covertly attaining an operational nuclear weapons capability.

How does the administration assess the value of the IAEA safeguard regimes?

Ambassador STOESSEL. We feel, Mr. Chairman, that the safeguards regime of the IAEA is very important and a vital factor in the whole question of nonproliferation. The safeguards are not foolproof. We would like to see them strengthened. But we do attach great importance to them.

The CHAIRMAN. If the Israeli action is accepted as justified self-defense by the United States, do you believe that our role in the IAEA will seriously be impaired? To what extent might the IAEA itself be undermined?

Ambassador STOESSEL. Mr. Chairman, I would like to take that question for consideration. I think this would be part of our overall review of the situation and the impact of any decision which we may reach.

The CHAIRMAN. We will keep the record open for that purpose. [The information referred to follows:]

HAS IAEA ROLE BEEN IMPAIRED?

[SUBMITTED BY THE DEPARTMENT OF STATE]

Some critics have stated that the bombing of the Iraqi reactor emphasized the lack of confidence that is placed on the IAEA and its safeguards system. We do not believe that the attack was centrally related to whether the IAEA safeguards system could be counted on to function as designed. The IAEA and its international safeguards system were not the basic concern of Israel. Rather,

in spite of safeguards and the warning they might have given of potential Iraqi action to divert nuclear material from civil uses, the Israelis presumably doubted that the international response to an Iraqi nuclear weapons program would have protected the interests of Israel.

This suggests that safeguards—though critical—are not by themselves the complete answer to difficult proliferation problems in sensitive regions. Fundamentally the Israeli bombing was part of the unresolved conflict in the Mideast, in which the IAEA was not central, nor was the NPT. This does not mean however, that we should not work to enhance the effectiveness of safeguards and strengthen their capability for detecting clandestine diversions on a timely basis.

RAMIFICATIONS FOR FUTURE VIABILITY OF NON-PROLIFERATION TREATY

The CHAIRMAN. Would you tell us then what ramifications for the future viability of the Non-Proliferation Treaty might you envision because of this action?

Ambassador STOESSEL. I would ask Mr. Boright to comment on your question.

Mr. BORIGHT. Mr. Chairman, I think generally we feel that we have to reemphasize the essentiality of the NPT and the IAEA safeguards system and not weaken that statement, but at the same time very much emphasize the other elements of our nonproliferation policy that must go with it.

Therefore, we were concerned over the implication in Dr. Eklund's statement that the attack was an attack on the IAEA. I think that it is reasonably clear that the events in the Mideast were Mideast events in which the IAEA was not central, nor was the NPT.

NO PRIOR KNOWLEDGE OF RAID

The CHAIRMAN. A final question. There has been, as I have looked through the world press reaction, a tremendous amount of skepticism as to whether the United States had prior knowledge. Many believe the United States actually knew that such a raid might be made and that a raid actually was going to be made on this particular date. I have tried to thoroughly examine this subject. I am totally convinced, as your statement indicates, we had no prior knowledge of any kind.

How do you surmise we did not know, when we have shared with Israel back and forth so much intelligence, so much in the way of advanced notice? And have you been able to convince the Arab world particularly that we did not have any such prior knowledge?

Ambassador STOESSEL. Mr. Chairman, it certainly is true that we did not have advanced knowledge of this raid, and we regretted that very much. We do feel that we have a relationship of confidence and trust with the Government of Israel and that the failure to discuss with us the immediate concerns and plans of the Israeli Government in this instance was deplorable.

We have tried very hard to explain our position on this to the other countries in the area. I think I can add nothing more to that.

The CHAIRMAN. Do you feel that we have made progress in convincing other countries that we had no prior knowledge?

Ambassador STOESSEL. I feel that we have, yes.

The CHAIRMAN. Thank you.

Senator Pell.

Senator PELL. Thank you, Mr. Chairman.

IRAQ CAPACITY TO DROP NUCLEAR WEAPON

Mr. Secretary, what is your view as to when Iraq would have had the capacity to drop a nuclear weapon, from the knowledge that you have?

Ambassador STOESSEL. I think that is a question that we really would prefer to discuss in closed session.

Senator PELL. Is it a correct statement that the IAEA inspected the Iraqi facility last winter and gave it a green light?

Ambassador STOESSEL. That is my understanding, that they made an inspection and found no violations.

Senator GLENN. Would you yield for a moment?

Senator PELL. Certainly.

Senator GLENN. Is there a plan to go into closed session so that Mr. Stoessel can answer some of the questions that he cannot answer in open session?

The CHAIRMAN. We certainly can do that if we do cover our full ground. If we cannot within the time limits that he has, we will try to cover them this afternoon and will call Secretary Stoessel back.

Senator GLENN. Thank you.

Thank you for yielding.

IAEA CLEARANCE TO IRAQI FACILITY

Senator PELL. If the IAEA gave clearance to the Iraqi facility as not being a nuclear weapon threat last winter—and we have concluded, as the State Department I believe did conclude, that it would have the capacity before too long—is it your thought that the IAEA inspections should be more frequent or that they should be more thorough? Is there any advice that you could give us in an open session on that point?

Mr. BORIGHT. Senator, I do not believe that the formulation that the IAEA concluded that there was no threat is quite right. The IAEA does only a very precisely defined verification job, and that verification job is to verify that no diversion has taken place.

The frequency of those inspections is dependent on the amount of material present. Certainly, our view would be that at this kind of a facility, if there were any more fuel than there was at the time of the bombing, inspections should be much more frequent than once or twice per year.

MORE FREQUENT INSPECTIONS NEEDED?

Senator PELL. In other words, in order to be able to say flatly that there is no nuclear weapons capacity here for the next months, let us say, for 3 months from now, the inspections should have to be every 3 months?

Mr. BORIGHT. The nuclear capacity about which you are talking is not clear to me. There is a long presumed chain of events between disappearance of some fuel from that reactor and a nuclear weapon. Of course, we feel that if any of the fuel were missing, the IAEA ought to know about it within a time not longer than what you have mentioned; yes.

Senator PELL. In other words, you believe that Israel did not have adequate assurance from the IAEA that fuel could not be diverted?

Mr. BORIGHT. No. I said that if more material were there, the IAEA should come more frequently. To our knowledge, the precise arrangements for safeguards at that facility when more fuel was present or when it was under operation had not yet been completed. They were under discussion within the agency and between the agency and Iraq. I did not mean to draw that conclusion.

PRESUMPTION OF FRENCH OR ITALIAN COMPLICITY

Senator PELL. Following along on that for the moment, how important is the presumption of French or Italian complicity in a judgment that IAEA safeguards were ineffective?

Mr. BORIGHT. I am sorry, sir, are you saying would it be necessary to assume French complicity to draw the conclusion that the safeguards were in effect?

Senator PELL. Yes. In other words, if the French and Italians went ahead and gave them what they wanted, it would then render the IAEA safeguards ineffective; would it not?

Mr. BORIGHT. That would depend upon what safeguards actually were applied. And as I said, that had not yet been worked out in detail. Generally, our view is that that kind of reactor can be safeguarded adequately.

Senator PELL. I think American officials have made representations in the past to the French and the Italian Governments concerning their nuclear technology and fuel sales to Iraq. In other words, we have protested this. Is it true that we made such representations to France and to Italy?

U.S. GOVERNMENT ACTIVELY INVOLVED IN NONPROLIFERATION DISCUSSIONS

Mr. BORIGHT. Senator, the U.S. Government has been quite actively involved in nonproliferation discussions of various sorts, including among suppliers and including questions related to strengthening safeguards for a long time. We have had very broad discussions. I think that further answers, more specific answers, ought perhaps to be in a closed session.

Senator PELL. All right. I could see that. But nevertheless, you can say in open session that representations were made. Presumably, the reasons for those representations were concerns that they were going to produce a nuclear weapon. Would that not be correct, that they were not for peaceful purposes; otherwise, we would not have made representations?

Mr. BORIGHT. Senator, the U.S. representations made in the general area of nonproliferation are not made only after the United States has concluded a specific country clearly is working on nuclear weapons. We are trying to think ahead. We are trying to minimize the risks and the possibilities and strengthen safeguards in light of future possibilities.

So it clearly is not accurate to say if the United States made representations with regard to this specific situation it was on the basis of some firm conclusions.

Senator PELL. Mr. Chairman, my time has expired.

The CHAIRMAN. Thank you, Senator Pell.

Senator Lugar.

Senator LUGAR. Thank you, Mr. Chairman.

Mr. Stoessel, I appreciate your statement. I think it was measured, controlled, and accurate.

JUDICIAL ISSUE OF SELF-DEFENSE

It appears to me that the purpose of today's hearing reflects the fact that U.S. equipment was involved. There is, first of all, the judicial issue of self-defense. But beyond that, as the chairman has pointed out, there are more intriguing questions as to whether our policy in the Middle East has been further set back and how nonproliferation has been further set back. These are issues on which you have commented. Quite properly you have noted that life goes on and the Habib mission is there.

The problem of testifying in this kind of atmosphere, while active diplomacy is proceeding, is extremely trying. Now, I accept the fact that the Congress has a role to play in this and that a hearing was necessary to fulfill that role. But at the same time, there is an obligation, I think, on the part of this committee not to throw further sand into the gears of diplomacy by getting into all sorts of things that get beyond, I believe, the self-defense issue.

You have addressed that issue by saying that the Israelis have noted that a state of war continues to exist between Israel and Iraq. This is an important point. War is war. It may have been dormant for a while, but the fact is, as you also point out: "Iraq has not recognized the legitimacy of Israel, has refused to ascribe to Security Council Resolutions 242 and 338, has rejected the Camp David Accords, and has hardly played a constructive role in the peace process."

That poses a dilemma, I suspect, for the Israelis.

The chairman, in his opening statement, raised the question: Could all of this have been worked out through diplomacy? And the answer is always, I suppose: It might have been.

One can make a judgment as to how quickly or how soon a nuclear weapon could have been produced and whether that was the motivation. But I must say—and I will use this initial period for my own opening comments—that it appears to me that the self-defense case made by Israel is pretty strong in this regard.

STILL FURTHER DILEMMAS

Having said that, there are still further dilemmas, because to pursue U.S. policy it is desirable that we get along better with Iraq and other countries in the Middle East, and that is rather hard to do, given these sorts of circumstances.

So I would say in the narrow issue—and the Senate decided this roughly by a vote, as I recall, of 78-7, the last time it came up, when Senator Hatfield raised a resolution of condemnation after an incursion into Lebanon in 1979. I do not know whether the vote will be 78-7 again, but it might not be far from that.

HAS U.S. LAW BEEN VIOLATED?

And I would simply hope that these hearings do not take a course of a fishing expedition which gets beyond what I think is the narrow purpose that I would like to see: Has the United States law been violated, and, if so, should we cease sending armaments to Israel?

In my judgment, the law has not been violated, and we should not cease sending arms to Israel.

Beyond that, we really have an enormous problem and an obligation in furthering our Middle East diplomacy to visit with all of our friends and people that we hope will be our friends and not look for enemies in the process. I hope that in closed session you might be able to assist us in helping further that mission through comments that we make and through leadership that we might take on the congressional side.

This is not really in the form of a question, but a statement. And I shall not burden you with trying to draw out further things which are going to prove difficult in your own diplomatic mission.

Thank you.

Ambassador STOESEL. Thank you very much, Senator.

The CHAIRMAN. Thank you, Senator Lugar.

Senator Glenn.

Senator GLENN. Thank you, Mr. Chairman.

I would use the time to make my opening remarks and will get to questions later on.

I think we perhaps run the danger of focusing too narrowly in some of these areas. I think the implications of this incident have made it one of the most disturbing events in recent history. And that is why since the time that we heard of this raid, I have been briefed by State Department, CIA, committee staff; I met with Israeli officials; I talked with the Egyptian Ambassador. But I hope we do not get bogged down in too many of the specific details. We can get to those later.

We should also realize that no event since India's explosion of a nuclear device in 1974 has underscored so dramatically the dangers of nuclear proliferation. I do not want to run around like Henny Penny saying, "The sky is falling." But I think we are literally running out of time on this particular issue. It is so important and it is such an issue that we have never been able to really keep public attention, world public attention, focused on it for any lengthy period of time.

But this one event has had a tremendous impact on a wide range of foreign policy concern: It has damaged our nonproliferation policy, also our bilateral relations with a close ally, Israel. It has engendered distrust of our Arab friends. It has disrupted the Mideast peace process. It has complicated negotiations to diffuse the Lebanon crisis, and, in addition to all that, provided the Soviets with a propaganda coup.

So when we start picking up the pieces and assessing the details of the damage and whether it was justified in this particular instance or not, I think it is important not to lose sight of the fact that the Non-Proliferation Treaty and the Nuclear Non-Proliferation Act of 1978 [NNPA] have been steps in the right direction. But I have to agree with some of the cynics who are correct when they charge that serious

problems remain unresolved, where many around the world continue to question the efficacy of controls on nuclear trade as a nonproliferation tool.

There is bitter disagreement over nuclear policies among the supplying and recipient nations. Israel's preemptive strike, however we may judge that in a legal sense, amounted to the first gigantic vote of no confidence in the international nonproliferation regime, including the IAEA safeguards. I do not think that means we just walk away and throw up our hands and say that there can be nothing further that we can do.

Changes are needed, we admit that. But Israel felt compelled in this case to ~~take the law~~ take the law into its own hands. That is vigilante tactics. They took the law into their own hands. But Israel is a close ally and will remain so. And it is understandable that they may fear a hostile neighbor.

But through the years, what have we done? What has been our record? We started clear back in the early days of the nuclear era, Acheson, Baruch, Lillienthal, proposing international control. That was not accepted. Atoms for peace, IAEA inspections, which I would add, are only information gathering and disseminating events, that is all they do. There are no teeth in them. NPT has no teeth.

But for the first time with the Nuclear Non-Proliferation Act of 1978 we tried for the first time, having filed to get teeth in any of these actions in the international field, we finally tried to take unilateral action that would put teeth in international nuclear law. And we tried through the international nuclear fuel authority as part of that to say we would have an internationally agreed-upon supply of fuel so other nations would have no excuse for getting re-processing or uranium enrichment facilities.

And that was never implemented by the previous administration. And then at the first test of NNPA, the first time out of the box that really came to a tough test with the last administration, they ducked it: We sent India the fuel, after the heaviest lobbying the administration ever mounted on Capitol Hill. And I think India's subsequent statements show how we can trust India. They have once again told us that internationally they will do what they see fit.

So I think, Mr. Chairman, while we concentrate on details of this, as we will get into in the next few days and subsequent hearings, we may have one last opportunity finally to focus world attention on this problem and do something about it. I am sending a letter to the President later today in which I will urge a meeting of the nuclear suppliers to try once again to put teeth into our international nuclear efforts.

We do not have them now. The IAEA is an information-gathering organization and then, supposedly, if the situation is bad enough, after reporting to the board of directors, it will take the issue to the U.N. if it looks so horribly bad that the nation involved is just automatically considered to be making nuclear weapons.

I would say this. This control of things nuclear in the world is a two-track thing. We are trying through SALT to say, "OK, we are trying to put a cap on this thing of the nuclear weapons states, starting with the superpowers, and we hope to put a cap on them and eventually

work them down. Meanwhile, if all these other nations will cooperate under a nonproliferation treaty, we will cooperate in the peaceful development of nuclear energy for the benefit of each one of those nations.

So it is a two-track system. I sat with Prime Minister Desai, and he said, "What gives the big powers the right to say that because you got this knowledge first that we should be prohibited from doing whatever we want, as you did, when we get that information?"

There is no answer to that. My only counter to him could be that, "You are right, except that it is such a horrible danger for the whole world that we must do what we can to try and get control of it. While we are trying through SALT, then cannot you and the other nations of the world cooperate with us in preventing the spread to smaller and smaller nations?"

And that is what we are up against with this right now. For the first time, Israel has cast a vote. They have created their own nuclear nonproliferation policy. And it was very effective in this particular case. And it is the first international action as a vote of no confidence in our efforts.

I think we have one last—no, I will not say it is the last, I will not give up—but we have one more opportunity, now that so much world attention is focused on this and I hope that we do not let this opportunity get past us.

And I hope that the President will respond positively to my letter proposing that we call for a meeting of the nuclear suppliers, because that is where the technology and the equipment is coming from, at least today and for the immediate foreseeable future.

It is the one touchstone that we can have that may control this in the immediate future, and follow it up later with world conference of nations to see if we cannot finally put some teeth in NPT and IAEA. The hour is late. I do not know whether we can do it or not. But I know one thing: We have to do our very best to try.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Glenn, very much.

Senator Mathias.

Senator MATHIAS. Thank you, Mr. Chairman.

PROBLEMS FOR THE UNITED STATES

The Israeli attack on Iraq's nuclear research reactor in Baghdad raises in my mind a whole agenda of problems for the United States in addition to the urgent problem of nuclear proliferation that Senator Glenn has addressed himself to so eloquently.

Ambassador Charles Yost once said that side effects of human actions are not less important effects than those intended or expected. The most fundamental of these questions is the extent to which we can permit the foreign policy of the United States to be determined by the actions of another state, even a state with which we feel the warmest kinship.

The United States has a longstanding and abiding commitment to the security of the State of Israel. The American people have a longstanding and abiding commitment to the welfare of the people of Israel.

Our ties, as we all remember, were forged in the crucible of the holocaust, and they are unbreakable. Historically, we have expressed our commitment to Israel with, of course, very substantial military and economic aid.

LASTING PEACE SOUGHT IN MIDDLE EAST

Our relationship with the State of Israel, however, is not exclusive, as Senator Lugar has just said. And it cannot be exclusionary. We have also to develop and maintain good relations with the Arab States of the Middle East and in all our relations with that troubled region, we have sought to promote a lasting peace.

Ambassador Habib's mission, of course, is only the latest expression of that fixed goal and purpose. The Camp David Accord is perhaps its most successful expression to date. But there have been a great many other efforts to promote Arab-Israeli cooperation, going back many years. One that comes to mind is the Johnston Plan for sharing the waters of the Jordan River. I myself made a suggestion several years ago for a joint Arab-Israeli energy project in the Sinai.

But, in short, our strategic objective has been and, I believe, must continue to be, to build an atmosphere in the Middle East which can lead to permanent peace. An action that enhances that objective should find a welcome with all of us. An action that detracts from it should be shunned.

These hearings of the Foreign Relations Committee will deal with a question of U.S. law which requires a finding of fact. But they will also deal with theories. And among them, the theory that a nation may be condoned for making an armed attack against another nation if the objective of that attack is to knock out a nuclear reactor. And we must examine whether the application of such a doctrine makes the world a more stable place or a less stable place.

But most importantly Mr. Secretary, I think we must explore the question of whether we serve the best interests of either Israel or the United States by standing idly by while the Prime Minister of Israel pursues successive courses of action, foreordained to move the Israeli people further and further from rapprochement with their Arab neighbors.

"LIVE IN PEACE WITH NEIGHBORS"

And I might add that I have assigned priority to this last question. After recollecting the many warm and friendly conversations that I have had with Golda Meir, who said so often that Israel's only and highest aspiration was to be able to live in peace with her neighbors.

Mr. Secretary I quoted our mutual friend, Charles Yost, in saying that the side effects of human actions are not less important than those intended or expected. What kind of side effects do you see that may flow from this episode? What kind of side effects will the United States have to cope with? Because I believe this committee, in order to discharge its function, must try to look into the future and prepare itself and the Nation for dealing with the problems that will flow from the Baghdad raid.

Ambassador STOESEL. Senator, I think I have already alluded to some of the problems we see developing as a result of the Israeli action. It is true, I believe, that the tensions in the area, which were already quite sufficient, have risen as a result of this action, that the efforts at reconciliation between Israel and her neighbors have been impeded by it.

We know that Jordan and Saudi Arabia, for example, have been very embarrassed and very taken aback by this action, which involved overflights of their territory by Israeli planes.

The position of Mr. Sadat in Egypt also is a difficult one. He met with Mr. Begin just 3 days before the action and was given no advance warning of it. And that puts him in a more difficult position vis-a-vis his own Arab colleagues, and must make it more difficult for him to pursue the course of the peace process with Israel.

I also alluded, as you have, to Ambassador Habib's mission. I believe that this effort has been made more difficult and more complicated by what has happened.

Now, as has also been suggested, we cannot leave it there. We have to keep working and try and overcome these effects. And we are doing that. We do feel that what has happened simply gives renewed attention to the need to proceed urgently on the course of trying to find a peace in the area. And we will certainly do that.

Senator MATHIAS. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Mathias.

Senator Sarbanes.

Senator SARBANES. Thank you, Mr. Chairman.

Mr. Secretary, I noted particularly your statement that the administration has serious misgivings regarding the ultimate character and direction of the Iraqi nuclear program. I regard the purpose and intention of the Iraqi facilities and nuclear program as a very basic question in this matter.

IRAQI GOVERNMENT ON PATH TO DEVELOP NUCLEAR WEAPONS

I must say to you that it appears to me that the Iraqi Government was indeed moving on a path designed to develop nuclear weapons. Obviously, such a development constitutes a grave danger for the area and, indeed, for the world. And I would only note that the United States in 1962, at the time of the Cuban missile crisis, was prepared to take effective action, including going beyond those steps which proved effective, to remove such a danger from the international scene.

Now, earlier, in response to questioning—I think it was in response to Senator Pell's questioning—your colleague indicated that representations would be made to the supplying nations, which I take it had been done—even in the absence of a firm conclusion that a specific country was clearly working on nuclear weapons. Is that correct?

DISCUSSIONS AMONG SUPPLIERS

Mr. BORIGHT. Senator, my reference there was to a long series of discussions among suppliers, for example, to avoid the presence of the

highly enriched uranium of the sort that was in this reactor. That is a general proposition that we have tried to minimize or avoid that sort of thing. We talked to suppliers about that.

Senator SARBANES. You would not make representations in a situation in which you perceived no possibility of weapons development, or where there was no reason to think that the country was embarked on a path which might lead it to the development of weapons: would you?

CONVERTING OUR OWN REACTORS

Mr. BORIGHT. Senator, no, that is not correct. For example, we are converting our own reactors to avoid the use of highly enriched uranium. It is a matter that we think is generally applicable worldwide. Our discussions also have related to measures such as the physical protection of nuclear facilities and material, again which are worldwide measures.

Senator SARBANES. Is it not the case that we tried very hard to persuade France not to sell the highly enriched uranium to Iraq?

Mr. BORIGHT. Senator, I would not want to get into the specifics of our exchange with France on that specific question. We certainly have talked to France, among many other countries, about this question of avoiding the supply and presence of highly enriched uranium.

Senator SARBANES. What response would you give to the question of our efforts to dissuade Italy from selling the hot-cell equipment to Iraq?

Mr. BORIGHT. Our discussions with suppliers also have included as is reflected in the existing supplier guidelines several propositions that are relevant to that. Recognizing the sensitivity of reprocessing technology, recognizing that suppliers should take into account all of the circumstances in a given situation in deciding whether to supply.

Senator SARBANES. Were our representations in this regard not made on a continuing basis and with considerable use of our influence, or whatever diplomatic coinage we had?

Mr. BORIGHT. I think we would rather discuss the specifics of our exchanges with a given supplier in a closed session.

Senator SARBANES. Did I understand, Mr. Chairman, that earlier you indicated that would be done?

The CHAIRMAN. Yes. We will go into closed session at 11 o'clock with Mr. Casey of the Central Intelligence Agency. And this afternoon we will either be in open or closed session, as the committee wishes, with our witnesses.

DOES ADMINISTRATION PERCEIVE A GAP?

Senator SARBANES. Does the administration perceive a gap between the nature of the Iraqi facilities and nuclear program, and its commitment to a peaceful use only?

Mr. BORIGHT. Senator, we do not consider the Iraqi program as being of an obvious sort; that is, related through a sequence that we would normally expect. So essentially, the answer to your question is "Yes."

Senator SARBANES. In other words, you do perceive a gap?

Mr. BORIGHT. The program is wider and broader in technical areas such as reprocessing than we would normally expect to see at this very early stage in the nuclear power program.

Senator SARBANES. Secretary Stoessel goes well beyond you, in his response, because his statement says that you have "serious misgivings regarding the ultimate character and direction of the Iraqi nuclear program." His seems to me to be a much stronger response to the question.

Mr. BORIGHT. I was simply attempting to add a specific example. It is the reprocessing element of the program which leads to that statement. Secretary Stoessel's formulation certainly is our view.

DIRECTION OF RESEARCH NUCLEAR REACTOR

Senator SARBANES. How far had Iraq progressed on developing the complementing infrastructure necessary for power development, if that was the direction in which this research nuclear reactor was headed?

Mr. BORIGHT. Not very far, Senator. The Iraqis were working on training, they were working on fuel fabrication. They had discussed, to our understanding, the possibilities of obtaining power reactors. To our knowledge, they made no commitments or contracts.

Senator SARBANES. So that is another significant gap on the tracks on which they were moving with respect to this nuclear program, as far as this peaceful use is concerned; is that not correct?

Mr. BORIGHT. That was my reference to being in the very early stage of the program, yes.

Senator SARBANES. I see that my time has expired. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Sarbanes.

Senator Baker.

Senator BAKER. Mr. Chairman, thank you very much.

Mr. Chairman, my apologies to the members of the committee, the witnesses, and to you for not being here when the meeting opened. But the Senate convened as well at 9 o'clock this morning, and it was necessary for me to be there. It will also be necessary for me to leave after I make this statement in order to attend a series of meetings during the day in preparation for consideration of the budget bill which has been reported and which will be taken up in the Senate on Monday.

I appreciate this chance to go out of sequence, Mr. Chairman. And I especially appreciate the forbearance of my colleagues on the committee to let me speak at this time.

CONCERN OF DEVELOPMENT OF IRAQI REACTOR

Mr. Chairman, it is no violation of security, I am sure, to point out that we on this committee and we in the Senate have been aware and concerned about the development of the reactor in Iraq for a long time. I can recall a particular occasion in a closed session of this committee when we were briefed extensively on the development of that reactor. I will not go into detail about that briefing or any of

the details that surround it. But it is a matter that has caused concern in this country and throughout the world.

It is impossible to travel to the Middle East without having some reference made to the apprehensions that flow from the presence or alleged presence of either nuclear weapons or of nuclear weapons capability in that region. It is a region that is perhaps the most volatile in the world and perhaps the most volatile in terms of the duration of that conflict in the history of civilization.

So we are not strangers to this concern. But, Mr. Chairman, it seems to me that we are confronted, as other Senators previously have noted, with a different set of problems now, because with the destruction of the Iraqi reactor we have a whole range of concerns with respect to America's domestic law and the appropriate foreign policy for this country as it must flow from these new developments.

It was with that in mind, Mr. Chairman, that I asked you to consider having hearings before this committee on this subject. As my colleagues on the committee know, both the Arms Export Control Act and the Foreign Military Sales Act give a virtual mirror image and certainly a coordinate responsibility to the Congress as well as to the President to decide whether or not there has been an improper or illegal use of weapons and whether or not that use has had a fundamental impact on the foreign policy of this country.

I would hope, Mr. Chairman, and I believe, that this committee will enter these hearings without any prejudgment, that it will provide a forum for administration witnesses and others to present their views, that the committee will test its ideas and points of view, and will go about the legislative craftsmanship of trying to formulate and publish an appropriate position for this country on this subject of that region of the world.

It is not necessary for the committee to decide that military sales should be cut off to Israel or should not. The committee can do that under its coordinate responsibility under the acts, but it need not do that if it chooses not to. It is not necessary for this committee to review the determination by the administration as they may make it on whether there should be an arms cutoff or not or whether the national security interests of the United States override other considerations. But the Congress can review that executive determination if it wishes under the act.

So in a very real way there is a partnership between the President and the Congress in this particular field an issue that exists in very few other areas. We have almost exact mirror image responsibility opportunity with the executive department to examine the facts of this situation and to decide what, if anything, should be done.

It would seem to me, Mr. Chairman, that we should have these hearings. I am pleased that you have agreed to call them, and I express my appreciation to you and to every member of this committee but especially to you and to Senator Pell, the senior Democrat on this committee, for scheduling them at this time.

I also express my appreciation to the President for making available these representatives of the administration.

May I conclude, Mr. Chairman, with one final remark, a reiteration of what I said at the beginning, in part, and one further statement. I hope we will approach this issue, volatile and sensitive as

it is, without any prejudgments or without any predetermination of where these hearings should take us. I hope we will examine the facts as we find them, that we will take account of the special relationship that exists, between the United States and the State of Israel.

But mostly, Mr. Chairman, we will decide how we can contribute through the leadership of the United States to the cause of a lasting and enduring world peace in this troubled region. That is the real issue before us. We should not be bogged down with minutia and detail. We must keep that general perspective, and we must approach this problem with diligence, with fairness, and without prejudgment.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much indeed, Senator Baker.
Senator Tsongas.

U.S. RELATIONSHIP WITH ISRAEL

Senator TSONGAS. Thank you, Mr. Chairman.

Mr. Chairman, I think there are two issues here. First is the U.S. relationship with Israel and that relationship is truly unique. There is, in fact, a historical commitment to Israel because there is a historic responsibility, and that responsibility goes back to the holocaust. Given the more expedient foreign policy of our allies in the Middle East than ours, the fact is if we do not stand fast in support of Israel, in the ultimate sense no one else will. And that, I think, should be underscored.

I would draw a distinction between the State of Israel and Prime Minister Begin. That has never been the case before. I think it is the case today. I can sympathize with Israel's fear of an Iraq armed with nuclear weapons. I think there is a very real question as to what Iraq was doing. And in my mind, they were developing a nuclear capability. And were I in Israel's shoes, would I have done the same thing? I am not sure, but I would have been sorely tempted.

But I cannot sympathize with Prime Minister Begin's direct, knowing affront to President Sadat. Here is a picture in Newsweek magazine, 2 days before the raid in which Prime Minister Begin sat across from his strongest ally in the Middle East, knowing exactly what he was going to do, knowing exactly what the impact would be on his friend, and said nothing. He could have canceled those sessions. The embarrassment to President Sadat is serious and will hurt Israel over the long term.

Begin did not serve his nation by that intentional and completely avoidable slap at President Sadat.

The second issue is nuclear proliferation. Senator Glenn referred to that. The fact is, Mr. Secretary, that the United States does not come into this matter with a clean slate. It simply is not in a position to effectively preach against nuclear proliferation.

Four reasons: One, the de facto rejection of SALT II, after we signed it, by both administrations: The Carter administration by backing down from it when it should have pushed it; and this administration for not embracing it.

Second, we have a President who is on record last year as saying that nuclear proliferation was none of our business. So how can our concern be credible?

Third, testimony before this committee by Secretary Stoessel, and I quote:

"As a means of buttressing our security and diminishing the risk of war, arms control has been greatly oversold."

What kind of a message does that send?

And finally, the serious embrace in this Nation of the concept of nuclear superiority as opposed to rough equivalence. And if we engage in that kind of arms race, how can we possibly preach to others that they should not do the same?

I would say, Mr. Secretary, that nuclear arms control, however one may view whether it is oversold or not, is the ultimate issue. And what this administration, which you are a part of, does on inflation, on social policy, on energy, on all those issues, is totally irrelevant if the policy of nonproliferation should fail.

History will record a number of things, obviously, as to us and as to the administration. If it records that we were the ones who participated by our own actions as opposed to our own words in nuclear proliferation around this globe, within this century, before the turn of the century, I think we will see the use of nuclear weapons. And that will be a world that we will regret, and now is the time to have done something about it.

LOOKING DOWN A DARK ROAD

I think the issue of that raid, as Senator Glenn said, goes far beyond the raid. The raid is just one event. We are looking down a very dark road of nuclear weapons being used by unstable people. And if we do not take the leadership in preventing that kind of proliferation, the fact is no one else will. And that is an enormous and ultimate responsibility. And I would hope that we take it very, very seriously.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Senator Tsongas.

Senator Kassebaum.

Senator KASSEBAUM. Thank you, Mr. Chairman.

Along with a number of others here, Secretary Stoessel, I have perhaps more observations to make than questions to ask.

I first would like to comment on something, however, which I think is important to note: that the nations who have been most directly affected in many ways, particularly the Arab nations, I feel, have been under pressure of extreme stress, obviously, and restrained in their comments.

I think also this should be particularly noted regarding France, which with a new President was then placed in the middle of a real vortex of whirling emotions and world opinions. Again, I think we should make note of their restrained and, I think, very beneficial attitude regarding this situation.

HEARING CALLED FOR LEGALISTIC ANALYSIS

This hearing was really called in part, for legalistic analysis. But, I think the Israeli action presents us with a foreign policy problem

in which we must reassure the other nation in the Mideast, particularly Egypt, as has been stated many times, that we will not condone precipitous provocative acts, while also maintaining the security of our historic and most valuable ally, Israel.

I would certainly share the eloquent statement that Senator Mathias has made because, I believe, that this does present us with a compelling opportunity to renew the Middle East peace mission. Secretary Stoessel, as you said in your statement, "We further believe that the unprecedented character of the Israeli air attack could not but seriously add to the already tense situation in the area and seriously complicate our efforts to resolve the various problems in the area through peaceful means."

SEARCH FOR A BROADER PEACE

It seems to me that it does give us an opportunity, an urgent opportunity, to search for a broader peace than now exists between Egypt and Israel. I realize it has been commented on many times that it is difficult to make comments in the delicate framework of ongoing negotiations. But in reply to Senator Mathias you did say that we need to urgently proceed. I think it is an opportunity which we cannot ignore or let go by.

I was heartened to hear your comments that indeed you believe the administration will proceed in this direction.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Kassebaum.

Senator Cranston.

Senator CRANSTON. Thank you, Mr. Chairman.

TWO BASIC QUESTIONS

I believe this hearing poses two basic questions. First, was the Iraqi Government, despite international safeguards, embarked upon a course which would yield nuclear weapons? And, therefore, can the Israeli raid on the Iraqi reactor fairly be deemed an act of self-defense?

Second, what steps can and should be taken to slow the spread of nuclear weapons? I warned in the Senate on March 17 that Iraq was embarked upon the systematic, determined effort to get the bomb. This conclusion was and still is shared by several key executive branch officials with whom I have been in contact.

IAEA DOCUMENTS

Additional information has come to me, Mr. Chairman, in the past several days which reinforces this conclusion. I have received four revealing internal documents from American sources within the International Atomic Energy Agency. These documents contain an estimate that Iraq could have produced enough plutonium each year in the Osirak reactor for up to three nuclear bombs.

Furthermore, these IAEA documents indicate that there is a significant possibility—indeed, probability—that this plutonium production would not have been detected by the IAEA inspectors.

Under the terms of Iraq's current agreement with the IAEA, inspections could be limited to three a year. Thus, Iraq could load its reactor between inspections but unload it before each preannounced inspection.

Under this procedure, Iraq could produce plutonium from unsafeguarded uranium yellowcake sufficient for one bomb every 4 months, without IAEA detection.

Two days ago IAEA Director General Eklund stated that such plutonium diversion in Iraq was not feasible and would be detected by the IAEA. This statement is contradicted by a special study conducted for the IAEA earlier this year which concluded that a reactor like Iraq's could produce as much as 24 kilograms of plutonium per year, as much as three bombs' worth.

In response to this study, an extraordinary meeting of nine senior IAEA technical specialists was convened to consider the dangers presented by the Iraqi program. Their unanimous conclusion was that such plutonium "diversion paths are technically practicable." They concluded that it was "very unlikely" that some IAEA member States like Iraq would accept the inspection activities necessary to detect such a diversion.

DOCUMENTS POINT UP FLAWS IN IAEA

These documents point up the fundamental flaw in the IAEA as presently configured. They show why there is presently no basis for public confidence in agency safeguards. The safeguards simply are not comprehensive enough to do the job, today.

The IAEA, unless we strengthen it, must negotiate with each host country what it will be shown and when it will see it. Inspectors simply come in after several weeks' advance notice, and they limit their check to predesignated facilities and material. This provides ample opportunity for any improper activities to be covered up.

I have also learned from an IAEA inspector in the section responsible for Iraq that several of the most sensitive Iraqi nuclear facilities were in fact under no international safeguards what ever. Not subject to inspection were the potentially sensitive hot cells supplied by Italy for fuel fabrication and plutonium reprocessing. Not subject to inspection was the stockpiled raw uranium yellowcake which could be used for plutonium production.

The documents I have obtained establish that the inspectors of the Iraqi program were not authorized to search for any clandestine bombmaking facilities.

ONLY SOVIET AND HUNGARIAN INSPECTORS VISITED IRAQ

I have also received information that since 1976 only Soviet and Hungarian inspectors have visited Iraq. Iraq had the right to object to any American citizen serving as an IAEA inspector. And Iraq had informally exercised that right.

The most recent inspection, in January, was reportedly conducted with the lights in the facility turned out. It was limited to a visual inspection of the fuel, and the whole operation was conducted by flashlight.

Several fuel elements could not be verified on that occasion because they were locked in a vault and the key could not be located. I have also learned from non-IAEA sources that Yahir el Mashad, the Egyptian-born scientist who was murdered in Paris last year, became a principal in the Iraqi nuclear program only after he had unsuccessfully advocated Egyptian production of nuclear weapons through the precise course the Iraqis apparently were pursuing.

Finally, an American inspector at the IAEA in the section responsible for Iraq, who has firsthand knowledge of the weakness of IAEA inspection procedures, resigned Tuesday. He has flown to Washington to present testimony to this committee on the Iraq program, in particular, and on the whole problem of the inadequacy of IAEA inspection safeguards, in general. He is Roger Richter. He will appear before this committee tomorrow morning.

I want to quote briefly from the analysis Mr. Richter provided the U.S. mission to the IAEA in 1980:

The available information points to an aggressive, coordinated program by Iraq to develop a nuclear weapons capability during the next 5 years. The IAEA safeguards are totally incapable of detecting the production of plutonium in large-size material test reactors under the presently constituted safeguards arrangement.

Perhaps the most disturbing implication of the Iraqi nuclear program is that the Non-Proliferation Treaty Agreement has had the effect of assisting Iraq in acquiring the nuclear technology and nuclear material for its program by absolving the cooperating nations of their moral responsibility by shifting it to the IAEA. These cooperating nations have thwarted concerted international criticism of their actions by pointing to Iraq signing of the Non-Proliferation Treaty while turning away from the numerous obvious and compelling evidence which leads to the conclusion that Iraq is embarked on a nuclear weapons program.

INTERNATIONAL APPROACH NOT WORKING

Mr. Chairman, the present international approach to controlling nuclear proliferation clearly is not working. The spread of the bomb presents the human race with our most fundamental challenge. The very survival of our civilization is placed at risk when the capacity to produce weapons of mass destruction is allowed to spread around the globe. We must all work together on this threat. There can be no more important task.

Thank you very much.

The CHAIRMAN. Thank you very much, Senator Cranston, for a very important statement and some very careful research on your part and your staff's part.

Senator Boschwitz.

NUCLEAR PROLIFERATION THREAT

Senator BOSCHWITZ. Mr. Chairman, I agree with the Senators who have spoken about nuclear proliferation and the threat that it poses. Without question, it is the greatest threat that we as a free nation and the world face in the next 20 or 30 or more years.

That threat is no better exemplified, Mr. Chairman, than a nuclear weapon falling into the hands of a country like Iraq. The proliferation of weapons falling into the hands of Third World countries, countries that are noted for extremism, countries that are not well disciplined,

is the greatest threat that we have to face in the succeeding part of the century and thereafter.

NUCLEAR SAFEGUARDS INADEQUATE

The nuclear safeguards, as Senator Cranston and others have pointed out, are apparently inadequate, in the minds of many, including the Israelis. And because of the intensity of the danger of proliferation and because the Israelis live so much in a world of reality, they probably did the world a favor by bringing to the attention in the most dramatic way the failure of nuclear safeguards and the problem of nuclear proliferation in the ensuing years of this century.

I watch a number of other countries and people do a lot of political posturing in this matter. It is a very easy one for political posturing on. But there is no question in my mind that the Iraqis were on their way to making a nuclear bomb. There is a question about how soon, there is a question about how many they could make. But there is also no question in my mind that the world and the Middle East is a lot safer from the fact that they will not be able to make such nuclear weapons. And some of the people who are most critical of the Israeli action are probably sleeping a little better and are probably cheering silently on the sidelines.

Some of those who are most critical are the ones who are most relieved. Although I also agree with Senator Baker that we should not get bogged down with minutia, I think that we have to deal, as Senator Tsongas said, with the most pressing issue that faces the world—the proliferation of nuclear weapons. This is no better illustrated than by the fact that nuclear weapons could fall into the hands of a country such as Iraq, led by a man such as Saddam Hussein.

Some people even tell me that this whole business was something of an election ploy by Prime Minister Begin. But nobody knows better than we that these kinds of missions do not always succeed. And in the event this one had not succeeded, it probably would have spelled the end of Mr. Begin's career, even at a time when he was moving ahead in the polls, even at the time when he was succeeding politically—which some observers just a few months ago said never could happen.

I have no particular sympathy for either Mr. Begin or his opponents, but quite clearly it is not an election ploy, because quite clearly, if this had failed, his party too would have failed.

ISRAEL DID NOT WANT TO BE HELD HOSTAGE

We went into Iran, a country with which we were not at war, overflew its territory, seeking to extract our hostages. Quite clearly, again, Israel just did not want to be held hostage and did not want a foe, such an implacable foe, to have a nuclear weapon.

The Iraqi reactor was, I believe, the largest of its type in the world outside of Germany, France, and the United States. They insisted on having 93 percent enriched uranium. They went around the world on a buying spree, buying hundreds of tons of natural uranium, the only purpose of which would be to serve as a blanket on that reactor for the purpose of producing plutonium.

INABILITY OF INSPECTING AGENCIES TO REMOVE THREAT

So if we call a spade a spade, Mr. Chairman, the threat that faces our Nation and the world in the years ahead is the threat of nuclear proliferation. The act of the Israelis, done in self-defense, in my judgment, very vividly brought to the attention of the world the scope of that threat, the inability of testing agencies or inspecting agencies to remove that threat, and the necessity for this country to act. I agree with Senator Tsongas that if it is not going to be us acting, it is not going to be anybody.

The Israelis tried unsuccessfully to negotiate a nuclear-free zone in the Middle East. Iraq would not have any part of such negotiations. Iraq, as a matter of fact, has never signed any form of a peace treaty or has even recognized, as Ambassador Stoessel pointed out, the existence of Israel in the 33 years that have succeeded after its independence.

So I think that it is the business of this committee not only to look into this action but also to look into the threat of the world ahead and to recognize this action for what it was: It was an act of self-defense, and also it was an act that brought to the attention of this country and the attention of the world the necessity for making some forward motion in ending nuclear proliferation.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Senator Boschwitz. We appreciate your statement.

Senator Dodd.

Senator DODD. Thank you, Mr. Chairman.

I will try to be relatively brief.

After listening to the remarks of my colleagues on the committee, I think a couple of things are important to keep in mind. First, I think we all need to recognize that there is a danger in becoming bogged down in some of the minutia surrounding this particular event. And second, I think we have to keep our attention focused on the particular foreign policy problem at hand. While I would like very much to see this hearing broaden out into a fuller discussion of nuclear nonproliferation, we have a particular policy problem in the Middle East that has to be addressed.

ADDRESS ISSUE OF NONPROLIFERATION

So while I would like to see us address the issue of nuclear nonproliferation, I think for purposes of trying to understand what has occurred and how it affects present relationships and future relationships in the short and long term, it is very important not to become bogged down, not to drift too far astray from the matter at hand.

It seems to me, Mr. Chairman, that some very basic concerns need to be addressed and examined in dealing with the issue of U.S. interests vis-a-vis Israel specifically, and in the Middle East generally.

DO OUR INTERESTS AND PRIORITIES MATCH?

The fundamental issue remains, I think, Mr. Chairman, how do we define U.S. interests in the Middle East and specifically with respect to Israel? Are our interests primarily political, military, or

economic? And this raises the further question of what are our priorities, given our interests? And finally, do our interests and our priorities match?

Second, what are Israel's interests? And does it see its interests primarily in political, economic, or military terms? And similarly, what are Israel's priorities in terms of the ways in which it defines and identifies its own interests?

Now, bringing these issues and questions together, I believe, Mr. Chairman, these hearings must focus on these questions, and we must ask ourselves how our interests and our priorities coincide with those of Israel and how the Israel attack on the Iraqi nuclear facility bears on our interests and on Israel's.

These are very fundamental and basic questions, but all too often we lose sight of them.

So I would hope, Mr. Chairman, that the committee will address some of the basics to see exactly where we are in terms of our own priorities and our interests, what Israel's priorities and interests are, where they match, and where they differ. And I think if we begin there, the committee will have a better chance of determining exactly what our position ought to be with regard to this particular event. With this approach, I think the committee will have an opportunity or a better chance, if you will, of helping to forge a policy which will both serve our interests, Israel's interests, and peace in that part of the world.

So, Mr. Chairman, if I can—and I realize we are on a very limited schedule here—I want to raise this very broad question for purposes of trying to determine what our priorities and interests are. I will be glad at this juncture to have Secretary Stoessel address himself to it, realizing that it may be a more appropriate question when we have a bit more time. If you would care at this point, Mr. Secretary, to comment on the basic question I have raised, I would appreciate your response.

Ambassador STOESSEL. Thank you, Senator. I think we would prefer to have a little more time to consider your questions and make a considered answer to them.

The CHAIRMAN. Is there any specific question you would like to put now, Senator? You have a moment or two of time remaining.

Senator DODD. No. But I would be glad to yield if anyone wishes additional time.

The CHAIRMAN. The first question I put to you was when a determination under the Arms Export Control Act may be made. Senator Glenn has raised a question as to whether the administration will make a determination as to whether there was actually a violation or whether that responsibility would be incumbent upon this committee.

Senator Glenn, did you want to raise that?

Senator GLENN. I would like to elaborate just a little and I appreciate very much the chairman's forbearance on this, even though we are short on time.

WAS THERE A VIOLATION?

Senator Baker spoke about the necessity for a partnership, and I agree with that. My question, on which I will elaborate a little bit,

is this: Has the administration determined that it will in fact make a determination of whether there was a violation or not?

Let me go back just a little. In 1978 we received a report that there may have been a violation in Lebanon. Nothing was ever done about that. There was no follow up by the administration. In 1979 there was another report that there may have been a violation, but there was no follow up from the administration. In 1974, with Turkey and Cyprus, there may have been a violation, but there was no follow up from the administration, though Congress took action and in 1978 undid that action with regard to Turkey and Cyprus.

CONCENTRATE ON POLITICAL SOLUTIONS

Now, Secretary Stoessel, your statement earlier said that we should concentrate not on legalisms, we should concentrate on political solutions. That would at least carry with it some potential connotation that a violation determination will not be made by the administration.

I was concerned from the beginning that since we would be 95 percent dependent upon the administration for the information we received, we should wait until the administration had completed all of its investigation before we had these hearings.

So I argued against having the hearings now. After the administration completed its investigation, we could then complete our action on whether there was or was not a violation, in partnership with the administration. But past history from the State Department, through the last administration at least, was that this committee has made its determination solo, and the administration has made its report and then let it drop.

Now, I think this incident should be in a different category of importance. This is not a little border violation we are talking about. This is 650 miles away and across two countries, sovereign nations. It is not a small border violation.

It seems to me that it is incumbent upon the administration to do exactly what Senator Baker indicated and have that partnership of determination on this and not, in effect, buck it to this committee and let us be the heavies in making this very, very momentous decision. These are big decisions in foreign policy.

So I would repeat my question: Has the administration determined that the administration will make its own independent determination of whether a violation has occurred?

Ambassador STOESSEL. Senator, I would answer that by saying that, no, we have not made a decision on that as to whether there will be a determination.

WHEN WILL DECISION BE MADE?

Senator GLENN. When will that decision be made, Mr. Secretary?

Ambassador STOESSEL. I cannot predict that, Senator.

Senator GLENN. Will there be a determination made on that, or will it be left hanging as has been done before, as we have had it happen before?

Ambassador STOESSEL. I think, Senator, that remains to be seen. It will be part of the outcome of our deliberations, our own investigation, our consultation with you. I do not think there is any intention

certainly to pass the buck here. I think all of us agree we are faced with a very difficult, complex situation. Our understanding is that the law does not require us to make a determination.

NO REQUIREMENT FOR PRESIDENTIAL FOLLOWUP

Senator GLENN. That is correct. There is no requirement for Presidential followup once the report has been made. And that is where things have fallen apart in the past. Then we are, obviously, under the gun to take some sort of hearing action at least, and out of that comes the formation of public opinion and our own opinions and it becomes sort of a de facto thing whether we actually take a vote or not.

So we become the critical item in this, and the administration rides along, as has happened in the past. I am not saying you are going to do that this time, but as has happened in the past, the administration makes its report and nothing else happens from the administration and we become the determining factor in this, still dependent on the administration for all information that we get, 95 percent of it, that will determine this.

It seems to me that is grossly unfair. I want to implement what Senator Baker talked about, that we decide these on a partnership basis. And I would urge the administration to make a determination that they will in fact come to a conclusion as to whether they think a violation has occurred. Then we can work together on this.

Right now, we become the determining factor, and I think that is unfair.

Senator TSONGAS. Will the Senator yield?

The CHAIRMAN. Senator Glenn, I would like to comment on that. The administration has made it clear that it has not made its decision whether it intends to make such a determination.

Senator GLENN. That is what I am urging them to do.

The CHAIRMAN. But I want to make it clear that this committee has not taken any action or made a determination. We have a coequal responsibility, the Congress and the executive branch. Either one or both can make a determination. It is up to us also to decide whether we are going to make a determination. There has not been a decision by this committee, and there has not been a decision by this administration.

Senator Biden, we are on a 5-minute time limitation. You can use your time either to make a statement or ask some questions. Then we will excuse our witness and go on with Mr. Casey.

Senator BIDEN. Mr. Chairman, I am most anxious to question Mr. Casey.

It is not that I do not have a high regard for you, Secretary Stoessel but I am anxious to get to Mr. Casey.

I have no questions for the State Department at this time.

The CHAIRMAN. Let me ask if Mr. Casey has arrived.

Mr. SANDERS. Yes, Mr. Chairman.

The CHAIRMAN. Would you ask Mr. Casey to come in, please?

Senator TSONGAS. Mr. Chairman.

The CHAIRMAN. Senator Tsongas.

Senator **TSONGAS**. I have just one follow-up on Senator Glenn's question. Does the administration wish this committee to make a determination?

Ambassador **STOESSEL**. Senator, I think we would leave that up to the committee. We have no view on that.

Senator **TSONGAS**. Does that mean the administration has no position and does not care whether the committee makes a determination or not?

Ambassador **STOESSEL**. I think it is fair to say that we have no position on that. We do wish to consult with you. We do wish to work in partnership with you and exchange views and information. But as to the action you may decide to take, I think that is for you to do.

Senator **TSONGAS**. I think it is fair to say, Mr. Chairman, that we have a true partnership on this issue in the leadership that we will jointly provide. [General laughter.]

The **CHAIRMAN**. Again, I would say this committee has not made such a determination, but we certainly have the right to do so.

U.N. RESOLUTION REGARDING ISRAELI ATTACK

Secretary Stoessel, before you leave, would you comment, as much as you can in open session, on the status of a resolution at the United Nations now regarding the Israeli attack?

Ambassador **STOESSEL**. Mr. Chairman, I think all I can say is consultations are going on very actively at the U.N. with regard to developing a resolution on this event. The hope is that we can arrive at a consensus resolution which all members may support. That, however, remains to be seen. I think the discussions will continue. There may well be a vote later today or tomorrow.

The **CHAIRMAN**. Thank you very much, Secretary Stoessel.

Senator **GLENN**. Mr. Chairman, I have a short comment.

The **CHAIRMAN**. Very short, please.

ADMINISTRATION DETERMINATION

Senator **GLENN**. The administration may have placed itself in somewhat of a box in this thing in making a determination, for this reason: The embargo of the F-16's either has to continue, in which case it would be a determination that a violation had occurred, or if you pull the embargo off, there has to be justification for pulling it off, as I see it, in which case we would have had to make a determination that a violation had not occurred.

So I think by the embargo you have placed yourself in a position where this partnership will be enforced on this administration contrary to past patterns in previous administrations.

Thank you, Mr. Chairman.

The **CHAIRMAN**. Thank you very much.

Gentlemen, we thank you very much for being here.

Secretary Stoessel, as I understand it, your colleagues will be back in this room with us at 2 o'clock.

We will now recess for 1 minute so that Mr. Casey can come forward so that we can move in open session to go into closed session.

[Pause.]

The CHAIRMAN. The Chair will entertain a motion to go into executive session.

Senator PELL. Mr. Chairman, I make a motion that we go into executive session.

The CHAIRMAN. Without objection, we shall now adjourn to room 324 to go into executive session with Mr. William Casey, Director of the Central Intelligence Agency.

[Whereupon, at 10:45 a.m., the committee recessed, to reconvene immediately in executive session in room 324 Russell Building.]

AFTERNOON SESSION

[Whereupon, at 2:07 p.m., the committee reconvened pursuant to recess at 10:45 a.m.]

The CHAIRMAN. This afternoon we will resume our hearing. Because we apparently will have fewer Senators here, it would appear wise for us to proceed on a 10-minute rule. We will do as much as we can in open session, and if it is essential in order to have complete candor and free discussion on sensitive areas we can then go into closed session.

But let us hold all questions that would be more appropriate for a closed session until the end. Let us do as much as we can in open session.

First, I wonder, Mr. McFarlane, if you would mind, to the extent that you can, updating us on what is happening at the U.N.; what the likely form of a resolution might be, and whether it does appear as though the possibility exists that a resolution can be adopted that could be supported by the United States.

STATEMENT OF ROBERT McFARLANE, COUNSELOR, DEPARTMENT OF STATE, ACCOMPANIED BY NICHOLAS VELIOTES, ASSISTANT SECRETARY OF STATE FOR NEAR EASTERN AND SOUTH ASIAN AFFAIRS; RONALD SPIERS, DIRECTOR, BUREAU OF INTELLIGENCE AND RESEARCH; AND JAMES MICHEL, ACTING LEGAL ADVISER

Mr. McFARLANE. Mr. Chairman, from reports that we have received from our mission, there is some prospect that a resolution that has been proposed, not by the United States, has been subject to negotiation by all of the parties to the issue.

Just this morning there appears to have been substantial progress toward consensus. And our latest report is there is the prospect of consensus emerging today. I would point out that there remain features in the current document, however with which the United States is not in full support and are subject to continuing dialog.

However, just before I left, our reports from our Ambassador were that there appeared to be a good prospect for consensus emerging.

The CHAIRMAN. Thank you very much.

In this morning's New York Times there was a report that in a previously undisclosed agreement between Iraq and France, French technicians would remain at the reactor through the year 1989. Did the United States know of this agreement?

FRANCE MAJOR SUPPLIER TO IRAQ

Mr. McFARLANE. Mr. Chairman, the French program with Iraq began some time ago, in the mid-1970's. France has become a major supplier of industrial and other equipment to Iraq. I do think that if we are going to get into the details and features of this, that we should treat it in closed session. And I would make a request to that effect at this time.

The CHAIRMAN. The entire discussion of it? I have several questions, and if you feel it more appropriate in closed session, it would be perfectly all right. But I would like to know whether Israel knew about this agreement.

Mr. McFARLANE. The United States did.

The CHAIRMAN. And assuming the agreement remained in force, would Iraq have been able to covertly develop an operational nuclear weapon capability without France knowing about it?

Mr. McFARLANE. We can treat for you our own estimates of the effect of this agreement. Again, it is judgmental and it deals with matters I think are better left to closed sessions, Mr. Chairman.

The CHAIRMAN. The last question, then, may prompt the same comment from you. But it is quite pertinent to the essential question as to what the threat was and was this an act of necessary self-defense? Could Iraq have expelled the French technicians without crippling the operation of the reactor?

Mr. McFARLANE. For my own part, Mr. Chairman, I would have to say that an informed answer would require knowledge of the French involvement, their degree of control, and the latitude they had for influencing the operation. And I quite honestly do not know those details. I am afraid I cannot reach a judgment on that.

LEGAL ASPECTS RELATED TO USE OF AMERICAN WEAPONS

The CHAIRMAN. I would like to discuss some of the legal aspects as related to the use of American weapons. In 1978 and 1979 the Secretary of State formally notified the committee that Israeli use of American weapons in Lebanon "may have" violated the provisions of the 1952 Mutual Defense Assistance Agreement with Israel.

What discussions did the United States hold with the Government of Israel with respect to the legality of preemptive military operations outside Israel's borders in the wake of these two incidents?

Mr. McFARLANE. I missed the first part of your question, Mr. Chairman. The two incidents in question?

The CHAIRMAN. I made reference first to the 1978 and 1979 notifications to this committee that Israel's use of American weapons in Lebanon may have violated the provisions of the 1952 Mutual Defense Assistance Agreement with Israel and asked what discussions did the United States hold with the Government of Israel with respect to the legality of preemptive military operations outside Israel's borders in the wake of these two incidents?

In other words, did we reach any kind of understanding with them in 1978 and 1979 with respect to preemptive strikes?

Mr. McFARLANE. The dialog that took place between our Government and theirs predates my presence in the Department of State.

However, my colleague, Mr. Veliotis, was present, and perhaps he could take that question.

The CHAIRMAN. Secretary Veliotis.

Ambassador VELIOTES. Mr. Chairman, I would like to make some preliminary remarks and then submit a more detailed response to you.

The CHAIRMAN. Surely. Excuse me. Do these remarks pertain to this particular question?

Ambassador VELIOTES. Yes, sir. They concern the conversations we had with the Israelis on the use of American weapons in Lebanon. I believe you said "preemptive strikes."

The CHAIRMAN. Yes.

Ambassador VELIOTES. At that time, as I recall, we did have discussions with the Government of Israel which fully satisfied us with respect to the two incidents that we had reported. I believe we so informed the committee.

Subsequent to that time, we have had periodic discussions with the Government of Israel on the question of the use of American weapons in or over Lebanon, most recently in the context of the Habib mission.

I think the results have been that we have on occasion urged restraint when we believed this was required. I think I had better leave it there at this open session.

HABIB MISSION

The CHAIRMAN. Could you give us an assessment, in your judgment, as to whether there was a reasonable chance that the Habib mission could be successful; that is, success being measured in the fact that there would be some arrangement by which the diplomacy would result in missiles being taken out of Lebanon.

Mr. McFARLANE. Mr. Chairman, on your basic point, is there a reasonable chance, I think that there surely is. The objectives that we seek are inclusive of several elements of stability in Lebanon and the relationship of outside forces to it. The mission thus far has explored different approaches to dealing comprehensively and separately with the three principal issues of contention and has drawn out from all of the parties their views on these three elements.

I think it is premature at this point to draw any conclusions. Ambassador Habib, in his second round, has visited Beirut, Riyadh, has collected the viewpoints of those parties in Damascus, and is now in Tel Aviv. We think there is a very solid basis for carrying this forward and right now we remain hopeful.

The CHAIRMAN. What is your assessment now as to the probable success of that mission? And to what extent has it been undercut by the unilateral action of Prime Minister Begin?

INCIDENT RAISED TENSIONS

Mr. McFARLANE. Well, I think it is fair to say that this incident has raised tensions, has called into question the confidence that we believe we must enjoy with all parties in the area, and has made it more difficult. Again, I would have to say it is premature to say whether it will have a catastrophic effect. I do not think that is true today.

The CHAIRMAN. During the course of our discussions with Israel relating to the Habib mission and because of the frequency of comments emanating from Israel that those missiles would be taken out militarily if we do not move faster on the diplomatic course, have we discussed with Israel the possible legal implications should American weapons be used in an Israeli strike on the Syrian surface-to-air missile batteries?

Mr. McFARLANE. In the wake of this incident, and indeed pre-dating it, our own viewpoint toward what will lend to an atmosphere of reduced tensions and a possible resolution of this issue have been made very clear to Israel and to other parties.

VIEW TOWARD USE OF U.S.-SUPPLIED WEAPONS AND EQUIPMENT

As my colleague had said a moment ago, we have in a separate context often been in contact with the Government of Israel with respect to our view toward the use of U.S.-supplied weapons and equipment. It is relevant clearly in the context of your question, and we are confident that Israel understands our attitude on this issue.

The CHAIRMAN. Have we made it eminently clear to the Israelis that military action using American weapons to take out these missiles would be inconsistent with our 1952 agreement?

Mr. McFARLANE. I would reaffirm—and I do not intend to dissemble or obfuscate—that the Government of Israel is clearly and unequivocally aware of our view toward the very harmful effects that actions today would have before we have had an opportunity to allow diplomacy to work.

The CHAIRMAN. Thank you very much.
Senator Pell.

Senator PELL. Thank you, Mr. Chairman.

USE OF AMERICAN WEAPONS VIOLATION OF 1952 AGREEMENT

I would just followup that thought. Has Israel been informed that the use of American weapons against the Syrian missiles would be a violation of the agreement?

Mr. McFARLANE. The context of our dialog with Israel, both on the use of U.S.-supplied equipment and on its actions in the context of the Habib mission, have been political in their orientation. I would reemphasize, Senator Pell, that there is no question but that the Government of Israel clearly understands that actions, using our equipment or not, which disrupt the prospects for resolving this conflict would have a very harmful effect.

Senator PELL. I understand exactly what you are saying. But you still did not answer my question. Have they been informed specifically to this specific effect?

Mr. McFARLANE. Well, I take it from your question that you are asking whether we have implied a legal sanction or a legal judgment on such use as Israel might make of our weapons. Or am I missing your point?

WAS ISRAEL INFORMED THEY WOULD BE IN VIOLATION OF AGREEMENT?

Senator PELL. My point—and, I think, Senator Percy's point—is to ask whether Israel had been informed that if they used American weapons against Syria they would be in violation of the agreement? You may well not have so informed them because you may not have made up your mind that it would be a violation. But my question was: Has that viewpoint been passed to them specifically? I think the answer probably is "No," but I just want to hear you say it.

Mr. McFARLANE. Has the United States informed Israel that the use of our weapons against Syria would be a violation of the agreement?

Senator PELL. Against the missiles in Lebanon, the Syrian missiles in Lebanon.

Mr. McFARLANE. Well, precisely in those terms, I do not recall any such notice. The intent of avoiding violence at this point is absolutely a fact.

The CHAIRMAN. Could we make sure that the other witnesses give us their knowledge? At no time then did we put Israel on notice that use of American weapons against those missiles would be a violation of our American-Israeli agreement of 1952?

Ambassador VELIOTES. I have nothing to add to Mr. McFarlane's statement.

Ambassador SPIERS. [Nods negatively.]

Senator PELL. May the record note Mr. Spiers shook his head.

Ambassador SPIERS. No. I have nothing to add.

Senator CRANSTON. Claiborne, my I ask a followup?

Senator PELL. Please.

Senator CRANSTON. At any time did we ever advise Israel that use of our equipment against the nuclear installations in Iraq would be in violation of our agreement with Israel or in violation of American law?

Mr. McFARLANE. Senator Cranston, perhaps I ought to defer to my colleague, the acting legal adviser of the Department. In the context of the agreement itself and what it implies or requires of Israel and other parties with whom we have analogous agreements—

Senator CRANSTON. I am sorry, I could not understand your last sentence.

Mr. McFARLANE. The terms of our agreements with Israel or indeed those analogous terms with other parties to whom we sell systems, the same criteria are, by and large, applicable. The interpretation of those actions which fall within the terms of those agreements are subject to interpretation. But basically to interpret in advance and to advise that thus and so does or does not qualify is not a practice that we followed, no.

Senator CRANSTON. So the answer is "No," then. Thank you.

AGREEMENT REFERENCED IN SALES AGREEMENT

Mr. MICHEL. I would just like to add something in order not to leave an impression that we have this 1952 agreement and it is just there and never referred to. This agreement is referenced in every sales contract that we sign with the Government of Israel under the

foreign military sales program. Its terms are incorporated by reference in each and every such contract.

The agreement talks about the purposes for which U.S.-supplied equipment may be used. It does not talk about countries or places. I think it is a rather difficult thing to anticipate that we would in advance think up some way that they might be used and then say what we thought about that anticipated use.

The CHAIRMAN. Senator Pell, we will extend your time.

Why, you would not be thinking up anything. Every paper in the country has carried this.

Mr. MICHEL. Yes, but the particular—

Mr. CHAIRMAN. And we were just asking has the State Department exercised due diligence by putting the Israelis on notice by defining exactly what these things mean. There is a lack of definition here—often you have seen and heard what they have said, days go by, what happens in those days?

Did you at that particular time with this particular provision put them on notice that the use of our weaponry against those missiles, which they were threatening constantly, would be a violation?

Mr. MICHEL. I misspoke, Mr. Chairman. I merely meant to point out that the existence of the agreement and our views have been made well known consistently over a long period of time.

I have nothing to add as to specific discussions in the specific context to which you referred.

WHAT ARE U.S. VIEWS?

Senator GLENN. What were our views? What did we express? You have not spelled those out?

Mr. MICHEL. In the context of previous incidents, we have expressed concerns and counseled restraint on the use of these U.S.-furnished items.

Senator GLENN. We have counseled restraint?

Mr. MICHEL. Yes. In the 1978 and 1979 incidents to which you referred.

On the question of prior notice, I would like the record to be clear that we do not construe our various mutual defense assistance agreements with recipients of U.S. arms as permitting the recipient to use those arms in any ways to which the United States had not objected in advance. We would not accept that kind of a legal burden and believe such an approach would be unworkable.

The CHAIRMAN. Senator Pell, please continue.

Senator PELL. Thank you very much.

IRAQIS PROUD OF THEIR NUCLEAR PROGRAM

Now, on another subject, as you know, the Iraqis were not only threatening with their nuclear program but were very proud of it. Accordingly, I guess, they will get right back on to the nuclear research track.

I am wondering as they do this do you feel this will begin a cycle again and Israel again will retaliate? My question is twofold: First, how long would it take a reactor to get back to just where it was last week? And, two, do you think that Israel would behave any differently if it did?

Mr. McFARLANE. On the first part of your question, the estimates of how long hypothetically it might take to restore the facility to its pre-June 7 status, estimates are in the neighborhood of 3 to 5 years.

The second part of your question, I may have misinterpreted, Senator Pell.

Senator PELL. Is there any reason to believe that Israel would find it less of a threat in 5 years than it would today?

FIND NO BASIS FOR ACTION TAKEN

Mr. McFARLANE. I think, first of all, you are aware, of course, of our condemnation of it and of our grounds for the condemnation. We find no basis for the action that was taken. We understand and are reviewing now Israel's stated position for it. The failure to consult with us, the damage that it does to the climate for a broader settlement and so forth, which have been discussed with the committee earlier, remain matters of concern to us. These are matters which we can continue to impress upon the Government of Israel.

To get to the essence of your question, Senator, I think each nation reserves to itself the right to take actions which it views as in its supreme national interest. We do not believe that kind of action was justified in this instance. I think the essence of your question—and I think Senator Glenn has referred to this fundamental problem himself—is that to foreclose this kind of thing, it stresses the importance of building upon what we have in IAEA safeguards, exploiting them and improving upon them. And it is to that end that the administration had undertaken some time ago to analyze its own nonproliferation policy and only recently has the President approved guidelines for this new policy, on which we would be pleased to come and consult with members.

It does involve strengthening in all ways possible IAEA safeguards, dealing with supplier countries, dealing with problem countries, which is the issue about which we are talking. At your convenience, we would like to consult further on that.

Senator PELL. Thank you.

In another context, former Ambassador Goldberg has submitted to the committee a letter, and I ask unanimous consent that it be inserted into the record at this point.

[The letter from Ambassador Goldberg follows:]

JUNE 17, 1981.

HON. CHARLES H. PERCY,
Committee on Foreign Relations,
U.S. Senate, Washington, D.C.

MY DEAR MR. CHAIRMAN: It is my understanding that your distinguished committee will hold hearings relating to the recent bombing by the State of Israel of Iraq's nuclear installation.

These hearings, I assume, will deal with all aspects of the matter, including whether Israel has violated the terms of its agreement with the United States restricting the development of American provided air-craft to Israel's self defense and also whether the Israeli bombing violates accepted norms of international law.

Iraq has consistently proclaimed that it is in a state of war with Israel. Further, Iraq, contrary to relevant resolutions of the United Nations, has refused to renounce belligerency against Israel and to conclude a peace treaty.

Iraq has also refused to accept Resolutions 242 and 338 unanimously adopted by the United Nations Security Council.

In light of the fact that by its own decision Iraq deems itself to be at war with Israel, the State of Israel, under established rules of international law, has the right to take military action, including bombing, against installations in Iraq which potentially may assist Iraq in its proclaimed war-like designs. It is not necessary, in my understanding of applicable rules of international law, for Israel to prove that the nuclear installation in question is producing nuclear bombs. It is sufficient that this nuclear installation potentially may be of assistance to Iraq in its announced program designed to undermine the security of the State of Israel.

By way of illustration, international law permits the bombing of a non-nuclear electric generating plant of a hostile and belligerent power inasmuch as such a plant may be helpful in the waging of war.

Thus, since Iraq is in a state of war with Israel, military action by Israel against Iraqi installations helpful to its war-like designs, would be regarded in international law as justified acts of self defense by Israel. The Allied Powers, during World War II, bombed, as acts of self defense, installations by Germany, such as oil refineries, steel mills, public utilities, ball bearing plants and other such installations which might contribute to Germany's war efforts against the Allied Powers.

It is my conviction, therefore, that the criticism of Israel for the bombing of the Iraqi nuclear installation has overlooked the basic fact that Iraq, by its own choice, is in a state of war with Israel and that Israel, therefore, had the legal right to seek to destroy such an installation. It is relevant, in this context, that Israel, contrary to Iraq, has expressed its willingness to make peace with Iraq, in accordance with Resolutions 242, 338 and other relevant resolutions of the United Nations Security Council.

There are, in addition to the nuclear installation, other evidences of Iraq's hostile intent, namely, the involvement of Iraqi forces in recent wars against Israel by the front line Arab States and its frequent statements since that its armed forces are available for future deployment and for the same purpose.

I am at a loss, therefore, to understand the criticism of the Israeli bombing of the Iraqi nuclear installation as contrary to accepted norms of international law and without justification as an act of self defense.

Since I have no independent knowledge about the reason for timing of the bombing attack, I express no opinion on this aspect of the matter. And since I also possess no independent information, other than public and conflicting statements on the advisability of resorting to military force rather than diplomatic measures, I likewise regard it to be inappropriate to comment on the military necessity or political wisdom of the attack. I have no doubt, however, about Israel's legal right to bomb Iraq's nuclear installations, in light of the given circumstances, under traditional principles of international law and generally accepted concepts of what actions constitute self defense between belligerents.

I would appreciate it very much, Mr. Chairman, if this letter could be included in the record of your hearings.

Sincerely yours,

ARTHUR J. GOLDBERG,
Former Associate Justice of the Supreme Court of the United States, former
Permanent Representative of the United States to the United Nations,
former U.S. Ambassador-at-Large.

STATE OF WAR BETWEEN ISRAEL AND SOME ARAB STATES

Senator PELL. Its thesis is that since Israel and Iraq are at war, when one is at war one is perfectly justified in taking actions of this sort. What is the State Department's response to that idea?

Mr. McFARLANE. First of all, it implies a legal connotation to acts authorized by states in the status of belligerency or war. And perhaps I could call on, first, my colleague, Mr. Michel.

Mr. MICHEL. Senator Pell, it is true that there is a continued state of war between some of the Arab states and Israel. That fact has been asserted from time to time by some of the Arab states as a justification of actions against Israel, such as the closing of the Straits of Tiran in 1956.

The United States consistently has denied that such assertions of belligerency give the Arab states any right to use force beyond the right of self-defense recognized in the U.N. Charter. We think the same reasoning would apply to Israel.

Of course, the existence of that continued state of war is a fact that Israel must take into account in its own defense policies. It does have hostile neighbors.

Senator PELL. Thank you. I see that my time is expired.

The CHAIRMAN. Thank you, Senator Pell.

Senator Mathias.

Senator MATHIAS. Thank you, Mr. Chairman.

HIGH LEVEL OF CONCERN IN ISRAEL

We can recognize that there must have been a very high level of concern in Israel before coming to the decision to take this particular step, a very serious step from which very serious consequences would inevitably flow. Of course, that concern centered on the development of a nuclear capability by a Mideastern neighbor.

Prime Minister Begin has said that he would not hesitate to take a similar step under similar circumstances in the future. Can you tell the committee what are the known nuclear facilities that now exist in the Middle East? And by "the Middle East," I think we probably ought to include for practical purposes Pakistan and Iran.

Mr. McFARLANE. We have our best judgments on that, Senator Mathias, and we will check quickly to see if we can provide that in open-session. I believe the fullest possible treatment would be better left for closed session.

LOCATIONS OF KNOWN NUCLEAR FACILITIES IN MIDDLE EAST

Senator MATHIAS. Would you give us at least the locations of the known facilities, those that are generally known? If you would prefer not to, I would stand by the decision on it.

Mr. McFARLANE. We can surely give you the locations.

Senator MATHIAS. I think it would be helpful to the committee and I think it would be helpful to the American people to have an idea of just what the picture is in the Middle East, because there was obviously desperate concern on the part of Israel as far as this particular location is concerned. Now, what other locations are there?

Mr. BORIGHT. Senator, let me quickly run over my understanding of the nuclear facilities in the Middle East. Essentially, there are very few. Iran had a very ambitious nuclear power program, which is now totally stalled. The Iranians had two reactors under an advanced stage of construction, but they have halted construction on those. They also had one or two research reactors. So there was a substantial program in Iran.

There is a small research reactor in Egypt, much smaller than the one in question in Iraq. I think you meant to leave out Israel in the question. You said neighbors of Israel.

Senator MATHIAS. I said the Middle East. I think we ought to have a full inventory of the Middle East.

Mr. BORIGHT. It is common knowledge that there is a reactor in Israel. In fact, there are two reactors. There is a small research reactor, and there is a natural uranium reactor obtained quite a while ago.

We will have to review this carefully for the record, but there are essentially no other nuclear facilities in the Middle East.

Senator MATHIAS. There is nothing in Pakistan?

Mr. BORIGHT. I did not know that the Mideast extended that far.

Senator MATHIAS. For this purpose I did define the Mideast as including Pakistan.

Mr. BORIGHT. Yes. Shall I go through the list for Pakistan?

Senator MATHIAS. Yes.

Mr. BORIGHT. Pakistan has a natural uranium power reactor of the Candu type. It has research facilities including a research reactor. I think it is generally known now that Pakistan is working on development of an enrichment capacity, and they have been interested in reprocessing and have one reprocessing plant under advanced stages of construction and various other laboratories.

I would have to provide any further information for the record.

The CHAIRMAN. Senator Mathias, may I ask for the hands of those in the room who are having trouble hearing? [Show of hands.]

It is virtually everyone, including those right behind the witnesses. I can assure you that we are having trouble hearing also. Would you please speak into the microphone so everyone in the room can hear you.

Can all of you hear me?

[General applause.]

The CHAIRMAN. Thank you very much.

Gentlemen, we are going into closed session later, but not now. [General laughter.]

The CHAIRMAN. Thank you, I am sorry for the interruption.

Mr. BORIGHT. I apologize, Mr. Chairman. Would you like to go through that again?

The CHAIRMAN. If you could repeat it, I would appreciate it very much.

Senator MATHIAS. Not on my time, Mr. Chairman. [Laughter.]

The CHAIRMAN. Oh, absolutely not. Out of the committee's time.

Mr. BORIGHT. The question is, What nuclear facilities are there in the Mideast? The answer, briefly, is: In Israel there is a natural uranium reactor and a research reactor. In Iran there was quite an ambitious nuclear power program, including two reactors in advanced stages of construction, plus one research reactor. In Egypt there is a small research reactor that has much less material and is less of a concern than the Osirac type of reactor.

There are in Pakistan several facilities, including a natural uranium power reactor, a research reactor, a research facility on uranium enrichment, and certain work on reprocessing capability.

There is—I will have to check the details of this—I think there is a very small research reactor in Libya.

The Chairman. Thank you.

Senator MATHIAS. I would think it would be useful for the committee if you would give us a more detailed report on that. But this will suffice for the moment.

[The information referred to above follows:]

NUCLEAR FACILITIES IN THE MIDDLE EAST

(Submitted by the Department of State)

Country and facility	Facility origin	IAEA safeguards
Iraq:		
IRT-2000, 2 MW research reactor.....	U.S.S.R.....	Yes.
TAMUZ-1, 40 MW research reactor.....	France.....	Yes.
TAMUZ-2, 500 KW research reactor.....	France.....	Yes.
Supporting nuclear research facilities.....	Italy.....	Yes, when Nuclear material present.
Iran: UTRR, 5 MW research reactor.....		
	United States.....	Yes.
Israel:		
IRR-1, 10 MW research reactor.....	United States.....	Yes.
DIMONA, 26 MW research reactor.....	France.....	Unsafeguarded.
Pakistan:		
PARR, 5 MW research reactor.....	United States.....	Yes.
KANUPP, 125 MWe power reactor.....	Canada.....	Yes.
KAHUTA and SIHALA enrichment facilities.....	Netherlands (technology) Switzerland, Netherlands, France, FRG (equipment).	Unsafeguarded. Unsafeguarded.
New laboratories reprocessing facilities (PINSTECH).....	France (technology). Belgium, FRG, Switzerland, France (equipment).	Unsafeguarded. Unsafeguarded.
Chasma reprocessing plant.....	France (technology). France, Italy indigenous (equipment).	Unsafeguarded. ¹ Unsafeguarded. ¹
Chasma fuel fabrication plant.....	Canada (technology). Indigenous (equipment).	Unsafeguarded. Unsafeguarded.
Uranium hexafluoride plant, Dera Ghazi Khan.....	FRG.....	Unsafeguarded.
Egypt: WWR-C, 2 MW research reactor.....		
	U.S.S.R.....	No. ²
Lybia: TAJURA, 10 MW research reactor.....		
	U.S.S.R.....	Yes.
Turkey:		
TR-1:		
1 MW research reactor.....	United States.....	Yes.
5 MW research reactor.....	France.....	No. ²
TR-2, 250 KW research reactor.....	United States.....	Yes.

¹ IAEA safeguards apply but not currently being administered.² Facility will be safeguarded under IAEA safeguards agreement currently being negotiated.

Senator MATHIAS. We know of nothing in Jordan, nothing in Syria, nothing in Turkey.

Mr. BORIGHT. I say "Yes" to the first two. But in Turkey there is a research reactor. Again, I did not go that far geographically.

FACILITIES SUBJECT TO INTERNATIONAL INSPECTION

Senator MATHIAS. If we are considering the whole problem, we may as well get it all under one tent.

Now, which of these facilities are subject to international inspection?

Mr. BORIGHT. Taking from the top those that I have gone through, Iran is an NPT party and, therefore, all of its facilities were under safeguards. Egypt now has ratified the NPT. Its research reactor is under safeguards. The same applies to Libya. Pakistan is not; the power reactor in Pakistan is under safeguards under the terms of the supply from Canada of that reactor.

The other facilities—that is, in Israel and the facilities, the enrichment facilities, in Pakistan—would not be under safeguard.

Senator MATHIAS. What is the origin of the equipment at each of these countries?

ORIGIN OF EQUIPMENT

Mr. BORIGHT. Again, from the top, Iran was negotiating for power reactors from several suppliers. The first two, I believe, were from

Germany. I will check that for you. The research reactors, I should check on the source of them.¹

The research reactor in Egypt, I think, was from the Soviet Union. I think that is true of the research reactor in Libya. The small research reactor in Israel, I think, is of U.S. origin. The natural uranium reactor, I think, was built in cooperation with France.

I would have to check on the origin of Turkey's reactor. I think it may be German.¹

Senator MATHIAS. The reason I asked the country of origin of each of these facilities is so that the committee could get some sense of the responsibility that the originating country may bear, the kind of terms under which the originating country may supply nuclear facilities. The whole issue of proliferation has been highlighted by this episode.

Mr. BORIGHT. Senator, excuse me. I did leave out an important facility in the Mideast in terms of origin. The natural uranium power reactor in Pakistan was from Canada.

Senator MATHIAS. And subject to the agreement with Canada with respect to its employment?

Mr. BORIGHT. Yes, sir.

ASSESSMENT OF INTERNATIONAL INSPECTIONS

Senator MATHIAS. Now, you have identified for us which of these facilities are subject to international inspection. Are you prepared at this session to give us an assessment or to give us the opinion of the Department of State as to the effectiveness and efficiency of these international inspections?

Mr. BORIGHT. Senator, I could make some general comments about IAEA inspections at facilities of this type. I could not give you an assessment on a specific facility by specific facility. The facilities in Iran are no longer under construction. There is no material there except for one of the small research reactors, to my knowledge. So I think there is essentially no IAEA activity there.

The natural uranium reactor, as in Pakistan, is a rather complicated reactor to safeguard, because it can be refueled continuously night and day. So it is rather difficult to monitor. And there is a substantial effort underway in the IAEA with the assistance of other countries to put together a technical approach that would be adequate for that kind of reactor.

The small research reactors generally have very little material and they are, therefore, visited very infrequently. The safeguards are relatively simple. There is no material processing. It is a matter of identifying the existing fuel elements.

Senator MATHIAS. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Mathias.

Senator Glenn.

Senator GLENN. Thank you, Mr. Chairman.

¹ See table on page 40.

ESTIMATE OF URANIUM OR PLUTONIUM IN IRAN

Let me follow up on that a little. Can you give us an estimate of the amount of highly enriched uranium or of plutonium that may be in Iran?

Mr. BRIGHT. I should follow this up with a detailed answer. It is not a sensitive question. It is just that I should check it factually.

There should be essentially no plutonium in Iran. There has been no production of power of any significant degree. Their research reactor has HEU, although it is a lower enrichment and a lesser amount than that in Iraq. And I can provide the precise numbers.

[The information referred to above follows:]

IRANIAN NUCLEAR FACILITY

[SUBMITTED BY THE DEPARTMENT OF STATE]

At the time of the revolution in late 1979 Iran had one nuclear facility under safeguards, this was a 5 MW research reactor supplied by the United States. Under the terms of the original U.S./Iran fuel supply agreement for this facility no more than 6 kilograms of HEU was permitted at the facility at any time. The research facility had approximately 5.5 kilograms of U.S. origin HEU on site at the time of the revolution and essentially no plutonium. Since the 5.5 kilograms is far less than sufficient material for concern, from a weapon standpoint, and Iran lacks supporting technology and equipment for processing fuel into weapons material, we are reasonably certain that there is no basis to be concerned about the Iranian nuclear facilities.

Senator GLENN. I was wondering if it might be on a list that Israel might consider a threat to them and that it might be subject to the same nonproliferation policy that it used on Iraq. I would appreciate any information that you can give us, if it is of any sizable amount. If it is a tiny amount, much less than bombmaking capability, why, that would be satisfactory.

FURTHER INVESTIGATION BEING MADE

We talked this morning to some extent about the report to us from the administration that there may have been a violation and that a further investigation was continuing. Concern was expressed that a further investigation was being made. Can you tell me what specific areas are being looked at in this further investigation? Of what do these investigations consist?

Mr. McFARLANE. I was not at the morning session, Senator Glenn. I understood that Mr. Stoessel characterized our current activities as reviewing with Israel the factors which prompted the decision on their part, expressing to them the basis for our concern about it; that is, the failure to exhaust diplomatic processes, the failure to consult with us, since we feel that close friends must enjoy a mutual trust with one another.

Senator GLENN. Anything else that we are investigating? What else?

Mr. McFARLANE. Basically, when an event of this magnitude happens, the shattering of confidence that it leads to requires, frankly, that you stop and think about it. You think about not just these things that I have mentioned, but how we can restore the basis of

confidence between Israel and ourselves and how we can get back on a course toward dealing with the broader problems of peace in the area.

RESTORING OUR CONFIDENCE WITH ISRAEL

Senator GLENN. OK. So the main item is this review with Israel and getting our confidence back with Israel. What time do you estimate that will take to complete this review?

Mr. McFARLANE. Well, it surely is not an indefinite and enduring process. When an event, again, of this size and importance with this kind of effect occurs, calling into question fundamental relationships, it is not uncommon that an administration will take some time. How much time I honestly could not tell you. I would not foresee an extended period of time. Surely, we are not talking about months.

Senator GLENN. Did you say we were talking about months?

Mr. McFARLANE. No. Surely, we are not talking about months.

Senator GLENN. A shorter period of time, then? A matter of weeks?

Mr. McFARLANE. That is right, sir.

DECISION ON SENDING F-16'S

Senator GLENN. Would I be correct in assuming that no decision will be made on sending the F-16's until that review process has taken place over the next few weeks, whatever the time period is?

Mr. McFARLANE. I think, Senator, that that is what this review, among other things, will take into account. Because that review is continuing, it is difficult to foresee right now what activities might or might not be taken. I do not want to mislead you, but basically I think while you are thinking things through you do not want to take any new initiative or prejudice what the outcome of your review may be.

Senator GLENN. Can you inform this committee or will the administration inform this committee when that review process has been completed?

Mr. McFARLANE. I think, first of all, it will be very clear when the administration resumes actions designed to restore the normal relationship with Israel and with others. And we will consult closely with the Congress on that.

Senator GLENN. We have had a report that there may have been a violation. I am talking about when you have finished your review with Israel, I would presume at that time you would make your own independent decision as to whether you feel there has been a violation before you would resume the shipment of the F-16's. Will we be informed of that decision?

Mr. McFARLANE. Surely, the actions that the administration decides to take will be a basis on which we consult with the Senate and the House. I do not want to dissemble. If you are talking about requirements of law, I will be glad to give you our viewpoint on that. But this review will lead to decisions and policy judgments and actions, and we will consult with you.

PAST ADMINISTRATIONS TOOK NO ACTION

Senator GLENN. I know you were not here this morning. But I was concerned that we had been tossed this matter for our consideration here, and I was afraid it was going to go the same way that previous considerations have gone when we have been notified of violations by administrations past; not this one, but administrations in the past.

I will repeat what I said this morning. In 1978, in Lebanon, there were violations of use of our equipment. It may have violated use of our equipment at that time. That was reported to us. No followup. In 1979, it may have violated; no followup. The only time there was anything done was in 1974 during the Turkish and Cypriot problem where it was reported to us. Once again the administration took on action, but the Congress took action and then rescinded it, of course, in 1976.

So the record of past administrations is that they toss these things to us and then never make their own decisions as to whether a violation has actually occurred or not.

ADMINISTRATION SHOULD BE PART OF DECISION

In the spirit of partnership that Senator Baker expressed this morning, we would like to exercise some of that partnership and let the administration this time be part of this decision as to whether a real violation has occurred. And I am trying to get out of you whether you are going to make that decision and report it to us when it is made.

Mr. McFARLANE. As I say, Senator Glenn, the review is not a rhetorical exercise. The review will lead to judgments and to decisions and to actions. Of course, as you point out, there is the opportunity for the Senate to take an initiative.

But we think that this process of review and this sharing of our viewpoint with the Senate that leads to decisions and actions is clearly in the spirit of, I think, your intent here as to whether nothing will happen from this exercise.

OTHER SHIPMENTS IN THE PIPELINE

Senator GLENN. Let me ask a different line of questions. Were other shipments in the pipeline at this time ready for delivery besides the F-16's?

Mr. McFARLANE. Well, there is, as you know, an assistance program with Israel that is of quite a substantial magnitude, and there are other items: pieces of communications equipment, items of ground equipment.

With respect to aircraft, to the best of my knowledge, there are no other currently due deliveries.

Senator GLENN. As far as other equipment, was it held up?

Mr. McFARLANE. The decision has affected the F-16's at this time.

Senator GLENN. And other equipment is continuing to flow to Israel?

Mr. McFARLANE. There has been no decision to foreclose it.

Senator GLENN. Then it continues to flow; is that correct?

Mr. McFARLANE. Well, I say that because quite honestly, I do not know what, today and tomorrow and the next day, is or is not due. But there has been no effort to cut that off.

Senator GLENN. At the time the decision was made to hold up the F-16's there was no decision made to hold up anything else in the pipeline, and there are extensive amounts of equipment in the pipeline. Is that correct?

Mr. McFARLANE. That is correct.

Senator GLENN. Can you give us a dollar value of that or any better definition of what that equipment is?

Mr. McFARLANE. I would be glad to provide that for the record.

Senator GLENN. All right.

[The information referred to above follows:]

U.S. MILITARY SUPPLY PIPELINE TO ISRAEL

[SUBMITTED BY THE DEPARTMENT OF STATE]

The U.S. Military supply pipeline to Israel continues except for the temporary suspension of F-16's. Since June 7 the following items have been shipped to Israel:

Item:	Quantity
M109A1B 155 Howitzers	11
Mortar Carriers M125A2	28
Ambulance	84
HAWK Missiles	153
175mm Rounds	25,000
MARK 84 Bombs	1,000
TOW Missiles	847

Other items due in the fourth quarter of 1981 include:

F-15 Aircraft	5
M60-A3 Tanks	49
M113 Armored Personnel Carrier	135
M88A1 Recovery Vehicles	25
81mm Mortar Rounds	71,000
175mm Rounds	40,000
Sidewinder Missiles AIM-9	300
TOW Missiles	916

The total financial value of U.S. military supplies in the pipeline is extremely difficult to calculate at any given moment. Such variables as transportation and handling changes, purchase lead-time versus delivery time, and follow-on support costs make day-to-day accounting all but impossible. Last year, however, Israel received \$2.185 billion in U.S. assistance, and under current plans it will continue at least \$2 billion per year.

"ISRAEL HAD NO RIGHT TO TAKE ACTION"

Senator GLENN. You said a while ago—and I think I wrote this down reasonably accurately in pencil here—"We do not believe Israel had a right to take the action they took in this instance." And then you went ahead with some other statement. That is roughly correct, I believe; is it not?

Mr. McFARLANE. That is right.

Senator GLENN. Well, then, now can we say this was not a violation if they did not have a right to take the action they took, flying across two other nations and 650 miles with our equipment, if we did not think it was right, and we still are not sure this was a violation?

Mr. McFARLANE. My intent was to say that it was not the right thing to do, it was not the correct thing to do, in keeping with the criteria that we would apply for judging the same threat. And then for the other reasons that I listed, it was not the right thing to do in terms of exchanges with us or exhaustion of diplomacy.

Senator GLENN. Have we ever sent a message or are you aware of any messages or contacts with Israel that would indicate U.S. approval of using our equipment outside Israeli borders in Lebanon, either stated or implied, or messages that Israel interpreted, with our knowledge that they were interpreting them, to indicate that we did not necessarily disapprove of what they were doing in Lebanon?

Mr. McFARLANE. I know of no such message.

Senator GLENN. Do any of you at the table?

Mr. MICHEL. [Nods negatively.]

Senator GLENN. We might want to go into this a little further in closed session later on.

I have one other question. In testimony this morning it was stated that other elements of our nonproliferation policy that go with NPT and IAEA, and then went on from there—I do not know whether that was you, Mr. Veliotis, or not.

Ambassador VELIOTES. No, sir, Senator.

OTHER ELEMENTS OF OUR NONPROLIFERATION POLICY

Senator GLENN. I forget who it was who made that comment. As I wrote it down, it was: "Other elements of our nonproliferation policy that go with NPT and IAEA." Now, I would like to have that spelled out a little better if we could, because the President at one time in the campaign said that nonproliferation was none of our business. He later on in the debates then said that nonproliferation would be a centerpiece of his foreign policy. We had a transition team report written that pretty much dismantled our nuclear nonproliferation policy.

But then in private conversations since then, we have had indications from the administration, in meetings—not committee meetings but in private meetings in my office—that they are not willing to go as far as the transition team indicated.

Now, can you comment on what our nonproliferation policy is? I am frankly not sure of what it is. I know what is in the law. But can you tell me what the nonproliferation policy of this administration is?

Mr. McFARLANE. To begin with, the analysis that has gone on for some several months, to define for the President the basis for setting policy was presented to him here some 10 days ago, and approval was given of the guidelines, with the direction that these guidelines be developed in some detail.

In an interest of sharing with you, your colleagues, and others, our viewpoints on these things, hearings have been set for these guidelines to be presented. As you mentioned in your opening, they do deal with matters beyond NPT and IAEA, such things as supplier countries and so forth. I would be glad to defer for a listing of it to my colleague on my left. But hearings have been set for going over this.

Senator GLENN. Good. We will look forward to getting those, because I think it is imperative that now, while world attention is focused on this problem because of the event that happened, that, we not let this pass. We have had one nation, as I have said before cast its vote of no confidence, in effect, in the regimes that have tried to control this spread of nuclear weaponry in the past.

And I think that now the hour may be very late for getting control of this, but at least we have to try. I welcome any of those guidelines you can share with us later on or bring to the hearings, because I think it is just very important we get this ironed out.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Glenn.

Senator Pressler, Senator Boschwitz thoughtfully has yielded to you.

Senator PRESSLER. Thank you.

INTELLIGENCE IN THE MIDDLE EAST

I will pursue the nonproliferation matter. But first I would like to ask a question that probably the intelligence community can offer an answer to better, but still I think you would be concerned.

Some years ago Jerry Ford said to me and to several other people—and it was not anything secret—that our intelligence in the Middle East was so good and if we would pass the Turkish aid bill it would be even better. The point he was making was that our intelligence was good enough that we could detect the taking off of military aircraft and in fact we recorded them routinely if they were just going on practice missions.

Somehow, it seems incomprehensible that we did not know about this mission until it was completely over. I guess there have been explanations about the AWACS being too far down and so forth. But from the State Department's point of view, with the intelligence operation apparently so bad, if that is the best way to put it, does this put you at a great disadvantage or does this raise a great credibility question about our operations from the State Department's point of view?

Mr. McFARLANE. I do not think it does, Senator Pressler. You are quite right that systems exist within the state of the art, surely. In fact, civil air control systems are capable of detecting the takeoff and landing of aircraft. Obviously, in the siting and disposition of military and other systems for collection of this kind, you orient them toward areas of priority interest. And we could dispose systems so exhaustively as to be able to detect all takeoffs and landings, but this, of course, would be a very expensive venture.

Suffice to say, that this particular operation was conducted with great care and in a way from which in the normal course of our collection we would not have picked it up.

Senator PRESSLER. Have you had complaints from some of the other Arab nations expressing great doubt that we did not know because of the systems that we have in place?

Mr. McFARLANE. There have been. We believe we have dispelled their doubts about our capabilities.

RUSSIANS CAREFUL NOT TO ENGAGE IN PROLIFERATION

Senator PRESSLER. In terms of the nonproliferation issue, the Russians, unless I am mistaken, seem to have been very careful over the years not to engage in proliferation or at least their satellite countries have not gotten the nuclear weapons or even nuclear development frequently. I am told that they even limit foreign students who study in that area.

Is that a true statement, that the Russians have been extremely careful about nuclear nonproliferation? Of course, they do have the bomb themselves. But in terms of the countries that are allied with them, do any of them have the bomb?

Mr. McFARLANE. The Soviets have been extremely careful, in the context in which you cast it; that is correct.

Senator PRESSLER. None of the Russian satellites have the bomb or any capability of moving toward it?

Mr. McFARLANE. No.

Senator PRESSLER. So it seems that it is very much a Western phenomenon, that most of the countries that have the bomb or could have it are Western countries. We have already mentioned those in the Middle East, but also South Africa, Brazil, Argentina; we have mentioned Pakistan and India. And those other countries have gotten their supplies or their initiative from the United States, France, Canada, from the Western countries.

It seems to me that we in the West have relied on a series of things like international law, such as the Nuclear Non-Proliferation Treaty, in our own country the Arms Export Control Act, and the nuclear acts that we have had. But we would have to say that those policies have been a failure; would we not? Would you agree with that?

SOVIET SATELLITES LESS WELL OFF

Mr. McFARLANE. To the extent that each of the countries that you have mentioned that do have nuclear facilities do enjoy a certain measure of benefit from those and correspondingly for Soviet satellites and others that have not been afforded that benefit and do not enjoy those benefits, I suppose one can say that Soviet satellites are relatively less well off.

But you are quite right: There surely are risks, and this imposes an enormous responsibility on supplier countries, in particular, that they develop effective safeguards and controls to foreclose proliferation. I do not think that we are better off not promoting nuclear power for its peaceful development.

But your point is very well taken: that if we are to do that it has to be under effective controls and safeguards. This administration is very much pledged to that end.

Senator PRESSLER. There is a new book coming out in October by Steve Weissman, suggesting that this thing has gotten out of control in the West and that what Israel did may have to be done in many other cases, because there is so much proliferation; and that as a matter of policy we may have to abandon the nice-guy treaties and reliance on international law and turn in the next 10 or 20 years to doing exactly what Israel did, to put it bluntly, in many other

instances, because of the West's proliferation and the fact that we have not taken the same care that the Soviets have to keep the nuclear club very small.

Of course, as you say, there is the other side of it, the benefits in some cases, of nuclear energy. But would you foresee that we will have to abandon the international law approach to nuclear nonproliferation in the West? Because if you look around at the countries that have a bomb or nearly have a bomb, then you have somewhere between 5 and 10, and one of these days one of them is going to do something with it.

NOT DONE AS WELL AS WE MUST

Mr. McFARLANE. First of all, I do take the intent of what you say. We surely have not done as well as we must. To go to the other pole and say that we will adopt or consider a regime of anarchy in which any particular state in a position to do so could take unto itself that burden of decision I think also is unacceptable.

I do not think we have run our course in intellectual terms on doing the best we can on safeguards and controls and supplier agreements. But I am not kidding myself—I hope. We cannot go on indefinitely without substantially improved safeguards. We do not have that much time.

Senator PRESSLER. The reason I ask this is I think in terms of arms control policy we are really at a crossroads. I am eager to see the administration's policy on arms control. I hope it evolves during some forthcoming hearings that we will have.

DANGEROUS SITUATION

It seems to me that we are in a very dangerous situation just to continue as we are and to continue relying on international law. I think it is safe to say, or at least it is my conclusion from what I have heard that the other Arab countries are secretly glad that Israel did what it did. They would not say that publicly. Would you agree with the idea that probably the other Arab countries are glad that Israel took out the Iraqi potential bomb?

Mr. McFARLANE. I would not make that statement. I think clearly one must take into account that the political implications of this are profound, and the viewpoint of Arab states or others, is not one of support or endorsement. I will leave it at that.

Senator PRESSLER. Do you think other countries would tolerate Pakistan's bomb, or would you anticipate some effort to take that out?

Mr. McFARLANE. I honestly would not care to speculate on that. I do think that your point, though—the need to foreclose that risk or possibility—is very clear, and we must do that.

Senator PRESSLER. I think what we have here is the situation—which maybe you cannot say it but I can—my assessment is that most countries in the world, including our own and including the Arab States, are glad that Israel did what it did, because if Iraq had gotten a bomb, it would have been unacceptable to the Arab States as well as Israel as well as to us. And we are going to face that same situation in the next 5 or 10 years in several other countries.

I think we should have a policy and start thinking about it. We are sort of operating with this fiction of international law, which does not work and nobody pays any attention to it. It certainly has not worked in the West. The Soviets have had a very tough policy. They will not even allow students from their satellite countries to become knowledgeable in this area. They have kept such a tight control on it. But the Western powers have not done that at all.

I think if we really think through what Israel did, it is something that may have to be done if civilization is going to survive the increasing number of little states that develop a bomb.

Mr. McFARLANE. I do not mean to be facetious, Senator Pressler. I take very much to heart what you say. We do have to do better than we have. The risks of proliferation are enormous, and the devastation that would result clearly intolerable. For those who 50 years ago would say that man was not made to fly or those who might suggest today that man was not made to have nuclear power, I think we are beyond the point of ruling it out, and we have to find a way to cope with it.

But I think we must accept—and this administration does—that there are benefits, and these can be made available to developing countries and developed countries alike. But they have to be done with thoughtfulness and care and effective controls.

Senator PRESSLER. My time is up.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Senator Pressler.

Senator CRANSTON.

Senator CRANSTON. Thank you, Mr. Chairman.

LIBYAN RESEARCH REACTOR

Mr. Boright, in responding to Senator Mathias' question about nuclear facilities throughout the Middle East, I felt that you were not exactly precise in responding in regard to Libya. My understanding is that Libya has a small, 2- to 5-megawatt research reactor, called Tajura. I understand that it was supplied by the Soviet Union, but it is nearing completion of construction and that the Soviets have sent 11 kilograms of highly enriched uranium fuel which is weapons-usable to Libya.

Am I correct? Does your information jibe with that?

Mr. BORIGHT. Senator, I do need to go and consult the books. That sounds right to me. I think, though that in this case, highly enriched meant 80 percent and not 90. But I would have to check that.¹

Senator CRANSTON. Thank you.

Senator MATHIAS. If Senator Cranston would yield.

Senator CRANSTON. Yes.

Senator MATHIAS. It was part of our agreement in the colloquy that I had that such further details would be supplied. I do not think it is fair to hold the witnesses to too high a degree of detail at this point.

Senator CRANSTON. Certainly.

¹ See table on page 40.

Senator BOSCHWITZ. In a followup to that, Senator Cranston, it is my understanding that there are 200 Libyan students in the United States who are studying nuclear engineering. Is that also the case?

Mr. BORIGHT. I do not think there is anyone here who can answer that question precisely. We can try to find an answer to that.

Senator CRANSTON. I have been aware of that same figure.

[The following information was subsequently supplied for the record:]

[SUBMITTED BY THE DEPARTMENT OF STATE]

The United States does not have information on foreign students attending U.S. colleges and universities which would permit us to determine areas of study.

CONCERN OF IRAQI PROGRAM

Senator CRANSTON. Secretary Veliotos, I would direct a question to you. I have been surprised to read reports that our Government never communicated to the Israeli Government our deep concern about the course and direction of the Iraqi nuclear program.

Is it not true that such communications actually have taken place? Specifically, did not our Embassy in Tel Aviv indicate concerns in December about the course of events in Iraq?

Ambassador VELIOTES. It is clearly on the record, Senator that we had concerns about the Iraqi program, the potential directions of the program, and that we did indeed have discussions with a variety of governments. As to the details of those discussions, I would be prepared to address them in closed session.

Senator CRANSTON. In regard to our counseling restraint regarding the Iraq reactor and regarding the Syrian missiles in Lebanon, am I correct in concluding, based on your responses to Senator Pell's, Senator Glenn's, and my earlier questions, that we never have advised Israel specifically that use of U.S.-supplied equipment would be considered an offensive use and hence in violation of U.S. law and United States-Israeli agreements?

Ambassador VELIOTES. With respect to the Syrian missiles, I believe we all testified earlier that we are not aware of any specific discussion with the Israelis, cautioning them against use of American weapons to attack those missiles on grounds of our agreement of American law.

However, certainly, on political grounds, in the context of the many discussions we have had with the Government of Israel, in connection with the Habib mission, we have very strongly urged restraint.

With respect to the Iraqi reactor, Senator, this is a much more difficult question to answer. My colleague, Mr. Michel, tried to address this earlier. You have general agreements that enshrine certain concepts. But you do not list the kinds of things that should not be done.

NEVER COUNSELED ISRAELIS

To the best of my knowledge, we never counseled the Israelis that should they decide to use American weapons to attack the Iraqi reactor, that this would be a violation of our laws. But then, again

to the best of my knowledge, the Israeli Government never asked us. This was not really in the context of our discussions.

Senator CRANSTON. Thank you.

We spent a great deal of time discussing Iraqi intentions and capabilities. While it seems very clear that they were stockpiling the most sophisticated technology available, technology that was ill-suited for a peaceful nuclear energy program but ideally suited for clandestine weapons production ultimately. So here we have an oil-rich nation at war with Israel, involved in wars with Israel three times since Israel's birth, and pledged to Israel's destruction.

Am I correct in assuming that you do not have any reason to disagree with President Reagan's statement on Tuesday that, "Israel had reason for concern"?

Mr. McFARLANE. No.

Ambassador VELIOTES. Not at all, Senator.

THREE IMPORTANT FACTS

Senator CRANSTON. Mr. Chairman, there has been much discussion, much misunderstanding, and some misquoting regarding various statements attributed to President Saddam Hussein and to the official newspaper of his Ba'ath Party involving Iraqi intentions toward Israel. Three important facts, I think, must be kept in mind.

These are—and I repeat what I said, in part, a moment ago—that Iraq has maintained a state of war with Israel since Israel was founded in 1948; Iraq has never recognized Israel's right to exist; three, Iraq has on three occasions sent military forces to participate in a pan-Arab war against Israel.

Against this background, I would like to read two quotes provided to me by the Foreign Broadcast Information Service (FBIS) of our Government, and the Congressional Research Service. I assume, based upon that source, that these are correct quotations.

The first is a statement by President Saddam Hussein, made on August 20, 1980, on Baghdad radio.

We decided to confer with the brothers in Saudi Arabia and to study with them the adoption of a decision—

And I skip a number of words here—

to boycott the states that abide by or acceded to the Zionist decision. Some people may ask if this decision is the best that can be taken. No. A better decision would be to destroy Tel Aviv with bombs. But we have to use the weapons available until it is actually possible to respond to the enemy with bombs.

The second quote is from Al Jumhuriyah, an official party organ of the leading ruling party in Iraq, dated October 4, 1980. This came after the raid on the reactor by unmarked planes, presumed to have been planes from Iran. The newspaper stated at that time:

Who is going to benefit from destroying the Iraqi nuclear reactor? Is it Iran or the Zionist entity? This reactor does not constitute a danger to Iran. It constitutes a great danger to Israel.

Finally, regarding the issue of whether there were any advance indications that Israel might strike against the Iraqi reactor, had there been general awareness in this administration that the following statement appeared in that same newspaper, Al Jumhuriyah, again,

the official party organ of the ruling party in Iraq on that same date, October 4:

We ask Khomeini and his gang who is going to benefit from destroying the Iraqi nuclear reactor? Is it Iran or the Zionist entity? The one who fears the Iraqi nuclear reactor is the Zionist entity. This entity has raised heaven and hell against Iraqi attempts to acquire nuclear technology, and it has threatened that it will not stand with hands tied toward that. It will act to destroy the Iraqi reactor by all means available to it, because the reactor constitutes a great danger to Israel.

Was there awareness generally in this administration of that statement?

HOSTILITY EXISTS BETWEEN ISRAEL AND IRAQ

Mr. McFARLANE. Senator Cranston, there have been numerous statements, including the ones to which you refer, that we have been aware of. There has also been some significant doubt, frankly, as to the authenticity of some, but not of others. But I do not deny your point. I do not think any of us would deny that a condition of hostility, a relationship of hostility has existed between Israel and Iraq. Neither country has made any secret of that, nor do I think really that the point is whether there was or was not any ambiguity about the Iraqi nuclear program.

In our judgment, the point is, given that hostility and given perceptions of ambiguity, there were nonetheless diplomatic—or there was diplomatic recourse that was not exhausted, and that the action that was taken has created very profound political turmoil that calls into question our ability to continue our diplomacy or the near-term Habib mission, and that this ought to have been a matter for discussion between close friends.

Senator CRANSTON. I would like to follow up on one point that Senator Percy made a little while ago, which was that we are not dreaming up scenarios. You have the statement from an Iraq official organ—and apparently you do not doubt its authenticity—that they were concerned that Israel might well seek to blow up the reactor. You have the obvious statements that have been made that Israel is considering a preemptive strike against the missiles in Lebanon. And you have history. You have a history of preemptive strikes as the way a small and vulnerable Israel seeks to defend herself against being totally destroyed.

I think the record should simply note that under these circumstances, our Government has not chosen to take up with Israel that making a preemptive strike in either of these circumstances would be in violation of our agreement with Israel or in violation of American law.

My time is up.

Mr. McFARLANE. May I respond to the Senator on that?

The CHAIRMAN. Yes, of course, you can.

Mr. McFARLANE. What you have said is clearly factually correct, Senator Cranston, and I suppose I would take issue only with the concept that in the certain knowledge that antagonists have declared that they will take a violent act to resolve a disagreement, to translate then to say that the way to forestall that is to go and tell

them that whether on legal grounds or other that they should not, is a way I think that it is to treat the symptom and not the cause.

And our point would be that any enduring promise that peace can endure, you must not be reduced to coping each day with the threats of one side or the other, that you had better relieve the source of the tension and try to bring peace in a way that meets the concerns of both sides. And I think that is the basis for our policy.

Senator CRANSTON. Well, certainly, addressing the source of disension and seeking peace is something that we must do. I totally agree on that.

Mr. McFARLANE. Mr. Chairman, may I take a moment, please, to correct the record on my part?

The CHAIRMAN. Yes.

Mr. McFARLANE. In the opening colloquy between the chairman and me, we were talking about whether we did or did not know about the agreement that was reported in this morning's paper. It was the first colloquy between the chairman and me. I think as a result of being out of sequence, the followup question on Israel, "Did Israel know?" and I said, "We did." I wanted to correct it to make sure that that did not indicate that Israel did. I have no knowledge of that. But we did.

The CHAIRMAN. We shall ask that that information be incorporated immediately following your response. Thank you.

Senator BOSCHWITZ.

Senator BOSCHWITZ. Thank you, Mr. Chairman.

STATE DEPARTMENT SURPRISED AT TIMING OF PREEMPTIVE STRIKE

I would pursue Senator Cranston's statements just a little bit. It is accurate, then, to say that the State Department may have been surprised at the timing of this preemptive strike but it was not surprised by the fact that a preemptive strike took place.

Mr. McFARLANE. I do not think that is a fair characterization. We were surprised by the timing and dismayed by the fact. The knowledge that historically Israel's strategy has placed high emphasis on the certain knowledge among their enemies that they would meet with swift reprisal is well known. But whether you can apply that to a set of circumstances today, last week, or next month I do not think it is clear.

Senator BOSCHWITZ. Are you saying, Mr. McFarlane, that you were not advised by your security advisers or other that Israel might make a preemptive strike of the exact nature that it did?

Mr. McFARLANE. If you are talking in the immediate context of this raid; no.

Senator BOSCHWITZ. You were not advised by the intelligence community or your own diplomats that a preemptive strike might be made by the Israelis; Is that correct, on the Iraqi reactor?

Mr. McFARLANE. Well, Senator Boschwitz, I would stand on my answer. If you want to put in a longer history about what the intelligence community may or may not have advised decisionmakers, we perhaps could do that in closed session. But the short answer, if you are talking about that raid to me personally, is "No."

Senator BOSCHWITZ. That is remarkable. There were, for instance, no conversations between our Ambassador in January and the Israelis or no correspondence between our Ambassador and Israel and the State Department with respect to the possibility of such a preemptive strike?

Mr. McFARLANE. Again, we would be pleased to discuss in closed session such exchanges as took place. My intent was not to mislead by what I just said. It is factually true. If you want to include a history of our exchanges on this, we can do that in closed session.

Senator BOSCHWITZ. One of the aspects of cutting off arms to the Israelis is the fact that some of the arms suppliers, of course, to its neighbors in the Arab countries make no conditions such as the condition we place upon our arms. And it could well be that it would destabilize the Middle East in the event that the neighbors of Israel felt that there was a lack of support of Israel in this country or if they felt that arms would no longer be shipped to the Israelis.

Would you agree that it may indeed have a destabilizing effect on the Middle Eastern situation to cut off arms shipments to Israel?

U.S. COMMITMENT TO SECURITY OF ISRAEL

Mr. McFARLANE. Well, Senator Boschwitz, the short answer is "Yes." I do not think anyone in this administration has called into question the U.S. commitment to the security of Israel.

Senator BOSCHWITZ. And you would agree then that it could indeed have a destabilizing effect by cutting off the arms shipment to Israel?

Mr. McFARLANE. That was not what I said.

Senator BOSCHWITZ. Would you agree in that case that it would have a destabilizing effect on the Middle Eastern situation in the event that we were to cut off arms shipments to Israel?

Mr. McFARLANE. Surely, if we cut off all arms, it would have a destabilizing effect to the extent that there is a continuing hostile relationship between Israel and its neighbors.

IRAQI NEIGHBORS NERVOUS

Senator BOSCHWITZ. Quite clearly, some of the Iraqi neighbors also were somewhat nervous about the development of a bomb by Iraq. My understanding, at least from reading the paper, is that Saudi Arabia is assisting Pakistan in the development of its nuclear capabilities and specified that Pakistan could not share its knowledge with Iraq. As I recall, the 1978 negotiations surrounding the sale of the F-15's to Saudi Arabia, part of the reason was the threat from Iraq. Kuwait certainly has had border problems with Iraq. Syria has been helping Iran, so it is not on friendly terms with Iraq in that regard, Iran certainly is not on friendly terms with Iraq. Yet, all of these countries have vociferously objected to the raid on the reactor.

Do you believe, while they may have objected to the raid on the reactor outwardly, were, to some degree, nonetheless pleased that the reactor was taken out of the scene?

Mr. McFARLANE. I do not agree with that position, Senator Boschwitz. I think they are segregable. That is, aside from the profound

political outrage among Arab States for this action, it is clear from what they have said, I think, that you can find entirely responsible and concerned viewpoints among many of those same states about the dangers of proliferation. I think that you could find, as well, expressions of concern about the Iraqi program.

Senator BOSCHWITZ. And you feel that while many of them seem to have shed some crocodile tears with respect to the raid, that therefore there was a distinction that can be made between their objections to the raid and their objections to the reactor, that they did not feel somewhat relieved, perhaps sleep a little bit better, because of the fact that Iraq was not on its way to having a nuclear capability?

SEPARATE BUT RELATED ISSUES

Mr. McFARLANE. I think that they are separate, but they are clearly related issues, that the essence of their concern was on the political act and the political connotation of the act, not to mention the violence and the same considerations that we might have or we did have. And I am not denying the fact that Arab States as well as other states—indeed, the United States—may have had concerns about the program. That is not to go beyond to the next step and say that they are delighted with this action, however.

Senator BOSCHWITZ. This morning I put this in terms more of an editorial comment than a question. I pointed out that proliferation of nuclear weapons probably is one of the great problems in the future without even delineating the balance of this century or thereafter but generally in the future. Proliferation of nuclear weapons is going to be a tremendous problem.

The scope of that problem cannot be better illustrated than by the possibility of Iraq, which had certainly not been one of the cooler actors on the international scene, obtaining nuclear weapons. So in a sense, there is a positive to be gained from the entire action, because in a most forceful manner Israel has focused our attention on the necessity to deal with nuclear proliferation.

DOES IRAQ NUCLEAR PROGRAM MAKE SENSE

Mr. McFarlane, let me ask you this. Does the Iraq nuclear program make sense in terms of the stage of that country's economic and scientific development? That is my first question. Second, is Iraq putting comparable efforts into other sophisticated scientific research areas? Has Iraq taken any positive steps toward obtaining nuclear power facilities? And if so, would the type of research reactors it has bought be useful in conjunction with a nuclear power program, or would such a large reactor be necessary developing a nuclear power program?

Mr. McFARLANE. Senator, I would be pleased to answer each of those. In open session, I would reaffirm that clearly we did have concerns about the program. To get into its logic and the criteria that you mention, I think we would have to go into closed session.

Senator BOSCHWITZ. What about putting comparable efforts into other sophisticated scientific research areas?

Mr. McFARLANE. I would be glad to supply that for the record. [The information referred to above follows.]

IRAQ NUCLEAR PROGRAM

[SUBMITTED BY THE DEPARTMENT OF STATE]

Iraq is importing significant amounts of western technology; however, most of the imports are for industrial applications—petroleum, petrochemicals, agriculture, iron and steel. There is little or no state of the art scientific research being done in Iraq, but even with the Osirak reactor the Iraqis would not have been doing state of the art nuclear research.

COUNTRY HAS RIGHT TO REJECT INSPECTORS

Senator BOSCHWITZ. With respect to the IAEA inspections, what factors determine the nationality of inspectors sent to any given country? Do the countries have a right to reject inspectors? What nationality were the inspectors who went to make the last inspections?

Mr. BORIGHT. Senator, the process within the IAEA is to have a section of the operations division which deals with the geographical part of the world. Those sections are generally geographically diverse in terms of the origin of the inspectors. The inspectors are proposed to the individual countries one by one, and the country has a right to accept that designation or not to accept that designation.

So the second part of your question, the answer is essentially "Yes."

Senator BOSCHWITZ. They can reject?

Mr. BORIGHT. They can reject them; yes.

I would rather discuss what we know about individual inspectors in a closed session.

Senator BOSCHWITZ. It is not a matter of record, the nationality of the inspectors who made the inspections in Iraq?

Mr. BORIGHT. I think I read it in the newspaper, but I think my answer still stands. I have read a statement in the newspaper as to where those inspectors were from.

Senator BOSCHWITZ. I understand that Senator Cranston pointed out this morning that one inspector was Russian and the other inspector was Hungarian?

Senator CRANSTON. Yes.

Senator BOSCHWITZ. In the last inspection that was made in Iraq, which I believe was in January.

I see that my time is up, Mr. Chairman. Thank you.

The CHAIRMAN. Thank you very much.

Before beginning our second round, let me say this. I would hope by 4:30 we could have a brief recess and then finish in closed session and, hopefully, conclude by about 5:30, or at least we could aim in that direction.

It might be appropriate at this time to put into the record a letter of June 10, 1981, from Secretary Haig, in which he indicates that a substantial violation of the 1952 agreement may have occurred.

[The letter from Secretary Haig follows:]

THE SECRETARY OF STATE,
Washington, D.C., June 10, 1981.

HON. CHARLES H. PERCY,
Chairman, Committee on Foreign Relations,
U.S. Senate.

DEAR MR. CHAIRMAN: I am providing the following information pursuant to section 3(c)(2) of the Arms Export Control Act.

The Department of State has learned that on June 7, 1981, the Government of Israel carried out an air attack against a nuclear reactor under construction in

Iraq. Israeli Air Force units taking part in this attack were reportedly equipped with defense articles that had been furnished to Israel by the United States under the Foreign Military Sales program, including F-15 and F-16 aircraft.

Sales to Israel under the Foreign Military Sales program are governed by a Mutual Defense Assistance Agreement of July 23, 1952 (TIAS 2675), which provides in pertinent part:

"The Government of Israel assures the United States Government that such equipment, materials, or services as may be acquired from the United States . . . are required for and will be used solely to maintain its internal security, its legitimate self-defense, or to permit it to participate in the defense of the area of which it is a part, or in United Nations collective security arrangements and measures, and that it will not undertake any act of aggression against any other state."

In these circumstances, I must report on behalf of the President that a substantial violation of the 1952 Agreement may have occurred. We are conducting a review of this entire matter and will consider the contention of Israel that this action was necessary for its defense because the reactor was intended to produce atomic bombs and would become operational very soon and that, once it became operational, an attack would have been impossible because it could not be carried out without exposing the inhabitants of Baghdad to massive radioactive lethal fallout.

While our discussions with Israel continue, and while your Committee is considering this matter the President has directed the suspension for the time being of the immediate shipment of four F-16 aircraft which had been scheduled for this week.

In responding to this incident we will make clear the seriousness with which we view the obligations of foreign countries to observe scrupulously the terms and conditions under which the United States furnishes defense articles and defense services. We will, of course, inform the Congress of the outcome of our discussions with the Government of Israel and our deliberations on the response warranted.

Sincerely,

ALEXANDER M. HAIG, Jr.

The CHAIRMAN. I would also put into the record a report from the Congressional Research Service of the Library of Congress which includes quotations regarding Iraqi nuclear intentions.

And Senator Cranston, the Iraqi news agency report to which you alluded is referenced on page 3 of the report. It does say that Saddam Hussein advocated destroying Tel Aviv with bombs but did not specify nuclear weapons.

[The information referred to above follows:]

QUOTATIONS REGARDING IRAQI NUCLEAR INTENTIONS*

The Congressional Research Service was asked to verify the content, sources, and dates of a list of Iraqi quotations allegedly describing Iraq's intentions to divert the French-built nuclear reactor for use in a nuclear weapons program and the Iraqi intention to use the nuclear weapons against Israel. The 70 Megawatt reactor nearing completion near Baghdad was destroyed by Israeli aircraft on June 7, 1981. The list of quotations, provided to CRS by a Congressional office, reportedly was being circulated in defense of Israel's attack on the nuclear facility.

Of the eight quotations on the list, three were direct quotes from Iraqi officials, four were indirect quotes, and one appeared to be a direct quotation from a newspaper editorial. One direct quotation did not list a source and could not be found and another indirect quote, from the Kuwaiti newspaper al-Qabas of November 30, 1976, cannot be verified because the newspaper issue cited is not available to us at present. Of the six remaining quotations from the list, two do not appear in the source cited. Of the four quotations from the list that do appear in the

*Prepared by Patricia Schwarzwalder, researcher, Congressional Reference Division, and Clyde R. Mark, specialist in Middle Eastern Affairs, Foreign Affairs and National Defense Division, Congressional Research Service, The Library of Congress, June 15, 1981.

original sources cited three appear to have been taken out of context in such a manner that the original meaning of the quotations may have been distorted. One quotation from the list is correct, although that quotation does not mention nuclear weapons.

In its attempts to verify the quotations, CRS was in contact with, or utilized the services of: the Near East Section, African and Middle Eastern Division, Office of the Director for Area Studies, Research Services Division of the Library of Congress; Bureau of Intelligence and Research, Department of State; the Embassy of the State of Israel; the Central Intelligence Agency; the Washington Post; the National Association of Arab Americans; the Foreign Broadcast Information Service, National Technical Information Service, Department of Commerce; the Middle East Institute; the Georgetown Center for Strategic and International Studies; the American-Israeli Public Affairs Committee.

Appended to this report, following a discussion of each of the quotations on the list, are copies of the list of quotations (appendix 1), original sources, other pertinent sources, and translations where applicable. Misspellings reproduced as in original.

(1) Baghdad, October 4, 1980 (al-Thawra)—“The Iranian people should not fear the Iraqi nuclear reactor which is not intended to be used against Iran but against the ‘Zionist enemy.’” (al-Thawra is the official organ of the Iraqi Revolutionary Command Council).

The quotation cited in the list does not appear in the original. (See appendix 3) Israeli Prime Minister Menachem Begin quoted the same al-Thawra editorial in a press conference in Israel on June 9, 1981, broadcast over Israeli state radio. (See appendix 2) A quotation somewhat similar to the one cited on the list and by Prime Minister Begin does appear in another Iraqi newspaper, al-Jumhuriyah, of October 4, 1980, but the quotation cited on the list and by the Prime Minister appears to have been created from parts of sentences appearing in the al-Jumhuriyah editorial with other words and phrases added. The pertinent sentences from the al-Jumhuriyah editorial are: “The nuclear reactor cannot be a threat to Iran, because Iraq looks upon the Iranian people as brothers. . . . The reactor constitutes a grave danger for Israel. . . . That is what Begin and Zionist enemy circles have said.” (See appendix 4) The Israeli newspaper Davar reported on June 14, 1981, that the Israeli Government could not verify the quote from al-Thawra or al-Jumhuriyah. (See appendix 5)

(2) Baghdad, August 19, 1980 (Iraqi News Agency)—“President Saddam Hussein has stressed that a decision better than boycotting the states that move their embassies to Arab Jerusalem is to destroy Tel Aviv with bombs. He added that until the possibility of responding to the enemy with bombs becomes available, all available weapons must be used with the help of the Arab brothers. . . . The president concluded his speech by stressing that when the time comes for Iraq to vent its anger on the Zionist entity, it will do so.”

The quotation on the list is correct. (See appendix 6)

The Iraqi News Agency is Iraqi Government-controlled. The citation is a summary of a speech given by Iraqi President Saddam Husayn on August 19, 1980, at a housing project in Baghdad. According to the summary, Husayn advocated destroying Tel Aviv with bombs but did not specify nuclear weapons. Later in the summary, President Husayn referred to Israel’s “campaign” against the Iraqi nuclear reactor and Israel’s “clamoring” about an Iraqi nuclear weapon.

(3) London, July 22, 1980 (The Times)—“in a report on Saddam Hussein’s meeting with journalists on July 21, 1980: “President Hussein implied several times that Arab nations would be able to use atomic weapons, adding after his denial of any intention to make a bomb—that enemy to be totally different in the very near future.”

The quotation on the list is correct in part. A few words of the sentence quoted appear to have been dropped inadvertently. (See appendix 7)

The quotation appears to have been taken out of context. The paragraphs preceding the quoted passage include a denial by Husayn that Iraq intends to build an atomic bomb. According to the Times article, Husayn responded sarcastically to Israel’s calling the Arabs “backward” by asking how could Iraq, a “backward” nation, produce an atomic bomb. In the paragraph before the quoted passage, Times correspondent Robert Fisk, present at Husayn’s press conference on July 21, said that the President pointed out that Iraq had signed the nuclear non-proliferation treaty while Israel had not, and that Iraq and other Arab nations intended to use nuclear power for industry.

(4) June 27, 1980 (The International Herald Tribune)—“Naim Haddad, senior member of Iraq’s ruling revolutionary command council stated at a meeting of the Arab League in 1977: “The Arabs must get an atom bomb. The Arab countries should possess whatever is necessary to defend themselves.”

The quotation from the list is correct. (See appendix 8)

The list quotes Revolutionary Command Council member Naim Haddad as saying that the Arabs must get an atomic bomb to defend themselves, but does not say that Haddad’s statement was in response to a report that Israel already had nuclear weapons. The preceding sentence in the Herald Tribune article stated that “only occasionally” have Iraqi leaders expressed an interest in acquiring nuclear weapons.

(5) Paris, January 31, 1980 (Al Watan al Arabi)—Saddam Hussein in an interview to the newspaper: “Any state which wants to use the atom for military purposes should reach a special scientific and technological level in all fields, not only in the nuclear field.”

The quotation from the list is correct. The date cited in the list of quotations is incorrect; the date of the magazine, number 155, is February 7, 1980. (See appendix 9)

In context, the quotation may take on a somewhat different meaning. President Husayn was asked if Iraq intended to produce an atomic bomb. Husayn replied that the theory behind military uses of nuclear energy was widely known around the world but that in practice, a nation must have a scientific and technological base before the nation can use nuclear weapons. Husayn states that Iraq’s pre-occupation with nuclear energy is to develop its peaceful, not military, uses and that Iraq must bridge a “great gap,” presumably in its scientific and technological base, before it could use nuclear weapons. Husayn goes on to say that Iraq favors the creation of a Middle Eastern nuclear free zone.

(6) September 29, 1979 (Speech by Mr. Haidar)—“Iraqi ambassador to Brazil on the occasion of the signing of a nuclear cooperation agreement: “If our enemy Israel is close to building an atomic bomb, or already has one, what prevents us from developing the same capacity?”

Speech could not be found.

(7) Kuwait, November 30, 1976 (Al Kabas)—“Iraqi oil minister, Taveh Abd el Karim, in a speech to OAPEC ministers council on November 23, 1976 refused to comment on reports that Iraq will be the first Arab country to have the atomic bomb. However, he said, Iraq intends to use nuclear energy for peaceful purposes. The production of the atomic bomb should be a project which all Arab states should participate.”

A copy of the newspaper could not be found.

(8) Lebanon, September 8, 1975 (Al Usbu Al Aradi)—“Saddam Hussein was reported to have declared that the acquisition of nuclear technology ‘was the first Arab attempt towards nuclear arming although the officially declared purpose for the construction of a reactor was not nuclear weapons.’”

The quotation cited could not be found in the magazine. An article about an interview with Iraqi President Husayn appeared in the magazine, but dealt primarily with Iraqi-French relations. Two paragraphs in the article mentioned Israel but in the context of the Egyptian-Israeli disengagement agreement of September 4, 1975. (See appendix 10)

APPENDIX 1: LIST OF QUOTATIONS

Baghdad, October 4, 1980 (al-Thawra)—“The Iranian people should not fear the Iraqi nuclear reactor which is not intended to be used against Iran but against the ‘Zionist enemy’.” (al Thawra is the official organ of the Iraqi Revolutionary Command Council).

Baghdad, August 19, 1980 (Iraqi News Agency)—“President Saddam Hussein has stressed that a decision better than boycotting the states that move their embassies to Arab Jerusalem is to destroy Tel Aviv with bombs. He added that until the possibility of responding to the enemy with bombs becomes available, all available weapons must be used with the help of the Arab brothers. . . . The president concluded his speech by stressing that when the time comes for Iraq to vent its anger on the Zionist entity, it will do so.”

London, July 22, 1980 (The Times)—“in a report on Saddam Hussein’s meeting with journalists on July 21, 1980: “President Hussein implied several times that Arab nations would be able to use atomic weapons, adding after his denial of any intention to make a bomb—that enemy to be totally different in the very near future.”

June 27, 1980 (The International Herald Tribune)—“Naim Haddad, senior member of Iraq’s ruling revolutionary command council stated at a meeting of the Arab League in 1977: “The Arabs must get an atom bomb. The Arab countries should possess whatever is necessary to defend themselves.”

Paris, January 31, 1980 (Al Watan al Arabi)—Saddam Hussein in an interview to the newspaper: “Any state which wants to use the atom for military purposes should reach a special scientific and technological level in all fields, not only in the nuclear field.”

September 29, 1979 (Speech by Mr. Haidar)—“Iraqi ambassador to Brazil on the occasion of the signing of a nuclear cooperation agreement: “If our enemy Israel is close to building an atomic bomb, or already has one, what prevents us from developing the same capacity?”

Kuwait, November 30, 1976 (Al Kabas)—“Iraqi oil minister, Tayeh Abd el Karim, in a speech to OAPEC ministers council on November 23, 1976 refused to comment on reports that “Iraq will be the first Arab country to have the atomic bomb. However, he said, Iraq intends to use nuclear energy for peaceful purposes. The production of the atomic bomb should be a project which all Arab states should participate.”

Lebanon, September 8, 1975 (Al Usbu Al Aradi)—“Saddam Hussein was reported to have declared that the acquisition of nuclear technology ‘was the first Arab attempt towards nuclear arming although the officially declared purpose for the construction of a reactor was not nuclear weapons.’ ”

APPENDIX 2: ISRAELI PRIME MINISTER BEGIN'S PRESS CONFERENCE, JUNE 9, 1981, EXCERPT

Begin, other leaders hold press conference on RAID.

Take 1—Israeli press conference.

TAO91649 Jerusalem domestic service in HEBREW 1605 GAT 5 JUNE 81. (Press conference in Jerusalem on 9 June by Prime Minister Begin, Chief of Staff Refa'El Eytan, Air Force Commander David Ivri, and Intelligence Chief Yehoshu A Sagi—Live)

(Text) (Begin—in English.) It will be in English, the first part will be in English.

* * * * *

Some people ask: Where are the proofs for this thesis? I will bring you today only one short quotation out of many: On the 4th of October in Baghdad, in the newspaper al-Thawra—(Begin spells out the letters—FBIS) a, l, t, h, a, w, r, a. Again, I spell the name of the newspaper in Baghdad: a, l, t, h, a, w, r, a; al-Thawra, on the 4th of October, 1980, the following statement was made: The Iranian people should not fear the Iraqi nuclear reactor, which is not intended to be used against Iran, but against the Zionist enemy. Well, what does it mean to be used against? Should that reactor be for peaceful purposes? Let us say for electricity? How can electricity be used against anybody, whether Iranians or Israelis? But against the Zionist enemy, it means that there will be something there that (? will be) used, obviously. In other words, an atomic bomb.

* * * * *

APPENDIX 3: AL-THAWRA (BAGHDAD), OCTOBER 4, 1980, TRANSLATION

From: al-Thawra, Baghdad, Iraq, 4 October 1980

Correspondence in goals and intentions between the rulers of Tehran and the Zionists

The Iranian regime, as usual, is still bragging, in a provocative and unbalanced way, about its false and shameful claim to being opposed to the Zionist entity when in reality it is bound to the Zionist entity by covered relationships and ties. In spite of the secretive characters of the relationships and ties, its features and shape are becoming clearer and clearer every day by means of strange events and unjustified political positions which lead in the final analysis to the same declared and undeclared goals and intentions of the Zionist entity and of the imperialist forces that support its aggressive approach and destructive activities against the Arab nation. The serious information published by the world press

regarding the open collusions between the Iranian regime and the Zionist entity over the question of striking at the Iraqi nuclear plants has been receiving the exclusive attention of the Arab and international circles to a high degree and in an exceptionally serious manner. This brings out into notice the reality of that regime's retentions of many important serious links of the old relations that existed between the Shah's regime and the Zionists. This has been ascertained by the agreement and correspondence of goals and intentions between the rulers of Tehran and the Zionists in Tel-Aviv. It has become obvious to everyone that rulers of Tehran have reopened the channels which they have retained in order to undertake the serious tasks and provide the conditions whereby the Zionist entity's dream and mad desire to destroy the Iraqi nuclear reactor may be achieved. They have done this consequent to a bitter propaganda war which they waged against our country which puts all its energies and capabilities in the service of the Arab nation and its national struggle for liberation. They have openly and impudently threatened to the point that they openly conceived and announced the means of destroying the nuclear reactor which Iraq built for peaceful purposes to assure the requirements needed for the progress of Iraq and the Arab nation on the path of liberation and victory. Many questions are being asked now on various levels, even by those who have tended somehow to believe the claims of the treacherous rulers of Tehran and who have been taken by the game of slogans and demagogical policies to a small or large degree. Iraq is determined to remain able to face all possibilities and overcome all the dangers and losses which might result from its taking the road of an honorable and national struggle to regain its land and achieve complete sovereignty on its national land and waters. But what will happen to the treacherous rulers of Tehran and what will the toiling Iranian masses gain from the ignorance and stupidity of Khomeini? After losing their balance and reaching a state of misery and desperation, what will they achieve except merely reopening the channels and secret relations with the Zionists, the enemies of our Arab nation and the good Iranian peoples. The coming days will bring many surprises, and the true nature of the rulers of Iran will become apparent exactly as they really are without any "touch-up," and their relations and commitments to the Zionists and American imperialists will be made known. Once this is done, the game will end at once and the peoples of Iran will put an end to the madness and frivolity of the Khomeini gang.

APPENDIX 4: AL-JUMHURIYAH (BAGHDAD), OCTOBER 4, 1980—TWO TRANSLATIONS

FBIS 59:

WA121808 For your information:

Israeli Prime Minister Begin in a 9 June 1981 press conference cited the 4 October 1980 issue of al-Thawra, the ba'th party daily, as stating that "The Iranian people should not fear the Iraqi nuclear reactor, which is not intended to be used against Iran, but against the Zionist enemy." This language did not appear in the 4 October 1980 issue of al-Thawra or in the paper's supplement of the same day.

However, an editorial in the 4 October 1980 issue of al-Jumhuriyah, published by the Iraqi Information Ministry, contained the following: paragraph three says "the nuclear reactor cannot be a threat to Iran, because Iraq looks upon the Iranian people as brothers." Paragraph four says "the reactor constitutes a grave danger for 'Israel.'" The editorial notes in paragraph five that "that is what Begin and Zionist enemy circles have said."

Baghdad Al-Jumhuriyah in Arabic 4 Oct., 1980, p. 1

(Editorial: "What is the meaning of Zionist support for the Persian regime?")

(Text) the Zionist officials again have volunteered to serve the regime of Khomeini, who calls himself "The Muslim imam," to provide him with helpful information in his war with Iraq.

A statement from one of the Zionist military officials broadcast over the Zionist enemy radio indicated that Iranian aircraft have hit the Iraqi nuclear reactor, resulting in insignificant damage. Before that, a high-level military source stated: "I am surprised that the Iranian aircraft have not hit the Iraqi nuclear reactor before now."

We ask Khomeini and his gang: Who will benefit from hitting the nuclear reactor in Iraq—Iran or the Zionist entity? The nuclear reactor cannot be a threat to Iran because Iraq looks upon the Iranian people as brothers. And if it were not for Khomeini's bloodthirsty bunch and its bitter arrogance and hatred, then there would not have been a war between Iraq and Iran. Instead, there would have been peace, friendship, and cooperation in the shadow of true Islam, the Islam of Muhammad, Ali, and Husayn, not the Islam of Khomeini, Khalkhali, Bani-Sadr, and the infamous gang.

The Zionist entity is the one that fears the Iraqi nuclear reactor. The entity has tried so hard to undermine Iraqi efforts to obtain nuclear technology. Further, that entity has warned that it will not stand with its hands tied behind its back in that regard, but rather it will try to destroy the Iraqi nuclear reactor by any means available to it, especially since the reactor constitutes a grave danger for "Israel."

That is what Begin and Zionist enemy circles have said. Those who tried to carry out the act are Khomeini, Bani-Sadr, and the suspicious defense minister, Fakuri.

* * * * *

EXCERPTS FROM AL-JUMHURIYAH OF OCT. 4, 1980

[Translated by Dr. Atiyeh, Near East Division, Library of Congress]

"We ask Khomeini and his gang who is going to benefit from destroying the Iraqi nuclear reactor. Is it Iran or the Zionist entity?"

This reactor does not constitute danger to Iran because Iraq looks at Iranian people with a brotherly look and had it not been for Khomeini gang and its arrogance, Iraq and Iran would not have gone to war. However, there is peace, friendship and cooperation under the shadow of true Islam of Mohammed, Ali and Al-Hussein and not the Islam of Khomeini, Bani-Sadr and gang. The one who fears the Iraqi nuclear reactor is the Zionist entity. This entity has raised heaven and hell against Iraqi attempts to acquire nuclear technology and it has threatened that it will not stand with hands tied toward that. It will act to destroy the Iraqi reactor by all means available to it because reactor constitutes a great danger to Israel. This is what Begin has said and the leaders of the Zionist enemy also. But those who try to execute this threat are Khomeini, Bani-Sadr and Defense Minister Fakhury."

APPENDIX 5: DAVAR (TEL AVIV), JUNE 14, 1981, TRANSLATION

FBIS 18.

Israeli Foreign Ministry unable to locate quote use by Begin.
TA140932 Tel Aviv Davar in Hebrew 14 Jun 81 P 1.

[Political correspondent Daniyel Bloch's report]

(Text.) The Foreign Ministry has ordered Israeli representatives abroad to stop using the quotations from remarks made by Iraqi ruler Saddam Husayn which was used by Prime Minister Begin, and according to which Husayn said that the Iraqi reactor was directed against the Zionist enemy. Following a comprehensive examination carried out by the United States, it emerged that there is no proof that this quotation is accurate. Israeli sources have not succeeded in finding any basis for it either.

The quotation the Prime Minister used was based on the Iraqi paper al-Thawra of 4 October 1980. However, as noted, it turned out that this quotation does not appear there at all. The sole source that exists is a report in an Israeli paper, by its Arab affairs correspondent, but no basis could be found for this report. Only after lengthy examination was an editorial in the same style found in another Iraqi paper—Al-Jumhuriyah—but without any quotation from or attributed to the Iraqi leader.

This revelation has caused considerable embarrassment because Israeli information made use of the quotation and Israel's UN Ambassador Yehuda Blum based part of his planned security council speech on it.

APPENDIX 6: IRAQI NEWS AGENCY (BAGHDAD), AUGUST 19, 1980, TRANSLATION

SADDAM HUSAYN CALLS FOR BOMBING TEL AVIV IN BAGHDAD SPEECH

JN192124 Baghdad INA in Arabic 1845 GMT 19 Aug 80

[Text.] Baghdad, 19 Aug. (INA)—President Saddam Husavn has stressed that a decision better than boycotting the states that move their embassies to Arab Jerusalem is to destroy Tel Aviv with bombs. He added that until the possibility of responding to the enemy with bombs becomes available, all available weapons must be used with the help of the Arab brothers. He further added that if the matter was up to Iraq, it would have adopted other decisions in addition to the boycott. But Iraq, he said, has to contend with two issues at the same time: to plan in accordance with its potentials toward achieving its aspirations and betterment and to work with the Arab brothers in accordance with what is possible by means of better decisions.

* * * * *

He said that we are witnessing strange evils coming from this or that Arab ruler; but this must not diminish faith in the Arab nation and the Arab people. One must differentiate between the people and the ruler, between the good and the bad.

President Saddam stressed that no matter what these rulers try, they will not impede the Iraqi's great potential in serving the Arab nation. He said that Iraq has chosen the path of science, the path of principles, the path of seriousness in building the great Iraq to serve the Arab nation.

The president referred to the Zionist campaign against Iraq's utilization of nuclear technology for peaceful purposes and said that the Zionist entity has clamored about an alleged atomic bomb in Iraq. He added that they consider Iraq's march toward science and actual cross though it is now cold [saliban fi'liyan hatta walaw kana al-ana baridan].

He stressed that Iraq's great experience will not be considered great unless it is in the service of the Arab nation, its honor, its sovereignty and its individual. This great experience must be for the liberation of Palestine and for nothing else.

The president concluded his speech by stressing that when the time comes for Iraq to vent its anger on the Zionist entity, it will do so.

APPENDIX 7: THE TIMES (LONDON), JULY 22, 1980, ARTICLE AND EDITORIAL

PRESIDENT HUSAIN DENIES IRAQ HAS ATOMIC BOMB PROGRAMME

[From Robert Fisk]

Baghdad, July 21—

* * * * *

If his replies were sometimes discursive, he was nothing but emphatic when he spoke of Western reports that Iraq intends to use French nuclear technology—supplied for a reactor on the banks of the Tigris River—to build a bomb.

We have no programme concerning the manufacture of the atomic bomb. We have no such programme for the Israelis to thwart. . . we want to use atomic energy for peaceful purposes”.

The President inveighed against Israeli “propaganda” recalling sarcastically that “a few years ago, Zionists in Europe used to spread the news that the Arabs were backward people, that they did not understand technology and were in need of a protector.

“These Arabs, the Zionists said, could do nothing but ride camels, cry over the ruins of their houses and sleep in tents. Two years ago, the Zionists and their supporters came up with a declaration that Iraq was about to produce the atom bomb. But how could a people who only knew how to ride camels produce an atomic bomb?”

Iraq, the President said, had signed the atomic non-proliferation treaty, but no one asked if the Israelis were making atomic bombs at their nuclear centers at Dimona and in the Negev Desert. The Arabs were now on the threshold of a new age and would succeed in using atomic energy and industry. Millions of Arabs, he said, would be able to use this advanced nuclear technology.

President Husain implied several times that Arab nations would be able to use atomic weapons, adding—after his denial of any intention to make a bomb—that “whoever wants to be our enemy can expect that enemy to be totally different in the very near future”.

Circumspect though this phrase may appear, it is no secret that Iraq's nuclear reactor is expected to be commissioned in five months.

* * * * *

President Saddam Husain's denial that Iraq has any plans to produce nuclear weapons will hardly be sufficient to allay the fears on this score that have recently been voiced in Israel, in the House of Commons, and in the pages of this newspaper. “He would, wouldn't he?”, is the most likely response.

It is not impossible that Mr. Husain is telling the truth. Although Iraq has abundant oil reserves she also has ambitious plans for industrial development and a population of thirteen million or so which is rapidly growing both in numbers and in material expectation. It would be entirely rational, and in accordance with the best economic advice, for her government to want both to prolong the lifetime of her oil reserves and to lessen her long-term dependence on oil revenue and oil consumption alike.

Nuclear power has been vigorously peddled as the wonder antidote to the energy crisis by Western governments and commercial interests, and many Third World governments have bought it in good faith. Moreover Iraq's actions, as opposed to her words, have not been strikingly bellicose against Israel or indeed against her other neighbours. The regime is single-mindedly ruthless in dealing with internal opposition but does not more than return tit for tat to those who try and make trouble for it abroad.

On the other hand, President Husain is the kind of leader whose vanity would certainly be tickled by the idea of joining the nuclear club, and who would be attracted by the argument of a nuclear deterrent as the ultimate guarantee of national independence. In any case the source of immediate concern is not the suggestion that Iraq actually is arming herself with nuclear weapons, but that by about 1985 she will be capable of doing so. This is not seriously contested.

The French have reacted with a parade of injured innocence to the suggestion that they are responsible for this state of affairs, much as the Canadians did when accused of helping India to achieve her first nuclear explosion in 1974. Both countries retorted with some justice that the chief promoter of nuclear proliferation was in fact the United States, which throughout the fifties and sixties sold nuclear reactors up and down the Third World, and trained Third World engineers in nuclear technology in the naive belief that civil and military technology could be kept separate. The Non-Proliferation Treaty, to which Iraq (unlike India and Israel—and for that matter France) is at least a signatory, has made little difference to this process in practice.

France, however, cannot escape at least a share of responsibility. But for her objections the safeguards agreed belatedly by the Nuclear Suppliers' Group in 1977 might have been much more stringent: they might, for instance, have included the opening of a recipient country's complete nuclear programme for inspection rather than only a specific installation or batch of material. As it is, countries like India, Iraq and Pakistan have been able to assemble the components of a nuclear weapon programme largely by shopping with a variety of suppliers none of whom had a full overview of what was going on.

In the case of India the super-powers can at most be accused of not having tried hard enough to stop her becoming a nuclear power. In the case of Israel the American government can hardly escape the charge of complicity.

Alone among America's allies, Israel came under no pressure to sign the non-proliferation treaty. Presumably it was felt that, as a small country openly threatened with destruction, Israel was entitled to develop a nuclear deterrent as her ultimate security. In retrospect the wisdom of that argument must surely be questioned. In 1967 Israel demonstrated with éclat her ability to ensure her security in conventional warfare, whereas it is difficult to see what would survive of Israel after a nuclear exchange, and some of Israel's enemies are the sort of people who would not necessarily shrink from such an exchange. The nuclear arms race in the Middle East which Israel started may well not be in Israel's interest. It is certainly not in the world's interest.

One good thing about the Islamic revolution in Iran is that it has jettisoned the Shah's grandiose nuclear plans. The thought of Iran as a nuclear power in its present condition is quite hair-raising. But how can we be sure that Iraq in 1985

will not be in the grip of equally fanatical Islamic revolutionaries? Or that the "Islamic bomb" which Colonel Gaddafi is supposed to have paid the Pakistanis to manufacture will not by then be a reality? There is little chance now of stopping these countries from proceeding with their nuclear programmes, but whatever can be done to dissuade them from a military application of the technology should be done. In particular they should be put under every kind of pressure, to accept full international inspection of their complete programmes, and the International Atomic Energy Agency should be strengthened so that it has the manpower and resources to carry out such inspection effectively.

APPENDIX 8: INTERNATIONAL HERALD TRIBUNE (PARIS), JUNE 27, 1980, ARTICLE

IRAQ A-BOMB ABILITY SEEN BY 1985

PROGRAM WOULD SPUR SMALLER NATIONS' NUCLEAR RACE

[By Jonathan Kandell]

PARIS, June 25 (IHT)—

* * * * *

"The growing stature of Iraq in the Middle East has unquestionably toned down alarmist criticism of its nuclear program," said a Western diplomat. "And the Iraqis themselves have done as little possible to advertise their growing atomic potential."

Only occasionally have Iraqi leaders publicly asserted an interest in nuclear weapons. At a meeting of the Arab League in 1977, Naim Haddad, a senior member of Iraq's ruling Revolutionary Command Council, taking note of news reports that Israel may already have developed nuclear weapons, stated:

"The Arabs must get an atom bomb. The Arab countries should possess whatever is necessary to defend themselves."

The discretion and secrecy surrounding the Iraqi nuclear industry have recently been punctured by violent incidents apparently aimed at delaying the country's nuclear program.

In April 1979, saboteurs destroyed the core of an advanced, 70-megawatt research reactor as it lay in storage in France shortly before it was scheduled to be shipped to Baghdad. News reports and private speculation suggested that the saboteurs may have been Israeli agents aided by French officials.

This month, a senior Egyptian-born nuclear scientist who was a key man in the Iraqi atomic program was killed in his Paris hotel room. The French police have not yet disclosed any possible suspects.

* * * * *

APPENDIX 9: AL-WATAN AL-ARABI (PARIS), FEBRUARY 7, 1980; TRANSLATION AND SUMMARY

[al-Watan al-Arabi (Paris), No. 155, February 7, 1980, p. 23—From an interview with Saddam Husayn by Walid Abu Zahr]

Question. There is clamor and confusion in the Western press about what is termed "Iraq's search for producing the atomic bomb," especially after the last agreement with Brazil. I hope my question is not difficult when I ask: Is Iraq aiming at producing an atomic bomb?

Answer. There is no difficulty in this question. In theory, dealing with the atom, including the military uses of it, is understood all over the world. However, in practice, in order that a state may reach the capability to use the atom for military purposes, it must first reach a specific scientific and technical level, in all branches of government and not only the specific branch that deals with the atom alone.

The other matter, what interests us and preoccupies us now is to possess the experiences and the capability to deal with the atom for peaceful purposes, and in what would serve our nation, its independence and its progress. All those who

foster the confusion about Iraq know that there is a great gap which Iraq has to bridge in order that it may reach the use of the atom for military purposes. They also know that Iraq's planning was not established on the basis of possessing the atom for non-peaceful purposes, but for the purpose of properly dealing with a field that serves the nation, and its goals of development and independence. But they want to deprive the [Arab] nation, by depriving Iraq, from having the technical means capable of dealing correctly and ably with the atom.

Question. This question leads us to another which is: What is your opinion on the question of introducing the atomic weapons to the area? And what is your position with regard to that?

Answer. We consider the introduction of atomic weapons into the area an extremely harmful and dangerous act. Our position in the United Nations has always been in support of global nuclear disarmament, and we have, in the United Nations, taken the position that the Middle East should be a zone free from the use of the atom for military purposes.

And on the basis of this, we are raising up in the United Nations the question of stripping the Zionist Entity of its capabilities for using the atom for military purposes. Consequently, we are against the introduction of the atom in the [Middle East] area for military purposes.

PRESIDENT HUSAYN COMMENTS ON U.S.-U.S.S.R. IN INTERVIEW

JN311113 Baghdad INA in Arabic 0730 GMT 31 Jan 80 JN

The Iraqi president emphasized that the entry of nuclear weapons into the Arab region is extremely harmful and dangerous. He said Iraq supports the idea of barring the use of the atom for military purposes. At the United Nations, it supported the idea of barring the Middle East area from using the atom for military purposes. On this basis, Iraq raises the issue of barring the Zionist entity from the possibility of using nuclear weapons. He added that Iraq is only concerned with having the expertise and capabilities to sue the atom for peaceful purposes. He affirmed that Iraq does not plan to possess the atom for nonpeaceful purposes, but for its correct employment in the fields of building and independence.

President Saddam Husayn said persons who are raising an uproar against Iraq in this connection know that Iraq has a long way to go to be able to use the atom for military purposes. By depriving Iraq, they aim at depriving the Arab nation of having the technical means of dealing with the atom in an efficient and sound way.

APPENDIX 10: AL-USBU AL-ARABI (BEIRUT), SEPTEMBER 8, 1975; TRANSLATION

[Saddam Husayn In Paris Following the Egyptian-Israeli Agreement]

al-Usbu al-Arabi, September 8, 1975, Lebanon.—Last Thursday, September 4, Egypt and Israel signed officially the new agreement between them which resulted from the shuttle rounds undertaken by Dr. Henry Kissinger, the American Secretary of State, between occupied Jerusalem and Alexandria.

On Friday, September 5, Mr. Saddam Husayn, vice chairman of the Iraqi Revolutionary Command Council arrived in Paris in an official visit in response to an invitation extended to him by Jack Chirac, the French Prime Minister. Right before the arrival of Saddam Husayn, Iraq had officially declared its opposition to the Egyptian-Israeli agreement, specially on the ground that the agreement states that the solution of the Middle East conflict cannot be achieved except through peaceful means. Furthermore, the agreement assigns to the United States of America a military and political role in the area.

. . . (Paragraphs dealing with French-Iraqi relations)

And even though Saddam Husayn's visit has taken place within the framework of a series of Arabic-French summit encounters, however, the special relationship between Iraq and France which began in 1972 and then quickly crystallized politically, economically and petrolically (in petroleum affairs), constitutes in itself a new basis—consequent to the Egyptian-Israeli agreement—for an Arab European cooperation upon which the Israeli-Egyptian agreement does not impact adversely as far as the nationwide Arab confrontation to the ambitions of the occupying Israelis is concerned. (Parentheses added.)

The CHAIRMAN. We will insert in the record then without objection "The Israeli Raid Into Iraq," a brief report by the Congressional Research Service of the Library of Congress made by Warren Donnelly, Foreign Affairs and National Defense Division.
[The information referred to above follows:]

THE ISRAELI RAID INTO IRAQ ¹

On June 7, 1981, the Israeli Air Force, using American-built F-15 and F-16 aircraft, bombed an Iraqi nuclear reactor under construction just south of Baghdad. The reactor was of French design and manufacture and French technicians were supervising its installation. After the attack, which reportedly destroyed the reactor without loss of Israeli planes, Israeli Prime Minister Begin explained that the installation was a threat to the security of Israel because Iraq intended to use it to manufacture nuclear weapons for use against Israel. Begin maintained that peaceful measures had failed and that the attack could not further be delayed because the reactor was soon to be made operational; an attack subsequent to that event would expose the residents of Baghdad to radiation hazard. The Israeli action and the international reaction raise a number of difficult issues for the United States: (1) To what extent was the Iraqi project a threat to Israel, and thus a justifiable target for an Israeli preemptive self-defense strike? Answers to this question depend on assessments of the technical characteristics of the reactor installation, the effectiveness of constraints imposed by Iraq's acceptance of on-site inspections under the nonproliferation treaty, and Iraqi intent. (2) Was the use of U.S. aircraft a violation of Israeli guarantees that U.S. equipment would be used only in self defense as required under U.S. arms transfer agreements? (3) How can the United States best respond to the incident? (4) What are the implications stemming from the incident for U.S. non-proliferation policies and goals and for those of the international community?

CHARACTERISTICS OF THE IRAQ REACTOR

The Iraqi reactor, designated Tamuz I, was a powerful research type. Its purpose was to supply an intense field of neutrons to irradiate materials and specimens so that more could be learned about their behavior under irradiation or the effects of radiation on them. This type reactor has been and was used in the development of nuclear power plants and their fuels.

The reactor was designed and supplied by France and was based upon the design of the French nuclear research reactor at Saclay. At full power, it would release heat equivalent to 70 megawatts. [In comparison, the reactor of a large nuclear power plant would release over 3,000 MW of heat (thermal) energy]. The reactor was to consist of an assembly of nuclear fuel elements (called the core) suspended in a tank of water which would be pumped to heat exchangers to carry away heat caused by the fissioning of atoms of Uranium-235 which provides the supply of neutrons. The nuclear fuel for the reactor was to be uranium in which the concentration of U-235 has been increased to 93 percent (highly enriched uranium). In comparison, in normal uranium the U-235 content is 0.7 percent, while fuel for most power reactors has no more than 6 percent U-235 (low enriched). The core had open spaces within it for the irradiation of specimens. Additional space around the outside of the core could be made available for irradiation of specimens by removing part of the reactor called the reflector. The reactor was surrounded by thick walls of concrete to absorb dangerous radiation emitted by the fissioning of U-235 during reactor operation. Used fuel from the reactor and some specimens would be stored underwater in an auxiliary pool until their radioactivity had decreased enough (decayed) to permit safe handling. In normal use, the reactor's fuel would have to be changed five to six times a year, with each fresh charge containing 12 to 15 kilograms of highly enriched uranium.

POTENTIAL USE OF THE REACTOR TO MAKE NUCLEAR WEAPONS

Assuming that Iraq wished to use the reactor to make nuclear explosives, the reactor in normal operation, could have been used to:

¹ Report prepared by Warren Donnelly, Foreign Affairs and National Defense Division, Congressional Research Service, The Library of Congress, June 16, 1981.

—Irradiate specimens of materials and perhaps some components for use in nuclear explosives to test the effect of neutron exposure upon them.

—Irradiate normal uranium to make small quantities of plutonium which could then be recovered by chemical separation (reprocessing) in a "hot cell" at the research center, assuming this item was delivered by Italy and put into operation.

—Training nuclear engineers in production and handling of nuclear materials and handling of intensely radioactive materials.

—Attract outstanding Arab scientists and engineers with whom the Iraqi scientists and engineers could associate to their benefit.

—Provide laboratory scale experience with reprocessing, and with handling and fabrication of plutonium.

POTENTIAL USE OF THE REACTOR TO PRODUCE PLUTONIUM

In theory, if the reactor had been operated to produce as much plutonium as possible, it probably would have required some modifications in the core and in the cooling system. The reflectors, which are needed for efficient use in normal research, would have been removed from around the core and the vacated space filled with containers of uranium to be irradiated. Similarly, empty space within the core could have been loaded with uranium. If this were done, and the reactor operated without interruption, and did not break down, up to 20 kilograms of plutonium might have been produced within one year. In order to recover plutonium, the intensely radioactive irradiated uranium would have to be dissolved in acid and the plutonium chemically extracted. How much could be recovered would depend upon the design and size of the hot cell and its equipment, and the experience and capabilities of the operating crew. We have no information on the capacity of the hot cell at the Iraq nuclear research center.

THE REACTOR'S FUEL AS A SOURCE OF WEAPONS MATERIAL

Since the reactor's fuel is highly enriched uranium, in theory, fresh fuel could be diverted and its highly enriched uranium recovered. Such recovery would provide a simpler and less dangerous means of acquiring weapons-grade material than reprocessing for plutonium because the fresh fuel is only slightly radioactive. There would nevertheless be risks of dangerous releases of radiation if too much of the recovered material were brought together in one place (criticality accident). A third means of obtaining weapons-grade material would be to reprocess the spent fuel from the reactor, which would have contained uranium with about 87 percent U-235. In principle, this quality uranium could be used to make a nuclear explosive, although more uranium would have to be used and the design would be more complicated.

DETECTION OF POSSIBLE MISUSE OF THE NUCLEAR RESEARCH REACTORS

In normal operations, the Iraq reactor could have produced small amounts of plutonium, probably much less in a year than the 5 kg required for a sophisticated weapon or the 15 kg for a simpler weapon. If the reactor had been operated solely to produce as much plutonium as possible, the changes in operation would have been so noticeable as to quickly announce this purpose to international inspectors.

TELLTALE INDICATORS OF MISUSE

If the reactor had been fully loaded with uranium to be irradiated, the nuclear processes involved would have released more heat than the cooling system could remove without modification. Enlargement or addition to pumps and piping would be immediately apparent to an inspector. Likewise, the amount of fuel required to run the reactor would have increased by perhaps half, which would have signalled the misuse to the fuel supplier (France) as well as to inspectors checking records on delivery and use of fuel. Because the reactor would be operating inefficiently, its controls would be in unusual—and readily observable—positions. Finally, inspection should reveal the presence of containers of uranium and the presence of excessive amounts of spent fuel. All of these telltales would have been visible to French technicians operating the reactor and to international inspectors.

If Iraq had diverted fresh fuel material to recover its highly enriched uranium, the reactor would have had to be shut down as its existing fuel was used up.

Moreover, the absence of the fuel from its storage place would surely have been noticed by inspectors. Similarly, if the spent fuel from the reactor had been taken to recover its highly enriched uranium, the recovery operation would have involved large amounts of highly radioactive materials that probably would have required substantial modification or expansions of the hot cell at the nuclear research center which could have been expected to arouse suspicions of inspectors.

SAFEGUARDS

An IEA press release of February 27, 1981 said the Iraqi reactor had been inspected in January 1981 and that all nuclear material was accounted for. The reactor would have been inspected by the International Atomic Energy Agency (IAEA), probably at monthly intervals, after startup. IAEA inspectors would have checked and verified records on the reactors operation, including its use and production of nuclear materials, to verify that there had been no diversion to nuclear weapons or other nuclear explosives devices. The inspectors also would have inspected the reactor itself, the fuel holdings, and the contents of the spent fuel storage pool.

The basis for this international inspection would have been Iraq's ratification of the Non-Proliferation Treaty in which it agreed to accept inspection by the IAEA and a subsequent safeguards agreement negotiated by Iraq with the Agency.

On the whole, the Iraq research reactor probably could not have been operated solely to produce plutonium without quick detection or withdrawal of the facility from the IAEA safeguard regime. Assuming it could have been so operated, the production of as much as 20 kg of plutonium per year would have required virtually perfect operation with no mistakes, breakdowns, or unexpected technical problems. So a lesser amount would have been more likely. If so, the amount produced in a year probably would not soon have been enough to do the necessary experimental work, to learn how to handle this material and fabricate it, and to have enough left over for a nuclear weapon.

INTERNATIONAL REACTOR TO THE RAID

THE FRENCH REACTION

The French government and all the French political parties united in strongly condemning the Israeli attack on the French-built facility in Iraq. The government called the action "unacceptable" and "a further complication in a situation which is already explosive." The new Socialist Foreign Minister Claude Cheysson formally protested the raid, in which a French technician was killed, to the Israeli Ambassador, calling the act "a breach of international law." Cheysson further noted that Iraq's adherence to the NPT and IAEA safeguards and inspections undermined the credibility of Israeli arguments that Iraq was planning to make nuclear weapons. The French Government, however, said that it would not push its protests so far as to strain relations between France and Israel.

Prime Minister Pierre Mauroy was quick to reassure the Israeli government that President Francois Mitterrand would still go ahead with plans to become the first French president to pay an official visit to Israel later this year. Mauroy also stated that the effects of the Israeli attack on Franco-Israeli ties are "unforeseeable" at this time. President Mitterrand has over time cultivated an image as a friend of Israel, while at the same time calling on the Begin government to become more flexible about recognizing Palestinian rights. The Israeli attack on the French-built reactor will undoubtedly complicate President Mitterrand's desires to "warm" relations between France and Israel and could also prove embarrassing to the Socialist Party in the elections scheduled in June.

The French Prime Minister assured the Iraqi government that the French would consider a request to rebuild the damaged reactor. Mr. Mauroy stated that an Iraqi request for French help to reconstruct the reactor would be carefully studied in light of the present tensions and in view of the Socialist president's determination to take France out of the "international arms sales business and to avoid nuclear proliferation." As a result of the attack, most of the 150 French technicians assigned to the project were ordered home. One technician who witnessed the destruction said the damage was so extensive that if the Iraqis want to resume work on the reactor complex, "they will have to flatten everything and start from scratch."

Although many French Socialist leaders, including President Mitterrand, criticized the reactor sale to Iraq when they were in opposition, Mitterrand, who is generally considered more sympathetic toward Israel than was Giscard d'Estaing, will be under some pressure to respond favorably to the Saddam Hussein regime. Before the 1980 Iranian-Iraqi war, Iraq supplied France with over 20 percent of its imported crude oil but, by December 1980, that percentage had fallen to 3.6. Iraq has also placed many valuable contracts with French industry.

ISRAELI ALLEGATIONS OF FRENCH COOPERATION IN "SECRET" FACILITY

The French government was accused by Israeli Prime Minister Menachem Begin on June 11 of having helped Iraq to build a secret, underground installation for the purpose of manufacturing nuclear weapons. On June 12, the French government described the Begin claim, which was put forth as a rationale for bombing the facility, as "a fantasy." The French External Relations Ministry later stated: "The only installation at which a fantasy-tinged accusation could be leveled would be the neutron guides, building, where experiments were carried out on the physics of solids. Such equipment in no way could be used for military purposes." There has been no further Israeli comment on the alleged "secret facility," after the French denial.

THE ARAB MIDDLE EAST REACTION

It is probably true, as some reports have speculated, that not all Arab states were unhappy that Iraq's nuclear program was set back by the Israeli attack. But without exception, the Arab states condemned the Israeli attack upon the Iraqi Tamuz 1 nuclear facility. Two of the states, Syria and Libya, have given support to Iran in the Iraqi-Iranian conflict. The Iraqi Government emphasized the peaceful purposes of its nuclear facility, contended that Israel had destroyed it in order to prevent the emergence of advanced technology in the Arab world, and alluded to collusion between Israel and Iran. Iraq called for a meeting of the U.N. Security Council to follow an emergency meeting of Arab League foreign ministers on June 11. Statements issued by the Iranian Arab League foreign ministers on June 11. Statements issued by the Iranian Government strongly condemned the Israeli action and declared that the attack had been part of a U.S. conspiracy to avert the fall of Iraqi President Saddam Husayn's government. Egyptian President al-Sadat termed the raid a "provocative act" that would have dire consequences for efforts to achieve a comprehensive Middle East peace.

A resolution adopted at the conclusion of the Arab League Council meeting in Baghdad on June 11 called on the United Nations to impose compulsory sanctions against Israel, and, in a message directed primarily at Washington, urged all countries that give economic, political, military and technological aid to Israel to work seriously to put an end to Zionist aggression and expansionism and to adopt practical and tangible steps to terminate such aid. The resolution also called for an end to the Iraqi-Iranian conflict, terming it harmful to Arab efforts to mobilize opposition to Israel which, it says, had exploited the circumstances of the war's continuation. It stressed the right of all states to establish programs for technological and nuclear development of their economies and industries for peaceful purposes. The Council commissioned a ministerial committee comprising Kuwait, Algeria, and Arab League Secretary General Chedli Klibi—in addition to Tunisia, which is represented currently on the Security Council—to represent the Arab League and Iraq at the Security Council's discussion of the Israeli action. The Arab foreign ministers stated that the Israeli attack was a grave precedent that threatened world peace and security, one which could lead to an explosion jeopardizing the world's vital interests.

In contrast to earlier statements from individual Arab countries, the resolution made no mention of military reprisal nor did it threaten an oil embargo against any countries that had given support to Israel. Jordanian newspapers on June 11 had commented on the possibility of an embargo. In Libya, Chief of State Mu'ammar Qadhafi had called for joint Arab action to attack and destroy Israel's nuclear facility at Dimona, and had charged that the United States was as responsible for the raid on Iraq's facility as Israel because the attack had been carried out by U.S.-supplied aircraft and made possible by U.S. technology.

SOVIET RESPONSE

Israel's attack on the Iraqi nuclear reactor provides the Soviet Union with an excellent diplomatic target and Moscow has condemned the Israeli attack in strong terms. The Soviet news agency, Tass, variously characterized the attack as "undisguised and arrogant aggression," "gangsterism," "international piracy," and "international terrorism."

A major thrust of the Soviet response has been to link the United States to the Israeli attack. The first comprehensive Tass report on the attack actually devoted more space to allegations of U.S. complicity than to denunciation of the Israeli raid.

Soviet charges include the following:

—The United States had long been "worried" by the Iraqi nuclear program and had, on several occasions, requested that France and Italy end their participation.

—U.S. intelligence services knew long in advance that Israel was planning to attack the Iraqi reactor.

—The Israeli attack was accomplished with American-made aircraft and bombs.

—The U.S. crews manning the Airborne Warning and Control System (AWACS) aircraft in Saudi Arabia intentionally withheld information that Israeli aircraft were flying over Saudi Arabia toward Iraq.

—Successive U.S. governments have consistently approved Israeli aggression against Arab states and peoples. Tass, on June 9, summarized the Soviet view as follows: "This act of gangsterism is a link in the long chain of Tel Aviv's crimes of which the ruling circles of the United States of America are direct accomplices and in effect inspirers." One Soviet report went so far as to claim that, "A White House spokesman has confirmed that President Reagan was informed of the impending Israeli air strike on Iraq. So without doubt, official Washington had prior knowledge of the bandit-like raid by Israeli planes on the Iraqi capital." (Broadcast by Moscow World Service in English, 100 MT, June 9, 1981.)

A secondary Soviet propaganda theme has been to allege Egyptian complicity in the Israeli attack as well, calling attention to the Begin-Sadat meeting at Sharm el Sheik a week before the destruction of the Iraqi reactor, where, Moscow claims, Sadat gave his blessings to the Israeli attack. "This is new evidence that the 'Camp David Triad' is the most dangerous enemy of the Arab Peoples." (Tass, June 9, 1981.)

The U.S.S.R. probably has little reason to regret the retardation of Iraq's nuclear program; Moscow had, in fact, refused to help Baghdad in that regard. Indeed, nuclear proliferation in the Middle East and Persian Gulf region poses problems for both superpowers, and a nuclear-armed Iraq acting irresponsibly might still have been perceived as a Soviet client. But the Israeli attack underlines once again the military dependence of a number of Arab states on the U.S.S.R., and may provide a basis for improvement of recently strained Soviet-Iraqi relations.

UNITED NATIONS

On June 8, 1981, in a letter to the President of the U.N. Security Council, the Israeli representative to the U.N. gave notice of the rationale for the Israeli raid the day before. Also on June 8, 1981, the U.N. issued a statement made by Secretary-General Kurt Waldheim expressing his deep concern about the raid "which is in clear contravention of international law and must be condemned."

That same day the Iraqi Minister of Foreign Affairs, Saadoun Hammadi, requested an immediate meeting of the Security Council to deal "with a grave act of aggression committed by Israel against Iraq with far-reaching consequences for international peace and security." The Security Council began meeting on this matter on June 12.

According to the U.N. Charter (art. 39), the Security Council is to determine the existence of any threat to the peace, breach of the peace, or act of aggression and make recommendations or decide what measures to take to maintain or restore international peace and security. Actions open to the Security Council range from agreeing on a statement which the President of the Security Council (the representative of Mexico during June 1981) would issue to the parties involved, to passing a resolution condemning the Israeli action, to imposing partial or full sanctions, including severance of diplomatic relations, pursuant to Chapter VII of the Charter. The Council could also recommend suspending Israel from the rights and privileges of membership or even expelling it from the organization (art. 5 and 6 of the Charter). The United States had indicated, however, that, though it could support condemning the raid, it would veto any resolution calling for sanctions against Israel.

**ARMS EXPORT CONTROL ACT PROVISIONS LIMITING USE OF U.S. SUPPLIED DEFENSE
ARTICLES AND SERVICES**

The Arms Export Control Act (AECA), as amended, is the law that authorizes the transfer by sale of U.S. defense articles and services through government-to-government agreements. The International Security Assistance and Arms Export Control Act of 1976 (P.L. 94-329) enacted on June 30, 1976, changed the title of the Foreign Military Sales Act (FMSA) of 1968 (P.L. 90-629), as amended, to defense its present one—the Arms Export Control Act.

Section 3(a) of the AECA sets the general standards for countries or international organizations to be eligible to receive U.S. defense articles and services sold under this act. It provides specifically in section 3(a)(2) that to be eligible to purchase defense articles and services under the AECA:

[a] country or international organization shall have agreed not . . . to use or permit the use of [any defense] article or related training or other defense service for purposes other than those for which furnished, unless the consent of the President has first been obtained

Section 3(c)(1)(A) of the AECA stipulates, in part, that:

No credits (including participations in credits) may be issued and no guarantees may be extended for any foreign country under this Act as herein-after provided, if such country uses defense articles or defense services furnished under this Act, or any predecessor Act, in substantial violation (either in terms of the quantities or in terms of the gravity of the consequences regardless of the quantities involved) of any agreement entered into pursuant to any such Act . . . by using such articles or services for a purpose not authorized under section 4 or, if such agreement provides that such articles and services may only be used for purposes more limited than those authorized under section 4 for a purpose not authorized under such agreement

Section 3(c)(1)(B) of the AECA adds that, under the above conditions, "[N]o cash sales or deliveries pursuant to previous sales may be made"

The purposes for which military sales by the United States are authorized are spelled out in section 4 of the AECA. This section states that defense articles and services shall be sold to friendly countries solely for:

- (1) Internal security.
- (2) Legitimate self-defense.
- (3) To enable participation in regional or collective arrangements or measures consistent with the Charter of the United Nations.
- (4) To enable participation in collective measures requested by the United Nations for the purpose of maintaining or restoring international peace and security.
- (5) To enable foreign military forces of less developed countries to construct public works and to engage in other activities helpful to the economic and social development of such friendly countries.

It should be stressed that the Arms Export Control Act, as amended, the Foreign Assistance Act of 1961, as amended, and predecessor Acts do not define such critical terms as "internal security" and "legitimate self-defense." It remains for the President or the Congress, as the case may be, to define the meaning of such terms as they may apply to a possible violation by a foreign country of an applicable agreement governing the sale of U.S. defense articles or defense services.

Section 3(c)(2) of the AECA requires the President to report promptly to the Congress upon the receipt of information that a "substantial violation" described in Section 3(c)(1) of the AECA "may have occurred." This Presidential report need not reach any conclusion regarding the possible violation or provide any particular data other than that necessary to illustrate that the President has received information indicating a specific country may have engaged in a "substantial violation" of an applicable agreement with the United States that governs the sale of American defense articles and services.

Should the President determine and report in writing to Congress or if Congress determines by joint resolution pursuant to section 3(c)(3)(A) of the AECA that a "substantial violation" by a foreign country of an applicable agreement governing an arms sale has occurred, then that country becomes ineligible for further U.S. military sales under the AECA. This action would terminate provision of credits, loan guarantees, cash sales and deliveries pursuant to previous sales. The President could, under section 3(c)(3)(B) of the AECA, permit "cash sales and deliveries pursuant to previous sales" by certifying in writing to Congress

that termination of such sales and deliveries would have "significant adverse impact on United States security." Such a Presidential waiver could not be invoked, however, if Congress, under section 3(c)(3)(A), had adopted or were to adopt a joint resolution finding that country ineligible. The President retains the prerogative of vetoing any such joint resolution. Congress would then have to override the veto in order to impose its will.

Congress also has the option of adopting regular legislation imposing varying degrees of penalties upon any country it finds has "substantially violated" an agreement with the U.S. governing arms sales. Such legislation would, however, be subject to the veto process.

Once a country is made ineligible for sales or deliveries under the AECA, it can regain its eligibility only when: (1), under section 3(c)(4) of the act, the President "determines that the violation has ceased" (the violation which led to the status of ineligibility in the first place), and (2), when "the country concerned has given assurances satisfactory to the President that such violation will not recur." Alternatively, Congress could pass regular legislation that would exempt the particular country from specific sanctions imposed through AECA procedures, although it would be subject to a Presidential veto.

ILLUSTRATIVE ACTIONS TAKEN BY THE UNITED STATES IN RESPONSE TO POSSIBLE VIOLATIONS

Destruction of the Iraqi nuclear reactor on June 7, 1981, prompted the most recent example of a Presidential response to a possible Israeli violation of its July 23, 1952 Mutual Defense Assistance Agreement with the United States. In a letter dated June 10, 1981, Secretary of State, Alexander M. Haig, Jr. reported to Congress, as required by the AECA, that a violation "may have occurred" as the result of the Israeli attack on the Iraqi nuclear reactor. In this instance, the President also chose to suspend "for the time being" the shipment of four F-16 aircraft scheduled for delivery to Israel.

Authority for this action can be found in sections 2(b) and 42(e)(1) of the AECA. The former permits the Secretary of State, under the President's direction, to, among other things, determine "whether there shall be delivery or other performance" regarding sales or exports under the AECA in order that "the foreign policy of the United States is best served thereby." Section 42(e)(1) of the AECA states that:

Each contract for sale entered into under sections 21, 22, and 29 of this Act shall provide that such contract may be canceled in whole or in part, or its execution suspended, by the United States at any time under usual or compelling circumstances if the national interest so requires.

Use of this authority does not prejudice the larger question of whether or not a "substantial violation" of the 1952 U.S.-Israeli agreement governing use of U.S. arms did in fact occur. That question can still be answered affirmatively or negatively, or left unanswered depending upon how the President and/or the Congress choose to deal with it.

The pertinent segment of the July 23, 1952 Mutual Defense Assistance Agreement between the United States and Israel (TIAS 2675) reads as follows:

The Government of Israel assures the United States Government that such equipment, materials, or services as may be acquired from the United States . . . are required for and will be used solely to maintain its internal security, its legitimate self-defense, or to permit it to participate in the defense of the area of which it is a part, or in United Nations collective security arrangements and measures, and that it will not undertake any act of aggression against any other state.

None of the critical terms such as "internal security," "legitimate self-defense," or "act of aggression" are defined within this agreement.

EARLIER ILLUSTRATIONS

On two separate occasions—on April 5, 1978, and on August 6, 1979—the Carter Administration chose to find that the Israelis "may" have violated their 1952 agreement with the United States through the use of American origin military equipment in operations conducted in Lebanon. However, the United States did not suspend or terminate any Israeli arms sales, credits or deliveries in either of these cases.

Following the military intervention of Indonesia in East Timor on December 7, 1975, the Ford Administration initiated a "policy review" in connection with the U.S. military assistance program with Indonesia. Because of the possible conflict between what the Indonesians had done in East Timor involving the use of U.S. origin equipment and the provisions of U.S. law and U.S.-Indonesian bilateral agreements, the Ford Administration placed a "hold" on the issuance of new letters of offer and Military Assistance Program (MAP) orders to Indonesia. However, military equipment already in the pipeline continued to be delivered to the Indonesians. The "policy review" was completed in late May 1976. Military assistance and sales were resumed in July 1976. No formal finding of "substantial violation" of applicable U.S.-Indonesian agreements involving use of U.S. origin military equipment, conditional or otherwise, was made by the Administration or by the Congress.

In late 1974 and early 1975, following a serious disagreement between the President and the Congress regarding the question of whether or not Turkey had "substantially violated" the applicable 1947 agreement with the United States governing the use of U.S. supplied military equipment during its military intervention in Cyprus beginning in July 1974, the Congress legislatively imposed an embargo on military sales, credits, assistance and deliveries to Turkey.

This embargo through legislation was in effect from December 10, 1974, until the approval of the Foreign Assistance Act of 1974 (P.L. 93-570) on December 30, 1974, in accordance with the provisions of section 6 of H.J. Res. 1167 (the Continuing Appropriations Resolution for FY 1975, P.L. 93-448.) On December 30, 1974, the embargo was temporarily suspended by the President, pursuant to a waiver clause in Public Law 93-570, until February 5, 1975 when the embargo once again entered into force. (The President had independently suspended the issuance of new FMS credits and guarantees and major new cash sales for Turkey from late July until October 17, 1974 when he exercised a waiver granted by P.L. 93-448 to permit sales until December 10, 1974.) From July until October 1974, the President did permit routine cash sales of spare parts and components for items already purchased by Turkey.

On October 6, 1975, President Ford signed into law, Public Law 94-104 which partially lifted the arms embargo on Turkey. Successive modifications were made in the military aid and sales levels permitted for Turkey while a partial embargo remained in effect. Finally, on September 26, 1978, President Carter signed into law Public Law 95-384, which authorized him to end the arms embargo against Turkey. He exercised this authority at once and ended the Congressionally mandated Turkish embargo.

A LEGITIMATE ISRAELI ACT OF SELF-DEFENSE? PRO AND CON

The Israeli Government announcement of June 8, broadcast over the government radio station, said Iraqi leaders had stated explicitly that the reactor under construction near Baghdad was intended to produce nuclear weapons for use against Israel. The Israeli announcement said the reactor was destroyed before it was to become operational, either in July or September 1981, because an attack after the reactor was active would have sent a "radioactive wave" over Baghdad, killing innocent Iraqi civilians. The government announcement also said the reactor was attacked on a Sunday to avoid casualties among the foreign (primarily French) Christian technicians working on the plant.

In press conferences on June 8 and 9, Israeli Prime Minister Menachem Begin said the attack was an act of legitimate self defense. Israeli diplomatic efforts to stop the Iraqi nuclear reactor project had failed Begin said, and Israel was left with two choices, either destroy the reactor before it became active, or wait passively for Iraq to develop and use a nuclear weapon against Israel. Critics of the Israeli attack have challenged these and other justifications for the attack.

Arguments in favor of, and opposed to, the Israeli attack on the Iraqi reactor are presented below as they might be offered by proponents of the two positions in response to the question: Was Israel justified in destroying the Iraqi nuclear facility? A number of questions of fact remain in dispute, but unconfirmed allegations made by both sides are included in order to convey the full range of the debate.

YES, THE ISRAELI ATTACK WAS JUSTIFIED

(1) The Israeli attack was legitimate self defense. Self defense and self protection are universally accepted principles, which no nation would surrender voluntarily. No nation can decide for another nation whether its existence is threatened. Only Israel can determine when its life is in danger and the action that must be taken to remove that danger. Clearly, Iraq, a self-admitted enemy of Israel, intended to use nuclear weapons against Israel, and Israel removed the source of that threat in self defense.

(2) The Israeli attack cannot be classified as "aggression" against Iraq because a state of war exists between Israel and Iraq. Iraq did not sign an armistice agreement with Israel as did Lebanon, Egypt, Jordan, and Syria, nor has Iraq signed a peace treaty with Israel as the Egyptians have. Iraq participated in armed conflict with Israel in 1948 and 1967. Iraq has not accepted United Nations Security Council resolutions 242 in 1967 or 338 in 1973 which are supposed to be the bases upon which a Middle East peace is to be built. By not accepting the U.N. resolutions, Iraq is stating that it does not want peace with Israel.

(3) Iraq was going to use the French-built nuclear reactor to produce nuclear weapons for use against Israel. Iraqi leaders have clearly indicated that they intend to build an atomic bomb to be dropped on Israel. Iraq did not need a large 70-megawatt reactor for nuclear research, because it already has a Soviet-built research reactor. The Iraqis, with French complicity, were building a secret underground reprocessing facility at the site to reprocess the nuclear fuel from the reactor into weapons materials. The Iraqi claim that they were building the nuclear research facility to meet future energy and industrial needs is nonsense because Iraq has 30 billion barrels of oil, more than the United States.

NO, THE ISRAELI ATTACK WAS NOT JUSTIFIED

(1) The attack was an act of aggression. Israel was not defending its homeland from an actual or potential threat, but crossed international boundaries to destroy a civilian, not military, facility. There were no Iraqi acts of belligerency to warrant the Israeli action, or upon which to base a claim of self defense. The Israeli action was based on a suspicion of intentions, which if used by other nations as justification for attacking other states could send half the world's nations to war.

(2) A technical state of war may exist but Iraq and Israel have not been in an active state of war. Iraq sent a letter to the U.N. in 1949 accepting the armistice agreements signed by the other Arab states and is therefore in a condition of non-belligerent armistice with Israel. The acceptance or non-acceptance of U.N. resolutions 242 and 338 does not change the armistice. A violation of the armistice is an act of aggression. If Israel wants peace with the Arab states, it should recognize the Palestinians and agree to attend a comprehensive peace conference with all the Arab states. By violating the armistice to attack what the Israelis say is a potential, not real, threat, the Israelis are also saying there is no prospect for peace in the future.

(3) With French and International Atomic Energy Agency technicians monitoring the use of the reactor, Iraq could not have begun a nuclear weapons program without the world knowing about it. Iraqi leaders have said the reactor was for peaceful, not military, purposes, and several of the alleged Iraqi statements of their intent to produce weapons cited by the Israelis have been taken out of context or proven false. French technicians who were building the reactor have denied that there was a secret reprocessing chamber to be used for weapons production. Oil is a finite resource that will be exhausted in 30 years or so. Iraq, like all nations, must find new energy sources to replace oil, and was beginning research into nuclear energy for the future. Besides, oil is more valuable to the world as a petrochemical raw material than as a fuel, and should be saved for the future.

(4) The world, particularly the French, ignored Israel's diplomatic appeals over the past five years to stop construction of the nuclear facility near Baghdad. The radioactive fuel was scheduled to be placed in the reactor either in July or September 1981. Israel waited until the last possible moment in the hope that a diplomatic effort could stop the reactor from becoming operative. With only three weeks left before the fuel was inserted in the reactor, Israel did for itself what the world would not do; it stopped the reactor. To have waited until after the nuclear fuel was in the reactor before destroying it would have released a radioactive cloud that would have killed or poisoned hundreds of thousands of innocent civilians in Baghdad. Israel, victim of the holocaust of World War II and victim of continuing Arab attacks on its civilians, would not become a mass murderer of Iraqi civilians.

(5) It is well known in international circles that the International Atomic Energy Agency inspectors are understaffed, poorly trained, and easily misled, as they were by the French and Iraqis who built the secret chamber for producing atomic weapons. The IAEA inspectors did not find the secret chamber. The French are unreliable, as proven by their cooperation in constructing the reactor and the bomb-making chamber. Israel cannot rely upon the IAEA and the French to protect it against an Iraqi nuclear weapon.

(4) Israel's diplomatic appeals were not ignored, but were judged to be unfounded. France and the IAEA would continue to monitor the Iraqi nuclear facility to ensure its peaceful use. In addition, the new French government had expressed its desire for closer ties with Israel which would suggest that new Israeli diplomatic appeals to France could have been more effective. But, according to news reports, Israel has not contacted the new French Government about the Iraqi nuclear reactor. There is no scientific evidence to support the Israeli contention that a breach of the reactor after the fuel was in place would have sent a radioactive cloud over Baghdad; on the contrary, some nuclear experts maintain that radioactivity released from the breached Iraqi reactor would have been confined to the reactor site. Israel's concern for the innocent Iraqi civilians lacks conviction when compared to Israel's acts against other Arab civilians, particularly those in southern Lebanon where hundreds of innocent civilians have been killed, thousands injured, and tens of thousands made homeless by Israeli attacks. Members of political parties opposing Prime Minister Begin's Likud party in Israeli elections to be held on June 30 claim the raid was timed to win votes for Begin.

(5) The IAEA is competent to monitor nuclear reactors as indicated by the fact that so many nations rely upon IAEA inspections. Iraq demonstrated its peaceful intentions by signing the nuclear non-proliferation treaty and agreeing to IAEA safeguards and inspections. The French Government has denied that a secret chamber for processing nuclear weapons existed at the Iraqi site. A secret facility, such as the one described by the Israelis, would have been detected by the IAEA inspectors. The French have stated that the so-called secret bomb manufacturing room was a neutron guide chamber which is used to examine and experiment on nuclear materials from the reactor, and is clearly visible in published drawings and descriptions of the Iraqi nuclear facility. The Israelis later changed their story that the so-called secret room was 130 feet below ground level to say that the room was 13 feet below ground level.

(6) The Iraqi reactor was designed to take five or six fuel loadings per year, with each loading containing some 15 kg of 93 percent enriched uranium, or a total of between 75 and 90 kg of 93 percent enriched uranium each year. A simple atomic bomb takes 50 kg of at least 90 percent enriched uranium, and a more complex and sophisticated bomb takes 15 kg of at least 90 percent enriched uranium. Iraq could have built two simple or six sophisticated bombs with the one-year supply of fuel for the reactor. In addition, the Iraqis could have used the reactor to produce about 20 kg of plutonium in a year, enough for a simple-plutonium bomb or for four sophisticated plutonium bombs. If the French or the IAEA safeguards did not work, or if the Iraqis abrogated their agreement with the French or the IAEA and refused to allow the reactor to be inspected, the Iraqis could have produced an atomic weapon or several atomic weapons within one year, perhaps as early as a few months from now. One atomic bomb on Tel Aviv would kill between 200,000 and 600,000 Israelis. Several bombs on Israeli population centers could destroy the nation. Israel will not allow another holocaust.

(7) Israel did the world a favor by destroying the Iraqi reactor. Many nations, foremost among them Arab states, are privately and silently applauding the Israeli act while they publicly pay lip service to international decorum by denouncing Israeli "aggression." The world realizes that the unreliable, unstable, and unsavory regime in Iraq could not be trusted with nuclear weapons. International safeguards are not foolproof, and even if an Iraqi diversion of material were discovered by the IAEA or the French, there is no internationally accepted action to be taken against the Iraqis—no international police force would enter Iraq to seize the atomic bomb. Israel can withstand the condemnation of world public opinion or the inevitable United Nations resolution denouncing Israel because Israel acts to protect itself, not to please world opinion.

(6) France would deliver one loading for the reactor, 15 kg of uranium, and take the spent fuel removed from the reactor back to France for processing. At any time, there would be only enough fuel in Iraq for one loading of the reactor. French technicians would know immediately if the fuel had been tampered with or if any was missing. In addition, IAEA inspectors, making monthly inspections, would know if fuel was missing or if the reactor was being used to produce plutonium. An Iraqi attempt to divert reactor fuel for weapons production would be discovered before a bomb could be built.

(7) Israel has established a dangerous precedent for any nation in the world to use force against a real or perceived enemy that may or may not be producing nuclear or conventional weapons. The world must condemn such acts of international lawlessness. The United Nations and other international bodies cannot encourage nations to take the law into their own hands but must rely upon international sanctions to punish wrongdoers or to express the world's displeasure at policies of individual nations. Without such constraints, there will be no order.

(8) Israel has not embarrassed its friend the United States by using American weapons in the attack in violation of any agreement. Israeli Deputy Defense Minister Mordekhay Tzipori told the Israeli newspaper Maariv on June 11, 1981 that there are no restrictions on the use of American planes. Even if there were restrictions stating that the planes could be used only for defense, the attack on the Iraqi reactor was a defensive strike. The United States has never suggested that Israel or any other ally should sit passively and await a nuclear attack before defending itself.

(9) Some critics have stated that the Israeli attack on the Iraqi reactor will become a cause around which the Arabs will unite. While the Arab states may disagree occasionally among themselves over minor issues, they are always unified in their hatred of Israel. In fact, Iraqi leaders often spoke of the "Arab bomb" and not just an Iraqi atomic bomb, that would be used against Israel.

(10) The attack on the Iraqi nuclear facility need not disturb the diplomatic mission of U.S. envoy Philip Habib to resolve the missile crisis in Lebanon, or the continuing discussions with Egypt over the Sinai peacekeeping force, West Bank/Gaza autonomy, broadening Egyptian-Israeli relations, the Israeli withdrawal from Sinai in 1982, and other matters. There may be temporary setbacks in those negotiations, but realism will soon prevail over rhetoric and both the Syrians and the Egyptians will soon return to serious negotiations on matters that are of far greater import to them than an Iraqi reactor. Egyptian President Sadat, already ostracized by his Arab "brothers" because he signed a peace treaty with Israel, cannot be ostracized further because he met with Prime Minister Begin two days before the attack. Sadat did not know of the attack in advance. Similarly, the United States will not lose any of its Arab friends and no Arab state will stop oil shipments to the United States if the United States does not punish Israel for the attack by stopping arms and aid to Israel. Most of the Arab states are glad the Iraqi reactor is gone, although they will not admit it in public.

(8) The 1952 Mutual Defense Assistance Agreement between Israel and the United States clearly states that military equipment provided to Israel can be used for defense only. United States-Israeli arms transfer agreements since 1952 have carried the same restriction. Israel violated those agreements by using American aircraft in the attack. Under U.S. law, Israel should be denied any further military assistance.

(9) Israel's attack will facilitate united Arab world efforts against Israel. Arab states, divided over whether or not to support Iraq in its war with Iran, were partially united by the Israeli attacks against the Syrian helicopters and the continuing missile crisis in Lebanon. With their attack on Iraq, the Israelis may have created the "eastern front" they say threatens them.

(10) Kuwaiti and Saudi diplomats were working with Philip Habib in trying to arrange a compromise solution to the missile crisis with the Syrians, Lebanese, and Palestinians. It is questionable if any of the Arabs will cooperate with Habib or will pursue the compromise after the Israeli attack, which the Arabs view as proof of Israeli "aggression." Egyptian President Sadat's meeting with Begin two days before the attack created the impression among some Arabs that Sadat knew of and approved the attack in advance, which may damage Egyptian and American efforts to include other Arabs in the peace talks. Sadat's critics in Egypt and the Arab world now have more reasons to denounce the Egyptian-Israeli peace treaty. The Arab World will be watching the United States to see if it "slaps Israel's wrist" or demonstrates real "evenhandedness" by cutting off the supply of weapons to Israel. American relations with the Middle East, trade, oil supplies, and an anti-Soviet alliance may be at stake.

The CHAIRMAN. Finally, we will insert a detailed letter that I have received, dated June 16, 1981, signed by Thomas A. Dine, and Douglas Bloomfield, executive director and legislative director, respectively, of the American-Israel Public Affairs Committee. They detail for the committee principal arguments supporting positions that they have publicly taken.

[The letter and attachments referred to above follow:]

AMERICAN ISRAEL PUBLIC AFFAIRS COMMITTEE,
Washington, D.C., June 16, 1981.

Hon. CHARLES PERCY,
Chairman, Foreign Relations Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: In the context of your committee's hearing on the Israeli raid on Iraq's nuclear facilities, the American Israel Public Affairs Committee (AIPAC) wishes to state:

1. The raid was an act of legitimate self-defense supportable under international law, and Article 51 of the U.N. Charter.
2. The Iraqi nuclear reactor would have been capable of producing nuclear weapons.
3. Safeguards on Iraq's reactor were inadequate.
4. The Iraqi regime is committed to the destruction of the State of Israel by any and all means.
5. Israel has exhausted over three years all diplomatic means to prevent the supply of nuclear weapons capability to Iraq.

1. SELF-DEFENSE: LEGALITY OF ISRAEL'S RAID

Iraq has been in a state of war against Israel since Israel's establishment in 1948, when the Iraqi army joined other Arab armies in an invasion of the new nation. Egypt, Lebanon, Syria and Jordan signed armistice agreements in 1949, but Iraq refused. Again in 1967 and 1973, Iraq joined the wars against Israel. Iraq refused to accept the 1967 cease-fire contained in UN Security Council Resolution 242 and the 1973 cease-fire contained in UN Security Council Resolution 338. On October 22, 1973, the Iraqi government proclaimed, "Iraq does not consider itself a party to any resolution, procedure or measure in armistice or cease-fire agreements or negotiations for peace with Israel, now or in the near future."

Israel destroyed the nuclear facility in Iraq, exercising the right of self-defense proclaimed in Article 51 of the United Nations Charter. As explained by Sir Humphrey Waldock, current president of the International Court of Justice, in a lecture at the Hague in 1952, "It would be a travesty of the purpose of the (UN) Charter to compel a defending State to allow its assailant to deliver the first and perhaps fatal blow. . . . To read Article 51 otherwise is to protect the aggressor's right to the first strike."

There can be no doubt that a nuclear first strike against the nation of Israel would be a "fatal blow."

We commend to the Committee the article in the June 15th edition of the Washington Star written by Anthony D'Amato, professor of Law at Northwestern University and editor of the American Journal of International Law. Professor D'Amato concludes that "the Israeli pre-emptive strike against the Iraqi nuclear facility did not violate international law."

Professor D'Amato points out that when dealing with a nuclear threat and "immediate annihilation, the old safeguard of collective security becomes irrelevant. There is simply no reaction time in the system. . . . Under this analysis, Israel's last chance to protect itself against thermonuclear destruction at the hands of Iraq was to destroy the nuclear installation. . . ."

It has been argued that Israel should have postponed its strike until the Iraqi nuclear weapon was at hand, until Iraq violated the International Atomic Energy Agency safeguards, or Iraq announced the actual development of nuclear weapons. Perhaps Israel could have, but once the reactor went "hot" the threat of nuclear contamination of Baghdad and the threat to Israel's own citizens would have been worse. Therefore, Israel's action was the most humane action possible.

Was the Israeli raid legal? Considering the very real Iraqi threat, no responsible government could have acted differently.

2. THE THREAT OF THE OSIRAK REACTOR

There is little doubt among nuclear specialists that Iraq was embarked on a program to develop nuclear weapons. If there is any question, it is how soon Iraq's nuclear weapons could be produced, with experts speculating that Iraq could develop a nuclear bomb by the end of this year and certainly by 1983.

Oil-rich Iraq did not secure the nuclear facility for the generation of power. As explained last week by Dr. Don Trauger, associate director for Nuclear Engineering at Oak Ridge, "The Iraqi reactor was large enough to make weapons. The 70-megawatt research reactor was larger than one would expect a country like Iraq would need" for research. (Associated Press, June 11, 1981.)

Professor Kosta Tsipis of MIT told the Los Angeles Times on June 9th, "You use a reactor like that either for metallurgical research or for making plutonium. Since there's no metallurgical industry in Iraq, it has to be for plutonium. . . . [This is] the cheapest way to produce plutonium. . . . This is a parsimonious way to make a bomb."

On March 18, 1981, Richard Burt, then national security correspondent for The New York Times and currently director of the State Department's Bureau of Politico-Military Affairs, reported: "Italy has provided Iraq with sensitive equipment that American officials said could be used to manufacture weapons-grade plutonium. . . . Officials said that the Administration was most concerned about a decision by Italy to permit Iraq to purchase a sensitive nuclear facility known as the 'hot cell.'"

"The fears are based, in part," Burt continued, "on the suspicion that Iraq would use the hot cell for military purposes. . . . [Officials] expressed concern over the number of Iraqi scientists now being trained in Italian companies and government research facilities, saying that the training programs would enable Baghdad, some time in the future, to set up a nuclear arms program without help from abroad."

The current issue of Nucleonics Week interviewed an unnamed "veteran non-partisan specialist intimately involved in international safeguard mechanisms . . . who has won widespread respect in the international nuclear community." According to the Nucleonics Week report, "Israel had reason not to be trusting of Iraq's [intentions]. The very idea that Iraq would be engaged in pure nuclear research on as grand a scale as indicated by its burgeoning nuclear complex is hard for this source to accept. Moreover, Iraq bought 300 tonnes of yellowcake, which has absolutely no capability to fabricate into any form for commercial use. In addition, Iraq is known to have purchased from Common Market countries about five tonnes of natural uranium processed for potential use as a breeding blanket and another five tonnes or so of depleted uranium also with blanket potential."

It should be recalled that the French government, spurred by the United States, attempted to substitute weapons-grade uranium (93 percent enriched) with another fuel unsuitable for the production of weapons-grade material ("caramel"). Iraq rejected the substitute, demanding the weapons-grade fuel.

"The highly enriched uranium which the French announced they will sell and deliver to Iraq," warned Professor Albert Wohlstetter in National Security in the 1980's From Weakness to Strength, "has only the remotest application in the civilian economy of Iraq, but such concentrated fissile material is the most important and hardest to produce component of nuclear weapons and can be quickly incorporated in a weapon assembly. Highly enriched uranium makes feasible weapons of the simplest design—the gun as distinct from the implosion-type essential for plutonium."

According to a recent Library of Congress Congressional Research Service study, "The enriched uranium provided by France, if diverted from its intended use, would be sufficient to produce six atomic bombs. The study also cited "one State Department nuclear expert who said that the Italian [hot cell] facility was big enough to obtain sufficient plutonium for a nuclear weapon in about one year's time."

Top level French nuclear experts have expressed concern over the reactor their country supplied to Iraq. Francis Perrin, the former High Commissioner for Atomic Energy and the President of the European Society of Atomic Energy, warned in August 1980 that "the nuclear cooperation treaty between France and Iraq could lead to the development of a nuclear weapon," according to the Times of London.

Two weeks ago, three officials of the French National Center for Scientific Research released a 32-page report which warned that "the high flux Osirak reactor, capable of significant and efficient radiation levels, is well suited for producing plutonium with a potential for the production of explosives."

3. INADEQUATE SAFEGUARDS

It is widely accepted in the scientific community that today's nuclear safeguards are incapable of detecting violations of nuclear guidelines and the secret developing of nuclear weapons. "Advanced technologies will outpace the safeguards systems needed to control them," warned the Stockholm International Peace Research Institute (SIPRI) last year. The enforcement and detection powers of the International Atomic Energy Agency, SIRRI continued, are "exceedingly cumbersome . . . Action [by IAEA against any violator] is bound to be slow, leaving a violator the time needed to carry out his design."

The political nature of the IAEA should also be noted. The Palestine Liberation Organization (PLO) has been granted observer status to the Agency.

Writing in the Brookings Institution's "Nonproliferation and U.S. Foreign Policy," Henry Rowen and Richard Brody warn that "under the present international rules, nations can possess nuclear explosive materials without violating . . . the NPT-IAEA safeguards."

Fred Ikle, who now serves as undersecretary of defense, wrote in the forward to "Plowshares into Swords" that IAEA safeguards are woefully inadequate: "The agency made it easier for the exporters of nuclear technology in several countries to pretend that their practices were safe. . . . Never mind that highly enriched uranium was accumulating in large amounts in many countries, it was under agency 'safeguards.'"

The current Newsweek and today's Washington Post reach a similar conclusion. "IAEA's authority and capabilities are limited," according to Newsweek. "Iraq offers a prime example of the weakness of IAEA inspections. . . . An IAEA spokesman . . . admitted that no security cameras or seals were yet in place at the reactor. . . . Iraq's nuclear activities were openly suspicious. The Osirak reactor was theoretically only for research purposes—but Iraq twice refused a French offer to supply it with low-enriched uranium. . . . Iraq was also operating an Italian-built 'hot cell' lab for extracting plutonium, and had arranged to buy large quantities of uranium from Brazil, Portugal and Niger—all without any investment in a nuclear-energy program."

The Washington Post, in a lead editorial entitled "Nuclear Safeguards or Sham?" wrote:

"The IAEA safeguards are also narrowly applied. They are focused on nuclear fuels, but not on facilities where fuel is not present. IAEA inspectors would therefore not have had access to the alleged underground weapons facility that the Israelis continue to claim Iraq had built.

"A more subtle but possibly more debilitating weakness in the IAEA system derives from the agency's split personality. It has a policing function, but it also regards itself as a promoter of peaceful nuclear activities. Characteristically the IAEA's first reaction to the raid was to criticize Israel for an action that 'could do great harm to the development of nuclear energy for peaceful purposes' or, in other words, for nuclear commerce. Incredibly, the agency called on its members to give Iraq 'emergency assistance' in rebuilding the damaged reactor."

4. IRAQ: COMMITTED TO ISRAEL'S DESTRUCTION

For over 33 years, Iraq has been committed to the destruction of the "Zionist entity." Indeed, Iraq cannot even bring itself to calling the Jewish state "Israel."

Iraq's commitment to Israel's destruction is manifest in its involvement in the Arab-Israeli wars, its support for terrorism, and in its leaders' statements against Israel. [For your background information, AIPAC has so far been unable to verify a statement attributed to Saddam Hussein on October 4, 1980. However, bellicose Hussein quotes are numerous—as shown below.]

The United States Government has identified Iraq as one of the major sponsors of international terrorism, particularly terrorism directed against Israel. In 1980, the Department of State declared, "The government of Iraq is a major supporter of rejectionist Palestinian elements which repudiate a negotiated settlement to the Arab/Israeli dispute. The rejectionist Palestinians include groups which use terrorism as a policy instrument."

Iraq is also a major financier of PLO terrorist activity. On January 10, 1980, the Iraqi News Agency (as recorded by FBIS) announced that Iraq transferred almost \$20 million to the PLO. In the announcement, the Iraqi finance minister "asserted that Iraq is fully ready to honor all its commitments in supporting the effective steadfastness and confrontation of the treasonous agreement between the Zionist entity and the Sadat regime, which are supported by U.S. imperialism and Zionism."

In August 1980, Saddam Hussein discussed an Arab proposal to boycott any nation maintaining an embassy in Jerusalem. As broadcast by Baghdad's "Voice of the Masses" (and recorded by FBIS on August 21), Hussein said, "Some people ask if this [boycott] decision is the best that can be taken. No, a better decision would be to destroy Tel Aviv with bombs. [Applause, cheers.] But we have to use the weapons available until it is actually possible to respond to the enemy with bombs."

Later that week, Hussein ominously hinted how Iraq would defeat Israel. "The Arabs will triumph when the Arab nation's sons have rid themselves of scientific and technological backwardness and have taken advance positions that bridge or reduce the gap between those who have come from the most developed scientific world circles and gathered on Palestinian territories as usurpers on one hand, and the Arab nation on the other, which has suffered from the oppression, division and backwardness that accompanied the colonialist domination of the Arab nation during past decades. . . . We are certain that the day will come when the Arabs will triumph over the midget Zionist entity. . . ."

"We also treat occupied Palestine's territory as if it were Iraqi territory. We are preparing ourselves for a role in protecting the security of the Arab countries against the greedy, the invaders and the imperialists. We are also preparing ourselves for a role in liberating the beloved land of Palestine."

5. ISRAEL'S RAID: THE LAST REPORT

Israel's June 7 attack on Iraq's nuclear installation was not a sudden, arbitrary decision. It was the carefully-considered last resort available to Israel whose existence was threatened by Iraq's development of a nuclear weapons capability.

As the following record indicates, Israel has long stated its objections to the Iraqi facility. But for a few exceptions, those objections fell on deaf ears. Since the first signs of nuclear cooperation between Iraq and European nations, Israel, enlisting the support of the United States, embarked on a campaign of public and secret diplomacy to alert the world community to the danger of the projects and to persuade those nations involved to end their support. Only after thoroughly exhausting those diplomatic channels without success and only after the new French government announced that there will be no changes in its Iraq policy did Israel resort to a military response. And even then it opted for a surgical raid, the loss of human life was minimized, and the possibility of nuclear contamination was averted.

We offer a chronology of that diplomatic effort:

September 1976

Just months after the French-Iraqi nuclear agreement is published, the Paris correspondent for the Israeli paper *Haret* reports that Iraq is to receive enough enriched fuel to manufacture three nuclear devices by 1985. Israel launches an intensive diplomatic campaign to try to convince France to renege on the agreement. (Miami Herald, July 23, 1980).

July 1978

The London Times reports on U.S. efforts to exert pressure on France to withhold a planned delivery of weapons-grade uranium to Iraq. Sources indicate that the "State Department, at the instigation of President Carter, has held talks with France, during which the United States expressed its 'grave concern' that the Iraqis could use the uranium to manufacture nuclear weapons." (Times, July 4, 1978).

April-July 1979

Israel appeals to France to reconsider its agreement following the mysterious destruction of reactor components awaiting shipment to Iraq at a French port. Yielding to diplomatic pressure, French Prime Minister Barre meets with Iraqi leaders to convince them to accept a newly-developed fuel known as "caramel" which would suit Iraq's reactor, but is not "bomb-grade" material. Iraq adamantly refuses anything but the 93 percent enriched uranium. Under threats of an oil cut-off and cancellation of French arms purchases, France goes along with Iraq's demands. (Jerusalem Post, August 22, 1980; Sunday (London) Times, October 26, 1980).

February 1980

In response to reports of France's failure to persuade the Iraqis, Senator Frank Church, then Chairman of the Foreign Relations Committee, and Senator Jacob

Javits, ranking minority member, sent an expression of concern to President Carter. (Congressional Research Study, June 8, 1981).

March 1980

New York Times correspondent Richard Burt reports that Administration officials are "most concerned" about an Italian decision to permit Iraq to purchase a sensitive nuclear facility called a "hot cell," which would enable Iraq to extract plutonium from other nuclear substances. Burt notes that efforts by U.S. officials have "so far . . . not succeeded in persuading Italy to reassess the project." (N.Y. Times, March 18, 1989).

July 1980

Prime Minister Begin makes a speech on French Independence Day in which he accuses France of encouraging an extremely dangerous situation. (FBIS, July 14, 1980) In a television interview on the same day, Deputy Premier Yadin says that Israel would take measures against the nuclear program. (Jerusalem Post, August 22, 1980) Foreign Minister Yitzhak Shamir says he views with severity the sale of French uranium to Iraq. (FBIS, July 15, 1980) Transportation Minister Chaim Landau makes a statement to Voice of Israel that the supply of a nuclear reactor to Iraq is particularly serious and the French government does not realize the danger inherent in the move. (FBIS, July 15, 1980).

The Knesset Foreign Affairs Committee suggests that a diplomatic and information offensive be launched in Europe. Labor Party Chairman Shimon Peres supports the idea and offers to make a special trip to Paris to discuss the matter with President Giscard. The committee issues the following statement: "When an extremist and aggressive regime such as Iraq's gets nuclear manufacturing potential Israel must regard the development as a threat to its existence. Israel will therefore have to make a sober assessment of its response." Christian Science Monitor, August 18; FBIS, July 24, 1980).

Associated Press reports on a U.S. announcement not to oppose the "controversial sale to Iraq." The report acknowledges that "Israel has protested strongly about the sale," in both France and the United States. (July 25, 1980) Yitzhak Shamir calls on the French charge d'affaires in Israel to voice his government's protest that French nuclear aid to Iraq will reinforce its "aggressive designs against Israel." (Washington Post, July 30, 1980).

Ronald Koven of the Washington Post reports that France has begun deliveries of fuel shipments of enriched uranium to Iraq despite the fact that "Israel has been mounting an increasingly insistent campaign to underscore the danger that Iraq could develop atomic weapons as a result of French actions" and that "Washington also has privately expressed its concern to France about the wisdom of shipping sensitive materials to unstable regimes . . ." (July 30, 1980).

Israel restates its proposal to begin immediately direct negotiations with the Arab countries "at any time, in any place, and without reconditions" to establish a zone free of nuclear weapons in the Middle East. The proposal is rejected by Arab states. (FBIS, July 31, 1980).

August 1980

The Christian Science Monitor reports that "Israeli officials have begun hinting strongly at the possibility of direct action against Iraq to block the development of that country's nuclear capability." Deputy Defense Minister Mordecai Zipori: "We will explore all legal and humane avenues. If pressure doesn't work, we'll have to consider other means." Director-General of the Prime Minister's Office Matti Shmuelevitz: "Israel could not wait until an Iraqi bomb falls on it." Ze'ev Schiff, Israel's leading military correspondent: "Israel must make every effort to block Arab [nuclear] development. This effort must be in the political area and other areas as well." (August 18, 1980).

February 1981

Nucleonics Week reports that Italy could face possible difficulties in obtaining U.S. nuclear exports because of U.S. concern that it is contributing to Iraqi development of nuclear weapons. (Congressional Research Service Study, June 8, 1981).

March 1981

Representative Jonathan Bingham writes a letter to Secretary of State Haig asking him to consider ending American nuclear supply to France and Italy because their assistance to Iraq and Pakistan's nuclear programs presented a

"clear and present danger to the United States and indeed, Western security interests" in the region. (N.Y. Times, March 18, 1981).

Senator Alan Cranston delivers a speech on the Senate floor in which he accuses Iraq of "blackmailing" oil-dependent Western European nations to acquire nuclear technology and fuel and embarking upon a "Manhattan Project-type approach" toward acquiring nuclear weapons. He further urges the Reagan Administration to exert pressure on France and Italy to refrain from exporting their nuclear technology and to consider ending U.S. shipments to them and any nation providing Iraq with highly sensitive nuclear assistance. He calls for congressional inquiry into the spread of nuclear technology to Iraq and other countries in the volatile region. (N.Y. Times, March 18, 1981).

June 1981

David Shieler of The New York Times confirms that "Israel sent representatives to Europe and the United States to try to interest newspapers, magazines and television networks in the issue" of Iraq's drive toward nuclear weapons. "Prime Minister Begin activated a campaign of secret diplomacy that included personal letters to the French and other European heads of state to persuade them to cut off support for the project." (June 14, 1981).

CONCLUSION

Mr. Chairman, having exhausted all diplomatic avenues and confronted with the imminent activation of the Osirak reactor, Israel was convinced it had no choice but to act. The action taken was compelling and legal. It was not taken lightly but only in the face of a clear danger to Israel's national security.

AIPAC, therefore, urges Congress to recommend the lifting of the suspension on deliveries of weapons to Israel and to recognize the fact that Israel acted legally and in self-defense. Failure to lift the suspension would send misleading signals to Israel's enemies and appear to condone Iraq's nuclear ambitions. Particularly at this time—when the Soviet Union is testing U.S. resolve, when Syria is trying Israeli and American patience by reinforcing its missiles in Lebanon, and when Arab states are challenging the strength of the U.S.-Israeli relationship—the failure to lift the arms suspension could seriously jeopardize the cause of peace.

Sincerely,

THOMAS A. DINE,
Executive Director.
DOUGLAS M. BLOOMFIELD,
Legislative Director.

Enclosure.

IMAGINING A JUDGMENT IN THE CASE OF IRAQ VS. ISRAEL

Was the pre-emptive strike by Israel against the Iraqi nuclear reactor a violation of international law? Since the question will probably never be resolved by an international tribunal, the best anyone can do is predict what an impartial panel of judges might decide after hearing full argument from both sides.

The case would not be simple. Counsel for Israel might try arguing that a state of war exists between Iraq and Israel and that it has been Iraq since 1948 that has rejected any armistice sought by Israel. Hence it follows from the existence of a war that Israel has the right to take military action against Iraq.

The trouble with this argument is that war itself is illegal under international law. The Kellogg-Briand Peace Pact in 1928 outlawed war, and that treaty has never been repealed. The Nuremberg trials after World War II made it plain that resort to war was illegal under international law.

International law is actually quite subtle on this issue. If a state of war in fact exists, then the Geneva Conventions operate to protect prisoners of war, the wounded, the Red Cross, civilians (in certain circumstances), and other attributes of war. But the triggering of those conventions does not in turn legitimize the war. In short, counsel for Israel cannot legitimately deduce any military right from its war with Iraq, since the illegality under international law of the war itself cannot be used to justify continuation of war—even though it may trigger the Geneva Conventions.

SELF-DEFENSE

What else can Israel argue? It might say that the two-minute "surgical" strike against the Iraqi nuclear facility was for the self-defense of Israel, as permitted

by Article 51 of the Charter of the U.N. Such an argument would invoke the same provisions that attorneys for the U.S. Department of State used to justify the blockade of Cuba in 1962 during the Cuban missile crisis. However, the argument is no better than it was then. The self-defense provision of Article 51 comes into effect only "if an armed attack occurs," and there was no armed attack on the U.S. in 1962 anymore than there was on Israel in 1981.

Perhaps counsel for Israel might try to salvage the self-defense argument by quoting the Israeli deputy defense minister, Mordechai Zipori, who said on June 11, "What constitutes the defense of the state of Israel shall be determined only by the government of Israel, and not by any other state, not even the most friendly one." The argument is like former President Nixon's self-definition of "national security" as a reason for not turning over the Watergate tapes to the special prosecutors. And it is equally unpersuasive. No court (even our imaginary international tribunal in the case of Iraq vs. Israel) will allow unbounded self-determination to decide legally contested issues. Israel simply has no right under international law to take any military action outside its national boundary in the name of self-defense as it chooses to define that term.

NOT PROSCRIBED

So far, then Israel has not justified its action under international law. But its counsel may still say that unless Iraq can show that the Israel attack was illegal under international law, it is permissible. Indeed this was the first pre-emptive strike against a nuclear facility in history so one could not reasonably expect international law to contain an actual rule affirmatively permitting such an act. But the absence of an explicit international rule *proscribing* a certain action does not mean that the action is *proscribed*.

Let us hear then from counsel for Iraq. First, the Iraqi attorneys might argue that Israel violated Article 2(4) of the U.N. Charter, which many have regarded as the modern equivalent of the Kellogg-Briand Peace Pact. Article 2(4) outlaws the use of force "against the territorial integrity or political independence of another state." But the long history in international law, especially in treaties going back to the turn of the century, of these particular quoted phrases suggests that Israel might be able to refute this particular allegation that it violated Article 2(4). In its pre-emptive strike that lasted all of two minutes, Israel sought no annexation of any of Iraq's territory (Iraq can hardly say the same in its present war against Iran). Nor did Israel interfere with the Iraqi government or its legal standing vis-a-vis other nations. Thus, although Israel's strike was certainly a use of force it arguably was not directed against Iraq's territorial integrity or political independence.

COMPENSATION

Allright, then (we might imagine counsel for Iraq arguing), Israel at the very least violated Iraq's airspace and dropped bombs on Iraqi property destroying an installation that cost Iraq millions of dollars and killing about three persons in the vicinity. Surely such an action is prohibited by international law.

But, again, international law is not so simplistic. An international tribunal would probably assess monetary damages against Israel for the value of the property that was destroyed, the value of the lives lost, and maybe an additional "punitive" though nominal amount for violating Iraqi airspace. But we cannot infer solely from the awarding of monetary compensation to Iraq that Israel was not entitled to destroy the nuclear installation. An analogy is found in the American law of eminent domain, as well as the international law of expropriation: the government may take away private property for a public purpose, but it nevertheless must award compensation to the person whose property was taken. The primary act is not illegal even though compensation must be paid.

Thus we are left with the main issue: Was Israel's pre-emptive strike contrary to international law?

UNDERLYING PURPOSE

At this point let us take a step back and look at international law from a broader perspective. It does not simply consist of rules which states either obey or disobey like the rules of a game. Instead international law has evolved over thousands of years as a system for stabilizing the interactions of states and governments by defining presumptions of legality arising out of the customary acts of the states themselves. The purpose of international law is to create the precondition for peace and human rights. This purpose does more than animate the rules of international law; it shapes and defines them.

The Kellogg-Briand Peace Pact and the U.N. Charter were drafted in the preatomic age. War was outlawed because a nation's rightful claim to security could be guaranteed on a collective basis by the community of nations. If nation A attacked nation B, all the other nations would (so the theory went) go to the aid of B and repel the aggression. In the absence of nuclear weapons, this system made perfect sense according to the overall purpose of international law.

But in the post-atomic age, the fact of instantaneous nuclear destruction has outrun the old legal rules. Those rules have to be reinterpreted in light of present realities. Israel's predicament is a rather clear illustrative case. A few thermonuclear explosions and Israel would cease to exist in less than the two minutes it took Israel to destroy the Iraqi installation.

FAILED SAFEGUARD

Because of this potential for immediate annihilation, the old safeguard of collective security becomes irrelevant. There is simply no reaction time in the system. As soon as other nations learn that Israel has been attacked with nuclear weapons, Israel will have been destroyed. Indeed, as soon as Israel itself learns of the attack, it will be too late for Israel to protect itself. Knowledge of the attack will probably be simultaneous with its destructive success.

Under this analysis, Israel's last clear chance to protect itself against thermonuclear destruction at the hands of Iraq was to destroy the nuclear installation near Baghdad, as it in fact did last Sunday. Perhaps Israel should be required to compensate Iraq for the property lost, but when one considers that the alternative might have been the thermonuclear death of millions of people in Israel, it would be highly artificial to conclude that Israel violated international law. Indeed, international law would have to be the technical, academic set of rules that many people caricature it to be if it would protect and insure Iraq's capacity to destroy millions of people.

But now we are at a very difficult stage of analysis. If international law in fact justifies what Israel did, how can we ever hope to draw a line against a forthcoming series of preemptive strikes against nuclear facilities all over the world?

FUTURE CASES

If counsel for Israel were asked this question in the case we are imagining, the standard lawyer's answer would be something like this: It is not up to us to draw the line for all future cases. Our purpose is accomplished if we justify our own case. Future lines can be drawn by the court itself if and when future cases arise.

And the standard judicial response to this contention would be as follows: Alright, then, justify your own case. Show that it is potentially different from other possible existing cases, such as the case that would arise if India and Pakistan were to bomb each other's atomic facilities, or Russia were to bomb China's or the U.S. were to bomb France's.

Israel's answer to the judge's inquiry would probably proceed along the following lines:

First, Iraq is an unstable state that is currently in violation of international law for its war of aggression against Iran and its treatment of its Assyrian minorities in northern Iraq.

Second, Iraq has publicly called for the annihilation of Israel.

Third, it is in a state of declared war against Israel and has resisted Israel's call for an armistice. This point, by the way, is raised not to justify Israel's attack, since as we have seen earlier, two wrongs do not make a right (the state of war is itself illegal; it does not justify military actions in pursuit thereof). But instead, the point is raised to indicate the state of mind of the Iraqi government—one of total hostility toward Israel.

Fourth, when Iranian planes last September caused minimal bomb damage to the Iraqi nuclear reactor, Iraq's official newspaper organ declared that the nuclear reactor was not intended to be used against Iran but against the "Zionist entity."

Fifth, it is clear from the absence of concurrent development in Iraq of a nuclear power program that Iran is not interested in electricity. Thus the nuclear facility was clearly intended to produce nuclear weapons, which in turn were clearly intended to be used aggressively against Israel.

EVIL INTENTIONS

Admittedly this argument by Israeli counsel puts a lot of weight on statements of intention that have been made by Iraq. In fact, Iraq might very well proceed

to develop a nuclear capacity but never use it aggressively. Why should we assume Iraq really has evil intentions?

Perhaps the answer is that when governments make aggressive statements, and their populace acquiesces or at least does not resist, a certain momentum is built up that may be hard to dislodge. If a government announces as its official policy the annihilation of other peoples, and then proceeds to develop an instantaneous annihilation capacity, that government by its own admission has taken itself out of the protection of international law. Such a government should hardly be able to complain of a violation of international law if, by its own admission, it was contemplating the gravest of such violations—the destruction of another nation.

If the reader accepts this line of argumentation, then he or she will conclude with me that the Israeli pre-emptive strike against the Iraqi nuclear facility did not violate international law. But the particular factors of the Iraq v. Israel case that we have been imagining will not be the same for other countries. The Israeli action does not constitute an easy precedent for any nation to pre-empt the nuclear capacity of its neighbor. On the other hand, if and when a situation arises that is as grave on its face and in its probable consequences as the one we have examined, then we would have to "bite the bullet" and admit that it too would be justified.

As disconcerting as this justification of the resort to military force might be, we should keep in mind the overwhelming danger to our existence posed by nuclear weapons. Never before in human history have weapons of total planetary destruction been created. We are living at the brink of disaster. Old values and shibboleths have to be re-examined. In particular, international law must be rethought not as a collection of do's and don'ts, but as a purposive system designed to ensure peace and fundamental human values.

STATE DEPARTMENT RESPONSIBILITY

The CHAIRMAN. Mr. Secretary, I want to ask you this. Do I understand that you do not think that the law requires you—that is, the State Department—to make a determination about whether a substantial violation of mutual defense assistance agreements with Israel has actually occurred?

Mr. McFARLANE. The short answer is "No, I do not." To promote our viewpoint on this more fully and I will be glad to call on the Department's legal adviser to explain, if that is all right, Mr. Chairman.

The CHAIRMAN. Yes, if you could, expand on that, please. Perhaps you might comment on it in light of the responsibility that you have in the Department for fulfilling the enforcement provision of the prohibitions in section 3(c) of the Arms Export Control Act that says no sales or credits shall be made to a country which has violated such an agreement. The question being: How can you fulfill that part of the law without actually making a determination as to whether a substantial violation of the Mutual Defense Assistance Agreement has occurred?

Mr. McFARLANE. Mr. Chairman, before we go into that, if I could, I hope I did not convey the impression that the administration thought that it needed to do nothing in this instance. Clearly, we do think that there is an intent in the law whenever a situation like this occurs, that clearly mandates care and thoughtfulness and analysis and corrective action and measures to deal with the problem. That is what we are about in the review that we are conducting.

It was the legal interpretation, and I would defer to counsel on that, which I think is less clear.

The CHAIRMAN. It is an extraordinarily important principle. If we have an obligation to do something and do not do it in this instance,

your decision has implications for weapons we are selling all over the world. We are talking about selling lethal weapons to the People's Republic of China now. We have yet to discuss that in detail with the Secretary and will, upon his return. But the implications of this are very wide and sweeping and go way beyond the application just to Israel, of course.

SECTION 3(C) OF THE ARMS EXPORT CONTROL ACT

Mr. MICHEL. Mr. Chairman, prior to 1976, the U.S. legislation section 3(c), required whenever a substantial violation occurred that the President cut off military assistance and sales to the country concerned. The law did not provide for any report to Congress and did impose upon the President an obligation to decide in each case whether or not there had been in fact a violation.

In 1976 legislation that originated in this committee changed the law to its present form. In section 3(c)(1) the words "as hereinafter provided" were inserted in paragraphs (A) and (B) in an amendment offered by Senator Javits at that time. The intention of the Javits amendment was to refer procedurally for the implementation down to paragraphs (2), (3), and (4) of subsection (c).

Paragraph 2 then says that the procedure begins with the requirement that the President—this is delegated to the Secretary of State by Executive Order—submit a report to the Congress whenever a substantial violation may have occurred.

It then goes on in the statute to provide that the President has the authority to make a determination of ineligibility, and it provides that the Congress has the authority to make a determination of ineligibility by joint resolution.

But neither the President nor the Congress is required by the present law to make such a determination. The rationale for that, as I understand it, was a recognition that such mandatory determinations could be an impediment to the kind of a broad practical solution that Mr. McFarlane has referred to earlier, that there could be a tension, therefore, between the requirement for a legal determination and the imperatives of diplomacy and the national interest.

This legislation gives the opportunity for the executive to fashion the solution in each case that seems appropriate and to serve the nation's best interests and provides the Congress with an opportunity to evaluate what the executive has done and to take different action if it is not satisfied.

So that is the statutory framework, as we understand it.

The CHAIRMAN. I would like to insert in the record at this point the exact language of sections 3, 4 and 42(e) of the act. I also ask our own committee legal counsel to prepare a memorandum on the interpretation Mr. Michel has given to this committee on our respective duties are here.

Mr. Fred Tipson will be requested to draw up such a memorandum. [The above-referred-to material follows:]

The Arms Export Control Act

* * * * *

**Chapter 1—FOREIGN AND NATIONAL SECURITY POLICY
OBJECTIVES AND RESTRAINTS**

* * * * *

SEC. 3. ELIGIBILITY.—(a) No defense article or defense service shall be sold by the United States Government under this Act to any country or international organization unless—

(1) the President finds that the furnishing of defense articles and defense services to such country or international organization will strengthen the security of the United States and promote world peace;

(2) the country or international organization shall have agreed not to transfer title to, or possession of, any defense article or related training or other defense service so furnished to it to anyone not an officer, employee, or agent of that country or international organization and not to use or permit the use of such article or related training or other defense service for purposes other than those for which furnished unless the consent of the President has first been obtained;

(3) the country or international organization shall have agreed that it will maintain the security of such article and will provide substantially the same degree of security protection afforded to such article by the United States Government; and

(4) the country or international organization is otherwise eligible to purchase defense articles or defense services.

In considering a request for approval of any transfer of any weapon, weapons system, munitions, aircraft, military boat, military vessel, or other implement of war to another country, the President shall not give his consent under paragraph (2) to the transfer unless the United States itself would transfer the defense article under consideration to that country. In addition, the President shall not give his consent under paragraph (2) to the transfer of any significant defense articles on the United States Munitions List unless the foreign country requesting consent to transfer agrees to demilitarize such defense articles prior to transfer, or the proposed recipient foreign country provides a commitment in writing to the United States Government that it will not transfer such defense articles, if not demilitarized, to any other foreign country or person without first obtaining the consent of the President. The President shall promptly submit a report to the Speaker of the House of Representatives and to the Committee on Foreign Relations of the Senate on the implementation of each agreement entered into pursuant to clause (2) of this subsection.

(b) * * * [Repealed—1977]

(c)(1)(A) No credits (including participations in credits) may be issued and no guaranties may be extended for any foreign country under this Act as hereinafter provided, if such country uses defense articles or defense services furnished under this Act, or any predecessor Act, in substantial violation (either in terms of quantities or in terms of the gravity of the consequences regardless of the quantities involved) of any agreement entered into pursuant to any such Act (i) by using such articles or services for a purpose not authorized under section 4 or, if such agreement provides that such articles or services may only be used for purposes more limited than those authorized under section 4 for a purpose not authorized under such agreement; (ii) by transferring such articles or services to, or permitting any use of such articles or services by, anyone not an officer, employee, or agent of the recipient country without the consent of the President; or (iii) by failing to maintain the security of such articles or services.

(B) No cash sales or deliveries pursuant to previous sales may be made with respect to any foreign country under this Act as hereinafter provided, if such country uses defense articles or defense services furnished under this Act, or any predecessor Act, in substantial violation (either in terms or quantity or in terms of the gravity of the consequences regardless of the quantities involved) of any agreement entered into pursuant to any such Act by using such articles or services for a purpose not authorized under section 4 or, if such agreement provides that such articles or services may only be used for purposes more limited than those authorized under section 4, for a purpose not authorized under such agreement.

(2) The President shall report to the Congress promptly upon the receipt of information that a violation described in paragraph (1) of this subsection may have occurred.

(3)(A) A country shall be deemed to be ineligible under subparagraph (A) of paragraph (1) of this subsection, or both subparagraphs (A) and (B) of such paragraph in the case of a violation described in both such paragraphs, if the President so determines and so reports in writing to the Congress, or if the Congress so determines by joint resolution.

(B) Notwithstanding a determination by the President of ineligibility under subparagraph (B) of paragraph (1) of this subsection, cash sales and deliveries pursuant to previous sales may be made if the President certifies in writing to the Congress that a termination thereof would have significant adverse impact on United States security, unless the Congress adopts or has adopted a joint resolution pursuant to subparagraph (A) of this paragraph with respect to such ineligibility.

(4) A country shall remain ineligible in accordance with paragraph (1) of this subsection until such time as—

(A) the President determines that the violation has ceased; and

(B) the country concerned has given assurances satisfactory to the President that such violation will not recur.

(d)(1) The President may not give his consent under paragraph (2) of subsection (a) or under the third sentence of such subsection to a transfer of a defense article, or related training or other defense service, sold under this Act and may not give his consent to such a transfer under section 505(a)(1) or 505(a)(4), of the Foreign Assistance Act of 1961 unless the President submits to the Speaker of the House of Representatives and the Committee on Foreign Relations of the Senate a written certification with respect to such proposed transfer containing—

(A) the name of the country or international organization proposing to make such transfer,

(B) a description of the defense article or related training or other defense service proposed to be transferred, including the original acquisition cost of such defense article or related training or other defense service,

(C) the name of the proposed recipient of such defense article or related training or other defense service,

(D) the reasons for such proposed transfer, and

(E) the date on which such transfer is proposed to be made.

Any certification submitted to Congress pursuant to this paragraph shall be unclassified, except that information regarding the dollar value and number of defense articles, or related training or other defense services, proposed to be transferred may be classified if public disclosure thereof would be clearly detrimental to the security of the United States.

(2) Unless the President states in the certification submitted pursuant to paragraph (1) of this subsection that an emergency exists which requires that consent to the proposed transfer become effective immediately in the national security interests of the United States, such consent shall not become effective until 30 calendar days after the date of such submission and such consent shall become effective then only if the Congress does not adopt, within such 30-day period, a concurrent resolution disapproving the proposed transfer.

(3) The President may not give his consent to the transfer to a third country of a defense article or a defense service valued (in terms of its original acquisition costs) at \$25,000,000 or more, or of major defense equipment valued (in terms of its original acquisition costs) at \$7,000,000 or more, the export of which has been licensed or approved under section 38 of this Act, unless at least 30 calendar days before giving such consent the President submits to the Speaker of the House of Representatives and the Chairman of the Committee on Foreign Relations of the Senate a report containing the information specified in subparagraphs (A) through (E) of paragraph (1).

(4) This subsection shall not apply—

(A) to transfers of maintenance, repair, or overhaul defense services, or of the repair parts or other defense articles used in furnishing such services, if the transfer will not result in any increase, relative to the original specifications in the military capability of the defense articles and services to be maintained, repaired, or overhauled;

(B) to temporary transfers of defense articles for the sole purpose of receiving maintenance, repair, or overhaul;

(C) to arrangements among members of the North Atlantic Treaty Organization or between the North Atlantic Treaty Organization and any of its member countries—

(i) for cooperative cross servicing, or

(ii) for lead-nation procurement if the certification transmitted to the Congress pursuant to section 36(b) of this Act with regard to such lead-nation procurement identified the transferees on whose behalf the lead-nation procurement was proposed; or

(D) to transfers to the North Atlantic Treaty Organization, any member country of such Organization, Japan, Australia, or New Zealand, of any major defense equipment valued (in terms of its original acquisition cost) as less than \$7,000,000 or of any defense article or related training or other defense service valued (in terms of its original acquisition cost) at less than \$25,000,000.

(e) If the President receives any information that a transfer of any defense article, or related training or other defense service, has been made without his consent as required under this section or under section 505 of the Foreign Assistance Act of 1961, he shall report such information immediately to the Speaker of the House of Representatives and the Committee on Foreign Relations of the Senate.

(f)(1) Unless the President finds that the national security requires otherwise, he shall terminate all sales, credits, and guaranties under this Act to any government which aids or abets, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism. The President may not thereafter make or extend sales, credits, or guaranties to such government until the end of the one year period beginning on the date of such termination, except that if during its period of ineligibility for sales, credits, and guaranties pursuant to this section such government aids or abets by granting sanctuary from prosecution to, any other individual or group which has committed an act of international terrorism, such government's period of ineligibility shall be extended for an additional year for each such individual or group.

(2) If the President finds that the national security justifies a continuation of sales credits, or guaranties to any government described in paragraph (1), he shall report such finding to the Speaker of the House of Representatives and the Committee on Foreign Relations of the Senate.

SEC. 4. PURPOSES FOR WHICH MILITARY SALES BY THE UNITED STATES ARE AUTHORIZED.—Defense articles and defense services shall be sold by the United States Government under this Act to friendly countries solely for internal security, for legitimate self-defense, to permit the recipient country to participate in regional or collective arrangements or measures consistent with the Charter of the United Nations, or otherwise to permit the recipient country to participate in collective measures requested by the United Nations for the purpose of maintaining or restoring international peace and security, or for the purpose of enabling foreign military forces in less developed friendly countries to construct public works and to engage in other activities helpful to the economic and social development of such friendly countries. It is the sense of the Congress that such foreign military forces should not be maintained or established solely for civic action activities and that such civic action activities not significantly detract from the capability of the military forces to perform their military missions and be coordinated with and form part of the total economic and social development effort: *Provided*, That none of the funds contained in this authorization shall be used to guarantee, or extend credit, or participate in an extension of credit in connection with any sale or sophisticated weapons systems, such as missile systems and jet aircraft for military purposes, to any underdeveloped country other than Greece, Turkey, Iran, Israel, the Republic of China, the Philippines, and Korea unless the President determines that such financing is important to the national security of the United States and reports within thirty days each such determination to the Congress.

* * * * *

Chapter 4—GENERAL, ADMINISTRATIVE, AND MISCELLANEOUS PROVISIONS

* * * * *

SEC. 42. GENERAL PROVISIONS.—(a) * * *

* * * * *

(e)(1) Each contract for sale entered into under sections 21, 22, and 29 of this Act shall provide that such contract may be canceled in whole or in part, or its execution suspended, by the United States at any time under unusual or compelling circumstances if the national interest so requires.

(2)(A) Each export license issued under section 38 of this Act shall provide that such license may be revoked, suspended, or amended by the Secretary of State, without prior notice, whenever the Secretary deems such action to be advisable.

(B) Nothing in this paragraph may be construed as limiting the regulatory authority of the President under this Act.

(3) There are authorized to be appropriated from time to time such sums as may be necessary (A) to refund moneys received from purchasers under contracts of sale entered under sections 21, 22, and 29 of this Act that are canceled or suspended under this subsection to the extent such moneys have previously been disbursed to private contractors and United States Government agencies for work in progress, and (B) to pay such damages and costs that accrue from the corresponding cancellation or suspension of the existing procurement contracts or United States Government agency work orders involved.

* * * * *

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D.C., July 6, 1981.

Memorandum to: Senator Percy.

Through: Ed Sanders.

From: Fred Tipson.

Subject: Determination Under Section 3(c) of the Arms Export Control Act.

During the hearing on June 18 with State Department witnesses on the Israeli air strike in Iraq you asked me to submit a memorandum for the record. The issue is whether under Section 3(c) of the Arms Export Control Act the President must make a determination as to whether a "substantial violation" of any agreement entered into in connection with the furnishing of U.S. defense articles or defense services has in fact occurred. Such a determination would be subsequent to the report given to Congress under Section 3(c)(2) of the act that such a violation "may have occurred."

The Department of State, as I understand their interpretation, argues that the determination of eligibility is optional—that is, that the President may decide not to reach a conclusion on the issue at all. In informal conversation and memoranda exchanged between us, they have cited aspects of the legislative history supporting this interpretation.

I agree that in the development of this law an effort was made by key Senators—especially Hubert H. Humphrey and Jacob K. Javits of the Foreign Relations Committee—to keep the provision ambiguous on this point, so as not to force the President to make a public and formal determination in politically-difficult circumstances. The law as written does not explicitly require the President to make such a determination. However, in my opinion, the President cannot reasonably avoid making a judgment of his own in order to fulfill his responsibilities under the various sections of the Act and his Constitutional responsibility to "take care that the Laws be faithfully executed." Although the law also establishes a procedure for the Congress to initiate such a determination, the Executive branch clearly has the primary, and independent responsibility to see that such laws are respected.

Before explaining my view of the statute, I should indicate that I do think the best approach to the implementation of this statute is a joint understanding between Congress and the Executive branch on the circumstances and requirements of any given case. The function of a statute of this kind should not be to set Congress and the President on separate tracks which could lead to differing interpretations and conclusions about U.S. law and policy. I also think that the entire framework of statutory and bilateral restrictions on the use of U.S.-origin equipment needs to be reviewed and revised. Diplomatic flexibility is clearly essential, but the ambiguities and uncertainties in the law are not satisfactory either from our own point of view or that of our allies.

SECTION 3(C) OF THE ARMS EXPORT CONTROL ACT

The concern of those who drafted this provision in 1976 was to provide diplomatic flexibility in dealing with cases where violations of U.S. law or bilateral agreements had apparently occurred. They realized that immediate, mandatory and categorical conclusions on such matters were not always in the best interests of the United States, particularly where a close ally was involved and the cir-

circumstances were complex. The previous law on the subject required that countries who violated these restrictions would be "immediately ineligible for further cash sales, credits or guarantees." Therefore, they set out a procedure according to which different steps would be followed in responding to an apparent violation of the law.

The first step was a prompt report that some violation "may have occurred." As the Conference Report on this provision indicated, that report was to be a basis on which either the President or the Congress could proceed to the further conclusion that a violation had in fact occurred. However, it should also be noted that in reenacting the law over President Ford's veto, the Congress did change the procedure for its own determination from a concurrent resolution (requiring a majority vote) to a joint resolution (requiring Presidential concurrence or a two-thirds vote to override his opposition). This change indicates that Congress accepted the desirability of a joint determination with the President even when the initiative came from Capitol Hill. They saw no point, apparently, in imposing such a determination on a dissenting President without extraordinary support (that is, more than two-thirds) in the Congress. Nor did they want to force the President to have to make a formal, public determination in each case. As Senator Javits put it during the floor debate in arguing against such mandatory determinations, "You may lead a horse to water but you cannot make him drink. That is just as true of Presidents."

On the other hand, to say that the law does not explicitly require a public determination does not mean that the President can turn his back on the question. It is the President who has the duty under the Constitution to "take care that the laws be faithfully executed." Unlike the Congress he is not given the option under most circumstances to decide whether or not to enforce a statutory prohibition. No special statutory procedure is necessary to indicate how the President shall arrive at a judgment about the enforcement of a provision.

It is in this light, I think, that the statute itself must be read. Sections 3 and 4 of the Arms Export Control Act say clearly that U.S.-origin equipment may not be used except for internal security, legitimate self-defense, or participation in collective security measures. Section 3(c)(1) states the following prohibitions:

(c)(1)(A) No credits (including participations in credits) may be used and no guaranties may be extended for any foreign country under this Act as hereinafter provided, if such country uses defense articles or defense services furnished under this Act, or any predecessor Act, in substantial violation (either in terms of quantities or in terms of the gravity of the consequences regardless of the quantities involved) of any agreement entered into pursuant to any such Act (i) by using such articles or services for a purpose not authorized under section 4 or, if such agreement provides that such articles or services may only be used for purposes more limited than those authorized under section 4 for a purpose not authorized under such agreement; (ii) by transferring such articles or services to, or permitting any use of such articles or services by, anyone not an officer, employee, or agent of the recipient country without the consent of the President; or (iii) by failing to maintain the security of such articles or services.

(B) No cash sales or deliveries pursuant to previous sales may be made with respect to any foreign country under this Act as hereinafter provided, if such country uses defense articles or defense services furnished under this Act, or any predecessor Act, in substantial violation (either in terms of quantity or in terms of the gravity of the consequences regardless of the quantities involved) of any agreement entered into pursuant to any such Act by using such articles or services for a purpose not authorized under section 4 or, if such agreement provides that such articles or services may only be used for purposes more limited than those authorized under section 4, for a purpose not authorized under such agreement.

The Department of State argues that the key phrase in this section is "under this Act as hereinafter provided" implying that the prohibitions themselves apply only insofar as the President or the Congress may decide to activate them in accordance with the procedures subsequently set forth in the Act. Instead, I think the point of discretion is not whether a substantial violation had occurred but the subsequent judgment of whether the finding of ineligibility is appropriate. Again, I do not think the President is obligated to make a formal, public determination regarding violations, but I do not think he can avoid—sooner or later—the determinations themselves. The decision procedure set out in the act, in other words, does not completely qualify the President's obligation for enforcing the law (including a free-standing agreement between the United States and

a receiving country) in other respects. The sanction (ineligibility) is discretionary, the judgment about violations is not.

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D.C., July 9, 1981.

Memorandum to: Senators Percy and Pell.

From: David Lawther Johnson.

Through: Ed Sanders and Jerry Christianson.

Subject: Majority Counsel's analysis of responsibilities for determinations under Section 3(c) of the Arms Export Control Act.

I concur in Fred Tipson's analysis of the proper balance of executive-legislative duties in finding and formulating responses to violations of Section 3(c) of the Arms Export Control Act.

After a review of the relevant legislative history, I agree that the primary purpose of Section 3(c) is to confer a discretionary, joint responsibility upon the President and Congress to determine ineligibility for further assistance under the Act. Such a judgment is primarily, and appropriately, a policy conclusion.

At the same time, and apart from the policy consequences, I also believe that any duty for finding the underlying fact of a violation must reside with the President. This is true both because of the President's Constitutional mandate to insure that laws are faithfully executed, and also because the executive branch has unique and primary access to the information necessary for determining whether and when a violation has occurred.

SECTION 42(e)(1) OF THE ARMS EXPORT CONTROL ACT

Section 42(e)(1) of the Arms Export Control Act provides that each foreign military sales contract shall include a clause authorizing the President to cancel or suspend the execution of the contract in whole or in part "at any time under unusual or compelling circumstances if the national interest so requires."

Was this section of law invoked to suspend delivery of the four F-16 aircraft to Israel?

Mr. MICHEL. Mr. Chairman, that section of law simply codifies an existing practice that had preexisted it, whereby all of the standard form sales contracts contain a clause which allows the United States in unusual or compelling circumstances to terminate or suspend performance of these arms sales.

The statute does not authorize the exercise of that authority. It requires that we continue to retain that authority which we have always regarded as implicit in the authority to make the sales. We have always construed the Act's authority to make sales as implicit including the authority to include provisions in the sales contract to protect the U.S. interest.

There is another provision that was added to the Arms Export Control Act at the same time as section 42(e)(1), and that is an amendment to section 2(b) which says that under the direction of the President the Secretary of State shall maintain continuous supervision and general direction over these programs, including whether there shall be delivery. And the reference to delivery was added at the same time that the section 42(e)(1) was added to the statute.

So these amendments seem to confirm what had been an executive branch interpretation that preexisted their enactment, that it was reasonable to regard as part of the authority to make the sales the authority to include such reservation of rights for the United States in the sales contracts as seemed reasonable to protect our interests.

FACTORS AFFECTING DECISION TO RESUME DELIVERIES TO ISRAEL

The CHAIRMAN. Could you describe the factors that might affect an eventual decision to resume deliveries of the F-16 aircraft to Israel?

Mr. McFARLANE. First of all, I would characterize the pause in the delivery as a matter which was not preeminent but collateral to the review that is going on.

The review requires that we go over why this happened, talk to the Government of Israel about not just its motives but its means of dealing with us, or failing to deal with us, on this issue, and basically going over all of the elements of shattered trust and confidence, if you will, and then translating beyond that to seeing how we can restore this relationship and renew the confidence that we think must endure between close friends, getting beyond it to deal with the broader issues that we face, security and peace in the area.

Basically, when we believe that we have defined the problem, reached a common perception, and then decided that we have the basis for proceeding, be in a position to decide on the pace of normalizing all of our relationships. Right now, we have not reached those judgments, as I said. And Senator Glenn, I believe, asked about it. If I were to guess, a matter of surely not months, perhaps weeks, to do that.

The CHAIRMAN. Thank you.

ADMINISTRATION'S VIEWS ON PREEMPTIVE STRIKES AND SELF-DEFENSE

Now, what are the administration's views on preemptive strikes and self-defense? What was our position, for instance, following the 1967 Arab-Israeli war regarding Israel's preemptive strikes at that particular time?

Ambassador VELIOTES. Mr. Chairman, as you recall, as soon as passions had cooled sufficiently after the 1967 war, the United States took the lead in the United Nations to achieve a consensus on Security Council Resolution 242. The point is we moved almost immediately into a peace process. I am not aware whether at that time we had any official policy on the concept of preemptive strikes.

Mr. McFARLANE. Basically, there is not really a legalistic framework for dealing with what is a policy measure, in my judgment at least. I think what we believe is that you must deal with what motivates preemptive strikes and get to removing those motives and those causes, conditions of instability, manifest hostility by neighbors, and actions by them which seem to threaten. You have to go to those causes and relieve those to remove the motive for a preemptive strike.

I think, basically, being against preemptive strikes may not make the point as much as being in favor of peaceful resolution of disputes. But together with our support for that peaceful resolution, we must also attack the causes which lead to preemptive strikes.

The CHAIRMAN. I have just two questions left, so I would suggest we each finish our questions in this final round.

Senator PELL. I have no questions. That is fine.

The CHAIRMAN. Do you have a couple of more questions?

Senator MATHIAS. I have one question, and then I am requested by Senator Thurmond to come to the floor at this time. If you would

be kind enough to yield to me for just that one question, I would appreciate it.

The CHAIRMAN. Of course, I would yield.

PROFOUND POLITICAL TURMOIL

Senator MATHIAS. In an earlier colloquy, Mr. McFarlane said that this action had resulted in—and I wrote the words down—“profound political turmoil.” Now, sir, were you talking about the Mideast, Europe, or both? Would you explain to the committee what you mean by “profound political turmoil” and how that may affect the interests of the United States, which, after all, is our most immediate concern?

Mr. McFARLANE. I was referring, Senator Mathias, to the understandable reactions of all states in the Middle East and throughout the world to violence, generally speaking, but as well and more specifically to countries in the Middle East who have seen a violent action taken while we have been engaged in efforts to bring peace to the area that call into question whether that peace process is viable.

It raises questions about whether the United States can serve effectively to move this peace process, to play a positive role with all of the parties in the area. It raises profound questions to countries outside the Middle East in the context of proliferation. It raises questions about states who are members of IAEA, for example, who believe and want to believe in that regime and its effectiveness.

All of these things lend to uncertainties and doubts and concern, really, when this kind of thing can happen and the normal rules of diplomatic discourse seem to be broken.

Senator MATHIAS. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. I have only a few followup questions.

In looking over the world press for reactions, it is quite apparent that many of our friends in the Middle East feel that the Israeli raid upon the reactor provides the Soviet Union with an opportunity to exploit the situation to enhance its own image in the Arab world and to discredit the United States and our Arab friends.

SOVIETS APPEAR TO LINK UNITED STATES WITH ISRAELI ATTACK

The Soviets appear to be making every effort to link the United States with the Israeli attack. I have seen time after time statements to the effect that we did have prior knowledge and it must have been done with our concurrence. Those are absolutely without fact or any basis from everything I can determine.

How might the Soviets use this situation to their own advantage? And, in your judgment, do you think they will gain significant advantage by the exploitation of this incident that they have so far used?

Mr. McFARLANE. Well, I think they surely can try. The efforts are rather clumsy propaganda that distort the facts and suggest U.S. foreknowledge, which is absolutely untrue, which play upon perceptions in the Arab world and elsewhere of an unbending United States-Israeli relationship that must lead the United States to auto-

matically favor Israel's interests to the exclusion of the interests of others—again, untrue—however committed we are surely to the security of Israel. And these efforts will continue, I expect.

I believe that our best course and the most effective counter is to make clear to parties on both sides of this issue and more broadly that the United States is devoted to working toward peace in this area and to invest all of its political capital and will in doing that.

It is the kind of attitude that we have tried to represent in the United Nations in the last few days, and, frankly, I think there is some promise that it will lead to success there. In our dialog with states that are parties to this dispute and to others in the Middle East since it happened, I think we have had a measure of success in demonstrating our resolve not to let it prevent us from continuing with the peace process and to our broader security concerns in the area.

So I think, yes, they will continue. But I am optimistic that we can minimize the damage.

IRAQ-SOVIET RELATIONS

The CHAIRMAN. Iraq-Soviet relations have been strained in recent months. Do you feel this incident will drive them back closer together than they would otherwise have been?

Mr. McFARLANE. No.

The CHAIRMAN. On what basis do you come to that conclusion?

Mr. McFARLANE. I think Iraq has better judgment than that.

The CHAIRMAN. You what?

Mr. McFARLANE. I think Iraq has better judgment than that. Its own experience with the Soviet Union has not been an entirely happy one, for reasons which are endemic to the Soviet system and its relationship to client states or states with whom it becomes affiliated.

I think a simple comparison on their part of a relationship of the United States to friends and allies and what the United States brings to countries seeking to develop, which is not weapons alone—in fact seldom—but indeed technology, assistance in many forms, a political system in terms of demonstrating it here at home that holds greater promise for the human spirit and its fulfillment, and all in all a way of life and a relationship politically speaking which does not impose penalties and burdens and indeed is a healthy one, mutually beneficial.

PRESIDENT SADAT EMBARRASSED

The CHAIRMAN. My final question concerns President Sadat, who we know by many statements that have been made by some Senators here today and by our own talks with the distinguished Egyptian Ambassador was highly embarrassed by the air strike so soon after his meeting with Prime Minister Begin.

Do you believe his embarrassment will have a long-standing impact on Sadat's position in Egypt or in the Arab world?

Mr. McFARLANE. I do not believe it will. I surely hope that it does not. President Sadat is a giant as measured against statesmen of his century. His commitment to peace in the Middle East is as profound or more so than anyone on earth today. His vision and leadership, I think, are critical to being able to carry forward this peace process.

Because of the leadership qualities that he has demonstrated, I am confident that he will carry forward.

The CHAIRMAN. Thank you.

Senator CRANSTON.

Senator CRANSTON. I have no further questions.

The CHAIRMAN. I suggest we take a 5 minute recess and then meet in room 324. I think we can finish this final session in less than 30 minutes. We certainly will aim to do so.

[Whereupon, at 4:08 p.m., the committee recessed, to reconvene immediately in room 324 in executive session.]

THE ISRAELI AIR STRIKE

FRIDAY, JUNE 19, 1981

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D.C.

The committee met, pursuant to notice, at 9:30 a.m., in room 318, Russell Senate Office Building, Hon. Charles H. Percy (chairman of the committee) presiding.

Present: Senators Percy, Mathias, Boschwitz, Pressler, Pell, Glenn, Sarbanes, and Cranston.

OPENING STATEMENT

The CHAIRMAN. In recommending that this committee hold hearings on the June 8 Israeli raid on the Osirak nuclear reactor in Iraq, Senator Baker, the distinguished majority leader and a member of this committee, placed particular emphasis on the coordinate and in many ways parallel roles assigned Congress and the executive branch with respect to determining possible violations of the terms of sale of American weaponry.

Under the Arms Export Control Act, either the President or the Congress may act to determine a state ineligible for military sales and assistance under the act, or either branch may decide not to make a final determination on such matters, preferring instead to employ other political and diplomatic options. In exercising the respective legislative responsibilities, Congress and the President obviously must work in close partnership.

In many respects this committee is dependent upon the administration for facts and assessments with respect to this specific incident. At the same time, though, it is important that each member of this committee to the fullest extent possible reach an independent conclusion with respect to judging the implications of the Israel action.

For this reason the committee decided to call a number of outside experts not holding office with the Government to appear before this body. This morning we will hear from the first group of nongovernmental experts. We have five witnesses, all well qualified in nuclear technology and the international nonproliferation regime. They have been organized into two panels.

The first panel will address the specific question of the Iraqi nuclear weapon potential. The second will examine some of the broader implications of this incident for nonproliferation efforts globally. Appearing in order on the first panel will be Dr. Robert Selden of the Los Alamos Laboratory in New Mexico, Dr. Herbert

Kouts of the Brookhaven National Laboratory in New York, and Mr. Roger Richter, until Tuesday an inspector of the IAEA, south and southeast section.

I would suggest that each member of the panel submit his opening remarks in order and that the members hold their questions until all three witnesses have spoken, unless a question is needed to clarify a specific point being made by witnesses.

Dr. Selden, I understand that you are going to explain to us in layman's language how one goes about making a bomb. Would you please begin.

[Dr. Selden's biographical sketch follows:]

BIOGRAPHICAL SKETCH OF DR. ROBERT W. SELDEN

Robert Selden received his BA degree from Pomona College, Claremont, California in 1958, and his Ph. D. degree in physics from the University of Wisconsin at Madison in 1964.

Dr. Selden was associated with the Lawrence Livermore National Laboratory from 1965 to 1979, when he was the Assistant Associate Director for Nuclear Explosives. He has served as a senior staff member and group leader in nuclear explosive design physics, and was involved in a wide range of projects relating to weapons physics and code development, warhead development, and national policy issues. His first assignment at the Laboratory was the Nth Country Experiment, as one of two physicists who designed a nuclear explosive without access to classified information. This experience led to many contributions toward the understanding of nuclear terrorism and proliferation issues.

He served as a member of the Task Force on Nuclear Weapons for the Congressional Office of Technology Assessment's 1977 study on Nuclear Proliferation and Safeguards. He was a principal contributor to the Department of Energy's study for the Nuclear Regulatory Commission entitled Reactor Materials and Nuclear Explosives. He was the Scientific Advisor on the U.S. Department of Energy team for bilateral technical discussions on nonproliferation.

Since December 1979 he has been Division Leader of the Applied Theoretical Physics Division at the Los Alamos National Laboratory. This Division plays a leadership role in several major Laboratory Programs; nuclear weapons, inertial fusion, particle beams, and supporting research.

In the Los Alamos nuclear weapons program, the Division is responsible for the physics design of nuclear weapons, nuclear weapon experiments, and the development of computer codes for these endeavors. Inertial Fusion Program responsibilities include target design, plasma physics, and code development. A variety of theoretical applications in Particle Beam projects are conducted as well as a number of supporting research activities including astrophysics, solar physics, hydrodynamics and particle physics.

Selden was born in 1936 in Phoenix, Arizona. Father Edward E. Selden was an attorney in Phoenix from 1925 to 1980. He lives with wife Marjorie and son Ian in Los Alamos, New Mexico.

STATEMENT OF DR. ROBERT W. SELDEN, DIVISION LEADER, APPLIED THEORETICAL PHYSICS DIVISION, LOS ALAMOS NATIONAL LABORATORY, LOS ALAMOS, N. MEX.

Dr. SELDEN. Thank you, Mr. Chairman.

Mr. Chairman, members of the committee, ladies and gentlemen, I am honored to be here and hope that I can contribute some information that will be useful to understanding this complex issue. I believe it is most useful to address the specific situation before us in the context of a general discussion about the requirements of a small program for the design and construction of nuclear explosives.

First of all, it is useful to make a general remark or two. Nuclear explosives really can be designed and constructed starting with any

fissile material. The United States, of course, starts with uranium ore and processes it into a form that is suitable for making weapons.

It is not correct to characterize the design and construction of a nuclear explosive device as easy, as has been done popularly for many years now. A more correct statement is that it is scientifically and technically possible and it is straightforward if you understand the problem correctly. In other words, competence is the key to success in any technical program of this nature.

Competence here would be defined as the ability to arrive independently at technical judgments and then correctly execute them. In this context, the design and construction of nuclear weapons is similar to many modern complex technologies.

Let me define what we might talk about in terms of a small national program where the goal would be to build a small stockpile of militarily useful weapons. Such a program could be done clandestinely and also could be done without nuclear testing.

The kind of weapon technology with which you could end up would be conceptually similar to early U.S. nuclear weapons, probably different in some detail and probably smaller in size and weight. It is possible to envision weapons with yields of up to a few tens of kilotons coming from such a program. It is possible to use reactor-grade plutonium.

The specific weapon technology that is involved, whether the gun-type weapon or an implosion-type weapon, really does not affect the overall resources required by the program. The technology does affect the detail of what kinds of technical skills are involved and some of the specific details of the program.

Let me address a few of the requirements. In terms of people, such a program would have to have at least several teams of competent technical people with a wide range of expertise: detonation phenomenology, knowledge of high explosives, perhaps ballistics, hydrodynamics, nuclear physics, explosion calculation, computers, chemistry, metallurgy, fabrication, test programs, and so forth. The list is long.

In addition, modest laboratory facilities for physics, chemistry, computations, engineering, and some field testing are necessary. Fabrication facilities are clearly necessary for conventional fabrication and for handling radioactive and other hazardous materials.

Finally, and perhaps of key importance here the fissile material to make weapons for the program that I described earlier—a small stockpile of militarily useful weapons—is necessary. The requirements are the equivalent of several tens of kilograms of plutonium or a few hundred kilograms of highly enriched uranium, depending upon the size of the program.

In obtaining this fissile material, there are important considerations that are pertinent here this morning. This material may require substantial investment of people and facilities well beyond those that I just mentioned, because it may involve the need for chemical reprocessing of the material involved. It may even be necessary to build a reactor or an isotope separation facility.

In the particular case of Iraq at the reactor in question, the fuel is highly enriched uranium. The highly enriched uranium metal that is present is a material that can be directly used for making nuclear weapons. The reactor also can produce plutonium from natural uranium which is put into the reactor. That plutonium has

to be reprocessed chemically, but then can be used to make nuclear weapons.

Let me close by addressing in general terms some factors which affect the overall resources and time necessary. Obviously, it depends on how badly you want the weapons. The commitment and urgency of the program has a very strong effect on how fast it happens. Also, the available technical manpower and the competence of the people and the management have a large effect on the time scale.

The fissile material availability probably is the most limiting factor overall. In general, in a program which has to start with uranium ore and build a reactor and the processing facilities that are necessary to obtain fissile material, the time scale is very much longer than in a program which starts with material that is readily put into weapons.

The dilemma of assessing the time scale associated with the diversion or seizure of material is the problem of when to start the clock on such an operation. A great many of the activities that are required for the design and fabrication of a weapon can be done in advance of actually obtaining the fissile material. Thus, the warning time that one might have for identifying a nuclear weapons program may be relatively short if the design and non-nuclear fabrication has been done in a clandestine fashion.

Overall, we have looked at the issues involved in assessing the resources and time needed to design and construct a small nuclear weapons capability, and recognize that it depends strongly on the state of the fissile material that is available and the facilities that are already available in a given country. The minimum financial resources might be in the range of several tens to a few hundreds of millions of dollars. The minimum times, the real time from the time the decision was made, could range from a few years to very many years to build the entire capability with nothing at hand.

These observations clearly show that the technology is not the limiting factor in the decision to build nuclear weapons. The technology is not outrageously expensive in comparison to any other kinds of major technological systems that are commonly used in our society today. The decision to build nuclear weapons will be governed by politics, economics, perceived defense needs and other factors, rather than by technology.

Thank you very much.

The CHAIRMAN. Thank you very much indeed, Dr. Selden.

Our next witness is Dr. Herbert Kouts, chairman of the department of nuclear energy at Brookhaven National Laboratory. We are pleased to have your testimony.

STATEMENT OF DR. HERBERT KOUTS, CHAIRMAN, DEPARTMENT OF NUCLEAR ENERGY, BROOKHAVEN NATIONAL LABORATORY, UPTON, N.Y.

Mr. KOUTS. Thank you, Mr. Chairman.

I would like to begin, if it is all right with you, by reading a short prepared statement that I have. This is not particularly to shed light on the questions to be addressed by this panel, but to provide a background within which this could be done. It is, in fact, something which

I think should be said quite early in order to lend some balance to the discussion that we are having.

The Nuclear Non-Proliferation Treaty and the system of safeguards applied by the International Atomic Energy Agency are absolutely unique. This is the only international agreement in history in which a large fraction of the nations of the world have agreed to give up much of their sovereignty to an international body in the interest of peace on earth.

The Nuclear Non-Proliferation Treaty is a voluntary undertaking by countries that have nuclear weapons not to disseminate these weapons to other countries that do not have this capability. It is an undertaking by countries that do not have such weapons that they will not develop them.

It is also an undertaking by this last group of countries that they will submit to inspection by an international body—the IAEA—to permit verifying their compliance with the treaty. This is brand new in history. There are many treaties in history where nations give commitments, but do not go beyond giving the promise.

It is worth discussing some of the details of the system used by the IAEA in implementing its responsibilities under the treaty. The structure of this system is given in a document called Infirc-153. It has the title, "The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons." I do not want to abstract this document, for that would be hard to do. But I can give some of the highlights.

IAEA safeguards are applied to all nuclear materials that could be used as or could be processed to become the essential explosive content of a nuclear explosive device. The document says that the safeguards are applied to all such material "in all peaceful nuclear activities," but as a practical matter, this means all material.

Safeguards are applied on the nuclear material, not on the facilities containing them. In practice, the application involves the facilities intimately because it is not unusually possible to separate one from the other.

The safeguards depend on accounting—accounting that the country itself sets up—and the IAEA has the responsibility of verifying the accounts. The country has to notify the IAEA when it receives any nuclear material, when it transfers nuclear material out of its jurisdiction, and when it uses material in certain ways that alter it.

The IAEA uses a system of verification that in many ways resembles auditing. It checks internal consistency of the information that it receives and the records that the country keeps. It conducts inspections that include verification of the inventory of the nuclear material as a function of where it is located. It even conducts independent measurements in some cases to verify what it has been told.

There also are additional rights held by IAEA and there are some restrictions on them. Among the rights are the ability to conduct some inspections without prior announcement. These are surprise inspections. The IAEA also inspects facilities at the start, to verify some details of their design, because these are important to the verifying of the accounts, too.

The restrictions are primarily limits on places the inspectors can go and limits on the rate at which inspections can take place.

The system and its effectiveness are of vital importance and they are primarily what we are talking about today. But I believe their importance has to be seen in the greater context of the functioning of the Non-Proliferation Treaty and the IAEA's general involvement.

It is very important to note, first of all, that the actual signing and ratification of the treaty are important steps in its effectiveness. Not all countries have signed up, by any means. Among the countries that have not signed up are most, by far, of the countries about which there has been concern regarding intentions as to nuclear weapons. The very act of not signing the treaty rings an alarm bell.

When a nation finally takes the step, signs and ratifies, there is a widely-felt state of relief. This does not prove that the objective has been accomplished, but violating the undertaking of a treaty is not a step casually taken, and that is particularly true of an undertaking not to produce nuclear weapons. Nuclear weapons are not popular in this world and seeing their manufacture in new places would not be popular, either.

Second and even more important, the information that becomes generally known just because safeguards are applied is of inestimable value. It is precisely this information which has been the subject of great discussion in the Iraqi case. It becomes known where the facilities are in a country and what they look like, where the material is to be found, in which form it is to be found, what uses are to be made of it, and so on.

This is all information which is required by the agency system. This is information which, if it had to be assembled through intelligence channels, would usually be fragmentary, self-contradictory, and perhaps misleading. Under the IAEA system, the information can even be verified by on-the-spot checking on a spot basis.

After all, the conclusions of IAEA inspections are only one part of the information base in nonproliferation. We have our own intelligence system and those of other countries too.

The significance of this system stands out more if we visualize what things would be like if we could use it elsewhere. A system of full revelation and inspection on the spot even at intervals would transform the SALT treaties, for instance.

Finally, there is also the chance that if the treaty were violated, the agency's systems would show this. This is a chance that politicians do not like to take. A covert violation is surely less likely under these circumstances than overt denunciation of the treaty or refusal to sign it in the first place. These acts would really ring the alarm bell. Measures that would lead a violator to take the overt path would be as fully effective as anything could possibly be.

The IAEA's system of safeguards cannot give 100-percent assurance in any case that any country to which that system is applied will not develop nuclear weapons capability. But that is not of absolute importance. The system is tailored very well to give advance information of suspicious actions and to permit the forces of political action to come into play.

This has been the objective of the whole enterprise from the first. No other objective is feasible or possible in a world where the basic facts of nuclear weaponry generally are known, where nature has widely endowed the world with mineral potential, and where nations remain sovereign.

The benefits of that degree of encroachment on sovereignty that has occurred with the Non-Proliferation Treaty and the IAEA system are of great value. I am sure that under the circumstances we cannot do appreciably better.

Now, that last remark, Mr. Chairman, really refers to the IAEA system in general and to the sovereignty which has been given up. How about the agency system itself? Of course, the agency's technical basis is not absolutely perfect; it can be improved. Measures which can be taken to improve the technical capability of the IAEA certainly will reinforce its political effectiveness. That is the context in which I am speaking.

Would it be possible for a country to circumvent agency methods to determine whether or not clandestine production of nuclear weapons would be taking place along the line that we have just heard? The answer is yes, it certainly is possible. It is always possible to develop scenarios in which a country can be successful in clandestinely developing its nuclear weapons capability.

Under the particular circumstances, probably the agency's technical methods would themselves not be effective. After all, they are based on material balance accounting. Those things that we know about the possibility of Iraqi development, whether or not they are significant, would not be investigated through material balance accounting. We know of these through other aspects of information gathered under the agency system, that is, what was taking place in Iraq at the time. That would be true in the future as well.

If there were clandestine development toward weaponry, this would probably require irradiation of uranium, of natural uranium or, if one could obtain it, depleted uranium, in a shield around the core of the reactor. This itself is a very difficult thing to do for engineering reasons and would require certain things that the agency inspectors certainly would observe, not as part of the material balance accounting but as part of the total information gathered on the site.

In order to irradiate this material, you have to heat it very much. This generates a lot of heat. The reactor core itself generates something between 40,000 kilowatts of heat and 70,000 kilowatts of heat. That is a pretty hot heat source and it requires a very large heat removal system.

The material you are irradiating on the outside probably will generate as much as 10 percent of that heat. That heat has to be taken away and that requires an engineering system whose presence would be observed or would very likely be observed. It would be very difficult to hide it.

Following that, you would have to take the material which is irradiated and move it to a place to process it. This requires heavy shielded containers, which also can be seen unless steps are taken to hide them.

Finally, in the processing itself, you generate a fission product burden in the environment whose presence can be detected by any number of methods, which also are not part of the agency system but presumably can accompany it. How long would a process of this kind take? Well, as Bob has just said, the whole process might take anywhere from a few years to a number of years.

To make the material in the first place in the Iraqi circumstances, it would take about 1 year to produce the material for a fissionable

device, and about another year perhaps to put it into a form that would be useful, supposing you already have taken the steps to know how to do it, and an unknown period thereafter in order to turn this into weaponry.

The CHAIRMAN. Dr. Kouts, we thank you very much, indeed.

At this point, I will ask Senator Boschwitz to chair the hearing for a quarter of an hour or a half an hour. Senator Mathias has to chair a hearing at the Judiciary Committee and I must leave to testify on an Illinois highway program for about 15 to 20 minutes. I am sorry I have to leave, but I will return.

As our final witness on this panel, we will hear from Mr. Roger Richter, a former inspector for the Middle East Region of the International Atomic Energy Agency, whom the committee has called at the suggestion of Senator Cranston. Mr. Richter, we are happy to have you with us. Please proceed.

STATEMENT OF ROGER RICHTER, FORMER INSPECTOR, MIDDLE EAST REGION, INTERNATIONAL ATOMIC ENERGY AGENCY

Mr. RICHTER. Thank you, Mr. Chairman.

It is both an honor and a privilege for me to appear before the committee. It is my intention to present my views regarding the adequacy of the International Atomic Energy Agency safeguards system and how this system relates to the controversy surrounding the Iraqi nuclear program.

As the only American inspector in the section responsible for the safeguarding of nuclear facilities in Iraq, Israel, Pakistan, and India, among other countries, I believe I have had a unique opportunity to gain an insight into the quality and effectiveness of the IAEA safeguards in a region of the world that is very much the focus of our Government's efforts to contain proliferation.

The present heightened interest and concern on the part of the American people and the world community toward the effectiveness of the IAEA nuclear safeguards and nonproliferation efforts offers perhaps the best opportunity ever to identify deficiencies which exist in the system and to work toward resolving these deficiencies.

A principal objective of my testimony, Mr. Chairman, is to identify IAEA deficiencies and to strengthen what I believe to be the crucial mission of this most important international agency. The other principal objective is to explain why I believe that the Iraqi nuclear program was organized for the purpose of developing the capability to produce nuclear weapons over the next several years.

By way of discussing these two subjects and their relations to one another, I thought it best could be accomplished by explaining them from the perspective of an IAEA safeguards inspector who is charged with the responsibility of safeguarding the Iraqi Osirak reactor.

But first, by way of introduction, I would like to briefly describe to you my background in nuclear engineering and my nuclear engineering work-related experience. I hold a bachelor of science in metallurgical engineering and a master of science in nuclear engineering from the Polytechnic Institute of New York and the University of Maryland. The latter degree was obtained under the auspices of the U.S. Atomic Energy Commission select intern program.

I have been employed by the U.S. Atomic Energy Commission, the Energy Research and Development Administration and, finally, the Department of Energy, from June 1968 until February 1978. During this time, I was involved in nearly all aspects of the technology associated with nuclear fuel engineering, reactor irradiations, and nuclear waste disposal.

When I joined the International Atomic Energy Agency in 1978, I initially served as an inspector in the Euratom section. I was a principal inspector at the nuclear fuel reprocessing facility in West Germany and at the fuel fabrication facilities in both West Germany and Italy. I subsequently replaced the lone American inspector in the South and Southeast sections when he returned to the United States.

I have been an active inspector in the South and Southeast section for the past 2 years until my resignation on June 16, 1981. In this capacity, I have inspected small research reactors in Australia, Greece, Indonesia, Israel, the Philippines, Turkey, and Yugoslavia. I have had considerable inspection experience with the heavy water power reactors, the Rapps 1 and 2 in Kota, India, and the General Electric-supplied light water reactors in Tarapur, India, and at the nuclear fuel fabrication complex in Hyderabad, India.

I was recently involved in the final negotiations on behalf of the IAEA with the Government of India on the safeguard approach to the Prefre nuclear fuel reprocessing facility located at the Tarapur site. I was to have been a key inspector in the implementation of the forthcoming inspections at the Prefre reprocessing plant later this year. I had, in fact, been offered and I recently had accepted, a 5-year extension of my present contract with the IAEA.

Now, returning to the text of my testimony, I would like to ask the members of the committee to imagine for the moment that each of you is a nuclear safeguards inspector who will shortly be going to Iraq to conduct an inspection. To begin with, you have to imagine yourself as being a national of the Soviet Union or another eastern bloc country, or possibly also a Frenchman. Since 1976, all inspections performed in Iraq have been conducted by Soviet and Hungarian nationals. Recently, a French national was granted approval by Iraq to be an inspector, but he has not, as of yet, been to Iraq to make an inspection.

This is a reflection of the fact that countries have the right to veto inspectors from whatever countries they choose, a right which they regularly exercise.

As an accepted inspector, you must keep in mind that any adverse conclusions you might reach as a result of your inspection would have to take into account your country's sensitivity to how this information might affect relations with Iraq.

In preparing for the inspection, you must first give the Government of Iraq several weeks notice of your planned inspection and obtain a visa. They may agree with the date or could, as has recently been the case, suggest you postpone or change your plans to a more suitable date. Naturally, not wanting to create unnecessary friction, you will agree.

You are now ready to go about the business of preparing yourself for the inspection. First, you should become familiar with the design

information Iraq has provided to the IAEA. You note that this design information is limited to describing the reactor, its operating characteristics—such as power and flux—a description of the type and number of fuel elements, and of the irradiation ports. The hot cells provided by Italy for examination and processing of irradiated nuclear specimens for possible plutonium separation are not included in the information by Iraq, nor is the radiochemistry laboratory, the pilot reprocessing facility, or the fuel fabrication line included in the design information available to the IAEA.

These facilities are not under safeguards, and so long as Iraq maintains that it is not processing plutonium or fabricating uranium fuel in these facilities, they will remain outside of safeguards. This may be disturbing to you as an IAEA inspector. Nevertheless, you are aware that as a signatory of the Non-Proliferation Treaty, only facilities which Iraq has declared to the International Atomic Energy Agency as containing either thorium, natural, enriched or depleted uranium in metal or oxide form, or plutonium are subject to your examination.

However, natural uranium in the form of U_3O_8 , commonly known as yellowcake, is not subject to safeguards, despite its potential for easy conversion to target specimens for plutonium production.

You are not entitled even to look at the other facilities if Iraq has not adhered to its obligation under the Non-Proliferation Treaty to report to the IAEA that materials subject to safeguards is located in these facilities. You are aware that the role of the inspector is limited to verifying only materials declared by Iraq or France.

You have no authority to look for undeclared materials, except if it is in the reactor which is under safeguards. Your job is to verify that the declared material accountancy balance is correct. The IAEA does not look for clandestine operations. The IAEA, in effect, conducts an accounting operation.

The amount and level of enrichment of the reactor fuel elements is indicated on your computer printout. But you notice that 100 tons of uranium in the form of the U_3O_8 yellowcake is not on the list. This is not an oversight, but it is a reflection of the fact that, even though Portugal reported the shipment to the IAEA, it is only a formality. The 200,000 pounds of U_3O_8 is not subject to safeguards.

Had this uranium been in a slightly reduced form, such as UO_2 , it would have been under safeguards. But this loophole could enable Iraq to do as it pleases with the U_3O_8 . And so long as it does not report that the U_3O_8 has been converted into a material that is in the safeguarded category, you have no right to inquire of its whereabouts. You are disturbed by this because you realize that in the other Italian-supplied fuel processing equipment, which also are not under safeguards, Iraq possesses the capability to convert, in a rather simple fashion, the U_3O_8 to UO_2 , or even better, to uranium metal.

This, then, could be made into uranium targets which, when bombarded by neutrons in the reactor core or blanket, would be partially converted to plutonium. The targets could then be disassembled and reprocessed in the unsafeguarded hot cells and pilot reprocessing facility and the plutonium recovered.

Since the U_3O_8 is not under safeguards, the material accountancy balance will not show that material has been withdrawn. The plutonium could therefore be accumulated without IAEA awareness.

So long as Iraq does not live up to its obligation to admit to irradiating UO_2 or uranium metal in the reactor, you, as an inspector, have no recourse but to limit your inspections to the declared inventory.

As an inspector, you have become aware that as much as 17 to 24 kilograms of plutonium could be produced each year with the Osirak reactor. Even if only one-third of this amount was produced in the first few years of operation of the reactor, through the use of the attendant processing facilities, Iraq could acquire a stockpile of plutonium sufficient to make several atomic bombs. This is because, in spite of having signed the Non-Proliferation Treaty, the most sensitive facilities in the nuclear reactor complex could remain outside of the purview of the IAEA as long as Iraq did not declare that they contained either plutonium or uranium metal or oxide.

During these years when the plutonium stockpile is growing, Iraq could master the techniques of fabricating the plutonium configuration required for a nuclear weapon.

Equally disturbing to you as an inspector is the realization that under the present negotiated agreement between the IAEA and Iraq, you will be limited to only three inspections per year, usually spaced at approximately 4-month intervals. Since the entire reactor can be emptied of the clandestine uranium target specimens within days, you, as an inspector, face the fact that by the time you arrive to verify the declared inventory of fuel elements which power the reactor, all evidence of illicit irradiations could be covered up.

Furthermore, under the present safeguard approach for material test reactors such as the Osirak, no use of TV or photographic surveillance is made. Such surveillance could possibly provide an indication of accelerated withdrawal of specimens from the reactor prior to inspection.

While it is recognized that such surveillance alone would not prevent clandestine plutonium production in the reactor, it could serve to reduce the ease by which the present laissez faire approach to safeguarding large-scale material test reactors allows for optimized production of plutonium 239 which has a low plutonium 240 content. Such low plutonium 240 fuel is ideal for nuclear bomb construction, particularly for a country whose bomb-making capabilities are in an early stage of development.

In contrast to material test reactors, in light water nuclear power reactors, it is comparatively very difficult to divert any of the plutonium generated during operation, and the high fuel exposure times lead to a buildup of the undesirable plutonium 240 isotope. This significantly increases the level of sophistication necessary to produce a useful bomb from light water power reactors and also greatly increases the difficulty of reprocessing the fuel for subsequent plutonium recovery.

Moreover, unlike the light water nuclear power reactors where the IAEA TV and photographic surveillance have proven to be successful, material test reactors do not readily lend themselves to unambiguous interpretation of surveillance results. This is because in research reactors the planned mode of operation is for frequent insertion and removal of the experiments and radioisotopes. Consequently, the cameras would only reveal the frequency and time when experiments were inserted and removed from the reactor.

In between inspections the amount of material removed and the nature of the material, that is are they isotopes for hospital use or plutonium, could not be ascertained. However, given the low level of materials research activity in Iraq, such surveillance could provide an indication of whether the amount of material withdrawn from the reactor is far in excess of any conceivable experimental research program.

Faced with these obstacles and constraints, you may now be wondering exactly what does an inspector actually do in the course of performing a safeguards inspection of the Osirak nuclear complex. So much of the potential safeguarding activities are beyond the scope of your inspection and the most sensitive facilities in fact are not even subject to safeguards.

Your inspection assignment is actually quite narrowly focused. First, you will sit down with the operator of the nuclear reactor and review your computer listing of the nuclear material which has been declared to the IAEA. This inventory should correspond to the declared inventory appearing in the facility's listing.

France, as supplier of the enriched uranium fuel, will have notified the IAEA of the type and the amount of fuel delivered to the reactor. You will determine that the amount recorded by the operator is consistent with the amount reported to the IAEA by France.

If there is new, unirradiated fuel in the inventory, you will measure the fuel with a stabilized assay meter to determine that the elements indeed contain enriched uranium and have not been replaced by dummy replica fuel. This is particularly important in the case of the Osirak fuel, since it would be a relatively easy matter to melt down the weapons grade highly enriched uranium fuel plates for use in a nuclear bomb.

If the fuel elements are already in the reactor and have been irradiated, the inspection procedure normally requires that you visually identify the fuel elements. They can normally be observed under the approximately 20 feet of water. To confirm that these elements are not dummies, you have the right to ask the operator to turn on the reactor. When the reactor is operating, you should then see a characteristic blue glow known as "Cerenkov radiation" emanating from the core. This is indicative of operating radioactive fuel elements.

Having done these checks, you have basically performed the most important elements of a nuclear safeguards inspection of a research reactor. Thus far, this has been the easiest part of the inspection. The most difficult part lies ahead.

You will now return to Vienna and report that your inspection disclosed no discrepancies between the operator's records and that of the Agency. You will report that you verified the unirradiated fuel with your stabilized assay meter and that you verified the irradiated fuel in the core by counting the elements and by virtue of seeing the reactor in operation.

The difficult part of the job is that you must prepare yourself mentally to ignore the many signs that may indicate the presence of clandestine activities going on in the facilities adjacent to the reactor, facilities which you were not permitted to inspect unless the host country has informed the IAEA that fuel elements from the reactor were transferred there. You will now complete a standard report. Filling

in the blanks, you will try to forget that you have just been party to a very misleading process.

It is partially the result of such feeling that I was prompted a year ago to write a report of my concerns about Osirak to the Department of State U.S. Mission to the IAEA. With your permission, Mr. Chairman, I would like to read a portion from that document.

Senator GLENN. Mr. Chairman, if I might interrupt for a moment. Is this unclassified? Is there any classification on the document you would read?

Mr. RICHTER. The document I have provided to the Mission?

Senator GLENN. No. You said you would like to read a portion of a document. Is the document classified?

Mr. RICHTER. No. It is a document I wrote. It is just a personal document. But I would not like to submit the entire document to the committee, and I can explain why.

Senator GLENN. Can you tell me whether the document has been classified by our State Department?

Mr. RICHTER. I have no way of knowing if your State Department classified the personal document that I wrote.

Senator GLENN. Can the staff comment on this, as to whether they understand that the document has been classified by our State Department?

[Pause.]

Senator BOSCHWITZ [presiding]. Senator, it appears that most of the press has a copy of this statement.

Senator GLENN. I am sorry, I did not hear you, Senator.

Senator BOSCHWITZ. I see the press turning pages of this statement along with us.

Mr. RICHTER. Oh, no, sir. It is not this document, it is another document.

Senator GLENN. Well, I do not know if the press has the same document the witness has. Have you already distributed the document to the press?

Mr. RICHTER. No.

Senator GLENN. Has anyone on the staff distributed it?

Senator BOSCHWITZ. I presume he is going to read his testimony.

Senator GLENN. Mr. Chairman, he asked permission to read from a different document than he is giving here, I believe. Is that correct?

Mr. RICHTER. Yes.

Senator GLENN. I am just asking if anyone has ever classified this document. Do you know if it is unclassified or does the staff know that it is an unclassified or a classified document?

Senator BOSCHWITZ. You do not intend to read from your statement, then?

Senator GLENN. There was some question about this raised to me and I am just following it up to see if it is an unclassified document.

[Pause.]

Senator CRANSTON. I would like to state that this particular quote that Mr. Richter is about to read has been distributed to the press. He does not wish to release the entire document that this quote comes from. What he has is a personal document, which he understands and I understand has not been classified.

Senator GLENN. Is the entire document classified?

Senator CRANSTON. No.

Mr. RICHTER. To my knowledge, it is not.

Senator GLENN. We are told that there is a member here from the State Department. He has just informed us that the document is secret, is that correct?

Mr. RICHTER. The document that I wrote?

Senator GLENN. That is what we are told.

Mr. RICHTER. Well, if so, nobody informed me.

Senator GLENN. Would the member of the State Department who is here, who is bringing this information to us at this late date, care to comment?

[Pause.]

Mr. Chairman, I have been told this, and I have not gone into it myself. The first I heard about it was this morning. But I understand that this is secret, although portions of it were released yesterday. I do not know if Senator Cranston wishes to comment further on this or not.

Senator CRANSTON. I would first comment that, since these two paragraphs are in the prepared testimony, have already been released to the press, I see no reason for them not now to be verbally read by the witness.

I also feel that a sudden classification of documents that were not American documents, that contain no U.S. secret information, should not be tolerated by this committee. Our objective is to learn about the validity or nonvalidity, effectiveness or noneffectiveness, of the International Atomic Energy Agency's inspection system. This witness is giving us testimony that indicates reason to have grave doubt about the ability of this Nation or any nation to rely on this inspection system for security purposes.

We have constantly seen in the past, efforts to cover up inadequacies in Government by labeling material secret or confidential. At this stage, I think we have an important responsibility to learn not only for ourselves but for the country and for the world how effective our policies are in regard to nuclear nonproliferation.

I also would point out that as far as "confidential" is concerned, that is not classified and that is not secret. The International Agency that we are concerned with apparently identifies practically all documents as confidential, no matter how inconsequential the material that they cover.

Senator GLENN. Mr. Chairman.

The CHAIRMAN [presiding]. Senator Glenn.

Senator GLENN. Mr. Chairman, rightly or wrongly, I have been the one who has brought up on this committee repeatedly, ever since I have been on this committee, the fact that we have had too many leaks on the committee, that there were too many documents that have gotten out. And I think we have done a very good job on this in the last couple of years in keeping this within bounds.

I must say I am somewhat appalled by Senator Cranston's statement, which would indicate that if we selectively decide just on our own to make public statements of classified documents, including confidential, that we somehow have a right to do that just without going back through State or normal declassification processes.

I am not here to define whether this is or is not. But I am saying when a question has been raised about whether a matter is classified, we cannot just decide in open session to say that we will go ahead and

let testimony be given of what previously was either secret information or confidential. Both are classifications.

I will not take that responsibility. If Senator Cranston wishes to take that responsibility, it is his right to do so, to release that information. But I certainly will not do so without going back to the originator of that information, including confidential.

We had quite a brouhaha on this committee one time a couple of years ago, when a Senator released confidential information and treated it nonconfidentially.

We had a situation where people in testimony decided that they themselves would declassify confidential information. I disagreed with that at that time and I disagree with it now as strongly as I know how.

I do not know the nature of this material, but the question has been raised and I think the committee should be very careful before we go ahead and give permission on what may be or may not be classified information. I just wish a positive determination could be made of whether it is or is not classified.

Senator CRANSTON. May I make one statement? The particular material that we are presently concerned with is a statement of judgment by Roger Richter. There is no factual information in the paragraph that he proposes to release and has released. In fact, it has been made public heretofore.

We presently have a disagreement behind our backs here by two State Department people as to whether the material is confidential or classified or anything else like that. And Mr. Richter has never been informed, prior to this moment, that this material is classified.

Senator GLENN. Mr. Chairman, I would only repeat and ask one question: Is the material classified by anybody in our Government or is it not? If it is classified, has it been in turn declassified so that he can give it in public testimony? If not, we should clear the room and receive this in executive session.

The CHAIRMAN. Mr. Richter, I will read to you and to members of the committee the statute of the International Atomic Energy Agency.

In the performance of their duties, the Director General and the staff shall not seek or receive instructions from any source external from the Agency. They shall refrain from any action which might reflect on their position as officials of the Agency subject to their responsibilities to the Agency. They shall not disclose any industrial secret or other confidential information coming to their knowledge by reason of their official duties for the Agency. Each member undertakes to respect the international character and responsibility of the Director General and the staff and shall not seek to influence them in the discharge of their duties.

I think, in view of the notification that this committee has received, that this material is either confidential or is secret despite the fact that it has been disseminated. I think that must then be the responsibility of you, Mr. Richter, and the responsibility of an individual member of this committee.

But being on notice now by the Department of State that this material is classified, I will request you not read this material at this particular time.

Mr. RICHTER. OK.

The CHAIRMAN. This committee cannot become a party to knowing ahead of time that you will be reading such material. We cannot

become a party to it even though it seems redundant in that the material already has been released. I would request that you respect the decision of the Chair in that regard. And it will stand unless I am overruled.

Senator BOSCHWITZ. Mr. Chairman.

Senator GLENN. Mr. Chairman, may I add one thing. There is a difference on confidentiality of an internal document within IAEA that may have been submitted to our Government. It may be an internal classification of IAEA that is not a U.S. Government classification.

What I am trying to determine is the internal working relationship on what will or will not be considered public within IAEA. Once it has come to our Government then we, in turn, make our judgment on whether we will treat it as confidential, secret, or whatever.

What I was trying to get at is does our Government classify it that way? I think from what you read I believe that that would indicate that the internal working relationship of IAEA.

The CHAIRMAN. That is entirely for Mr. Richter to make his own decision about.

Senator GLENN. That is his decision.

The CHAIRMAN. But I wanted to remind him of the statute under which he accepted an appointment.

Senator GLENN. That is with regard to his relationship with IAEA. But does our Government have any classification at all on this document? That was my question.

The CHAIRMAN. If we are notified—and I assume that you have been notified, Senator Glenn; I have not been personally—but if you have been notified and would assume responsibility for that notification, then being placed on notice, I would simply ask Mr. Richter at this point to refrain from reading it though there may be some subsequent clarification before we finish our testimony today.

Senator BOSCHWITZ. Mr. Chairman.

The CHAIRMAN. Yes; Senator Boschwitz.

Senator BOSCHWITZ. It is not clear to me that the conclusion you have just reached, that this is a classified document, is indeed the fact. Furthermore, the State Department was aware yesterday of this document coming before the committee. If they are going to after the fact classify a document, I object to that, just as the Senator from Ohio quite properly objects to the declassification of documents unless it is properly done. I do not think it is classified properly, if, at this point, they decide for some reason or another that this document should be classified.

We should not deal in charades in this committee, Mr. Chairman. And with the knowledge that this is already in the hands of the press, I think we ought to let this witness read the statement so that he properly interprets it for the press so that it not be misinterpreted.

Senator GLENN. But it has not been given to the press yet.

Senator PELL. Mr. Chairman.

The CHAIRMAN. Let us clarify the position of the State Department. We have asked the State Department to go back and determine whether or not this is in fact classified, as Senator Glenn has been notified.

Senator BOSCHWITZ. I want to know if it is classified at this time, Mr. Chairman, not whether or not they are going to classify it but whether or not it is classified at this time.

The CHAIRMAN. We will get a determination on that.

Mr. Richter, would it be acceptable to you in such time as we clarify this matter simply to omit that one paragraph? We will go on with the rest of your testimony, and certainly we can determine before this panel has finished whether or not you can in fact read that one paragraph.

Senator PELL. Mr. Chairman, as a matter of practicality, would it not be feasible, since the one paragraph he wants to read is really a subjective paragraph, there is no reason in the world why Mr. Richter could not paraphrase his own subjective views in this regard and let those be known to the country as it already has been known to members of the press who have been reading it in their copies of his statement.

[Laughter and applause.]

Senator PELL. And it is just a thought here that might meet the objections of everybody.

Senator GLENN. Mr. Chairman, may I add one thing: Is what Mr. Richter intends to do just read that one paragraph?

Mr. RICHTER. Yes, sir.

Senator GLENN. That is part of what already has been released and is part of the public statement?

Mr. RICHTER. Yes, sir.

Senator GLENN. Is that part of what already has been released as the public statement?

Mr. RICHTER. Yes, sir.

Senator GLENN. It was my impression that you were going to expound on that and go further than that statement.

Mr. RICHTER. I want to limit it strictly to that statement.

Senator GLENN. And it is your opinion that what already has been released, which the press already has, did that statement and the conclusion you drew in it, which already is out to everybody, was that a part of a classified document and has our government, to the best of your knowledge, classified that full document?

Mr. RICHTER. It was part of a document which I sent to the U.S. mission.

Senator GLENN. Was it classified?

Mr. RICHTER. I received no feedback that it had been classified. It was my own personal views and some information I had provided, and I had not heard anything of the sort. And this was the first I have just heard of it, so I am surprised.

Senator BOSCHWITZ. Are you just going to read from this [indicating]?

Senator GLENN. Oh, go ahead and read it. Who cares if it is in your statement. Everybody has it anyway.

Senator CRANSTON. Mr. Chairman.

The CHAIRMAN. Senator Cranston.

Senator CRANSTON. Mr. Chairman, I totally support Senator John Glenn's vigilance in this committee in seeking to prevent leaks, and the use in improper ways of classified documents.

On the other hand, I strongly object to this frivolous effort by the State Department to impose censorship on the deliberations of this committee. There is no appropriate reason that I can comprehend for the State Department to have sought to suppress some material

that has already been released, that was a subjective judgment of a man testifying before this committee, containing no facts.

Our Government does not have the right, as I would understand it, to classify documents that are produced by international agencies.

I would also like to say that Roger Richter, the witness, is performing a remarkable act of conscience. He telephoned me last Friday, 1 week ago today, from Vienna, to express to me his concerns about the inadequacies of the inspection system in which he was involved. We had further discussions, and as a result from that, he resigned from the International Atomic Energy Agency so that he could fly here, at considerable personal sacrifice, to state his views and give us his knowledge as a basis for our deliberations.

He resigned from that position so that he would be free to speak to us. He gave up a job which happens to earn more than a U.S. Senator. He had just had a contract renewed for 5 years. He had just had a baby born 1 month ago. He disrupted his family and flew with his wife Barbara, who is present today, to be with us today.

And I have great respect for his personal sacrifice and for the conscientiousness that led him to the point where he now sits before this committee.

Senator GLENN. Mr. Chairman.

The CHAIRMAN. Mr. Richter, would you continue your testimony and complete it now, paraphrasing, avoiding in any way you can something that you would feel is classified. You are on your own authority now. Please proceed.

Senator GLENN. Mr. Chairman, I would like to add one statement. I would not want to let Senator Cranston's statement go without some challenge here. I fully appreciate the sacrifices Mr. Richter has made; I truly do. And I am glad he is here today to give us this information, because some of his views are very parallel to mine.

I have been at this IAEA subject for a long time. I visited IAEA in Vienna. I have gone through some of the equipment that they use. One of the first things I did when I got to the U.S. Senate, as a matter of fact, the first amendment of mine was to get them an extra \$1 million because they were running out of money for inspections.

So I have been at this for a long time. But to somehow justify what might be a potential—I underline "potential"—violation of security on the basis that someone has an act of conscience to perform is a very, very dangerous thing to be saying. It invites everyone in Government to say,

If I disagree with what is going on and I have classified documents that I have been working on, I somehow can perform an act of conscience and be absolved of any guilt by going out and releasing those documents and making my point publicly which might in some cases be in the best interest of the United States but usually will not.

I fully support him being here. I want to have the information. But I do not want to let the statement go unchallenged that if someone disagrees in Government, if it is an act of conscience, that they somehow can make secret information public which might get many Americans killed in combat sometimes, that they somehow could take it upon themselves to declassify something on their own and give that information in public.

I just want to make that point. I make it separately, Mr. Richter, of you. I am not criticizing you. We have been trying to keep this

committee tight on classified matters, and a lot of them get far more important than the statement you have made here that is already released. And I would suggest you go ahead and read it, so far as I am concerned.

But I just want to make this point: That we cannot have people absolved of their responsibilities to the oaths that they have taken because it somehow becomes a matter of conscience with them later on. That defeats the whole security of the United States.

Senator BOSCHWITZ. Mr. Chairman, I want to make a comment.

The CHAIRMAN. Senator Boschwitz.

Senator BOSCHWITZ. I am still unaware that Mr. Richter, whom I have never met before, is in any way presenting to us papers or documents that have been labeled as "classified." The distinguished Senator from Ohio took Mr. Richter's testimony and Senator Cranston's statement and suddenly had people dying on the battlefield. I really think that is certainly an expansion of the existing situation.

Senator Cranston brought out the fact of Mr. Richter's background simply because of the difficulties we have been having at this moment and not as a method, in my judgment, to try to give any particular type of veracity to the statement.

So I object, in turn, to the Senator from Ohio characterizing the materials that Mr. Richter is going to present as "secret."

Senator GLENN. Senator, I did not indicate that they are secret.

Senator BOSCHWITZ. Pardon me, Senator. I am not done.

The CHAIRMAN. Gentlemen, I think we should proceed.

Mr. Richter, what you are about to say may have just been totally obscured and lost. With all of this buildup, I am sure it will not be, however. Won't you please proceed?

Mr. RICHTER. Let me first make a point of clarification, Senator Percy. You indicated that I should paraphrase the statement on the chance that it might be classified, rather than read it verbatim; is that correct?

The CHAIRMAN. Would you rather withhold any paraphrasing of it?

Mr. RICHTER. I suppose I could paraphrase it.

Basically, as a result of my experiences as an inspector and the information that was available to me, I became quite concerned that under the auspices of the Non-Proliferation Treaty, Iraq would be gaining an advantage because of the way inspections were done, the limitations on the inspections, that the agency would be unable to detect a diversion of plutonium under the presently constituted safeguards arrangement.

But more important than that, I became very much disturbed that the International Atomic Energy Agency was possibly going to be used as a scapegoat for the moral responsibility which several nations seem to have abrogated in the conduct of their technological dealings with this Iraqi sale.

I further would like to make the point that the time to improve the IAEA safeguards is now. No better time is likely to exist in the future for improving the IAEA safeguards system. There is no viable substitute for the IAEA. It is a very necessary agency with perhaps the most important job of all international agencies. It employs highly competent, motivated, and sincere people, nearly all of whom share the same ideals and goals with respect to nuclear nonproliferation.

But the IAEA has been hampered by narrowly focused rights to conduct inspections bestowed by the member states. These rights need to be broadened, and the IAEA must be enabled to conduct more comprehensive and better quality inspections. Each member state should ask itself whether its security and the collective security of the world community would be better served by improving the confidence and respect for the IAEA or whether unbridled proliferation and short-term commercial advantages should take precedence.

As Senator Cranston stated in his opening remarks before the committee yesterday, the very survival of our civilization is placed at risk when the capacity to produce weapons of mass destruction is allowed to spread around the globe. We must all work together on this problem. There can be no more important task.

[Mr. Richter's prepared statement follows:]

PREPARED STATEMENT OF ROGER RICHTER

Mr. Chairman, it is both an honor and privilege for me to appear before the committee. It is my intention to present my views regarding the adequacy of the International Atomic Energy Agency (IAEA) safeguards system and how this system relates to the controversy surrounding the Iraqi nuclear program. As the only American inspector in the section responsible for the safeguarding of nuclear facilities in Iraq, Israel, Pakistan and India among other countries, I believe I have had a unique opportunity to gain an insight into the quality and effectiveness of the IAEA safeguards in a region of the world that is very much the focus of our Government's efforts to contain proliferation. The present heightened interest and concern on the part of the American people and the world community toward the effectiveness of the IAEA nuclear safeguards and nonproliferation efforts offers perhaps the best opportunity ever to identify deficiencies which exist in the system and to work toward resolving these deficiencies.

A principal objective of my testimony, Mr. Chairman, is to identify IAEA deficiencies and to strengthen what I believe to be the crucial mission of this most important international agency. The other principal objective is to explain why I believe that the Iraqi nuclear program was organized for the purpose of developing a capability to produce nuclear weapons over the next several years. By way of discussing these two subjects and their relations to one another, I thought it could best be accomplished by explaining them from the perspective of an IAEA safeguards inspector who is charged with the responsibility of safeguarding the Osirak reactor.

But first, by way of background, Mr. Chairman, I want to inform the Committee of my relevant experiences in the field of nuclear engineering. I hold a B.S. in Metallurgical Engineering and M.S. in Nuclear Engineering from the Polytechnical Institute of New York and the University of Maryland. The latter degree was attained under the auspices of the U.S. Atomic Energy Commission select intern program. I have been employed by the U.S. AEC, ERDA, and DOE from June 1968 until February of 1978. During this time I was involved in nearly all aspects of the technology associated with nuclear fuel engineering, reactor irradiations and nuclear waste disposal.

While working for the Atomic Energy Commission, I have served as project engineer for the National Program to develop advanced fuel for breeder reactors, as a site representative at the General Electric breeder reactor headquarters in Sunnyvale, California and the Westinghouse nuclear component manufacturing facility also in Sunnyvale.

I have also authored a report for the U.S. Department of Energy San Francisco, operations office which was written at the request of the Federal Reserve Bank, on the economic impact of passage of proposition 13, and initiative which could have shut down the nuclear plants in California. This report was criticized by proponents of the initiative as being too pro-nuclear.

On the basis of these relevant experiences, I was offered a position as a nuclear safeguards inspector with the IAEA in February of 1978.

At the IAEA I initially served as an inspector in the Euratom section. I was a principal inspector at the nuclear fuel reprocessing facility in West Germany and at fuel fabrication facilities in both West Germany and Italy. I subsequently replaced the lone American inspector in the south and south/east section when he

returned to the United States. I have been an active inspector in the south and south/east section for the past two years until my resignation on June 16, 1981. In this capacity, I have inspected small research reactors in Australia, Greece, Indonesia, Israel, the Philippines, Turkey and Yugoslavia. I have had considerable inspection experience with the heavy water power reactors Rapps 1 and 2 in Kota, India and the General Electric supplied light water reactors in Tarapur, India and at the nuclear fuel fabrication complex in Hyderabad, India.

I was recently involved in the final negotiations on behalf of the IAEA with the Government of India on the safeguard approach to the Prefre nuclear fuel reprocessing facility, located at the Tarapur site. I was to have been a key inspector in the implementation of the forthcoming inspections at the Prefre reprocessing plant later this year. I had in fact been offered, and I recently accepted, a five year extension of my present contract with the IAEA.

Now, I ask the members of the committee to imagine for the moment, that each of you is a nuclear safeguards inspector who will shortly be going to Iraq to conduct an inspection. To begin with, you have to imagine yourself as being a national of the Soviet Union or another eastern block country, or possibly also a Frenchman. Since 1976, all inspections performed in Iraq have been conducted by Soviet and Hungarian nationals. Recently a French national was granted approval by Iraq to be an inspector but he has not been to Iraq to make an inspection. This is a reflection of the fact that countries have the right to veto inspectors from whatever countries they choose; a right which they regularly exercise.

As an accepted inspector, you must keep in mind that any adverse conclusions you might reach as a result of your inspections would have to take into account your country's sensitivity to how this information might affect relations with Iraq.

In preparing for the inspection you must first give the Government of Iraq several weeks notice of your planned inspection and obtain a visa. They may agree with the date or could as has recently been the case, suggest you postpone or change your plans to a more suitable date. Naturally, not wanting to create unnecessary friction you will agree. You are now ready to go about the business of preparing yourself for the inspection. First you should become familiar with the design information Iraq has provided to the IAEA. You note that this design information is limited to describing the reactor, its operating characteristics such as power and flux, a description of the type and number of fuel elements and of the irradiation ports. The hot cells provided by Italy for examination and processing of irradiated nuclear specimens for possible plutonium separation, are not included in the information provided by Iraq, nor is the radiochemistry laboratory, pilot reprocessing facility or the fuel fabrication line included in the design information available to the IAEA.

These facilities are not under safeguards and so long as Iraq maintains that it is not processing plutonium or fabricating uranium fuel in these facilities, they will remain outside of safeguards. This may be disturbing to you as an IAEA inspector. Nevertheless, you are aware that as a signatory of NPT, only facilities which Iraq has declared to the IAEA as containing either thorium natural or depleted uranium in metal or oxide form of plutonium, are subject to your examination. However, natural uranium in the form of U_3O_8 , commonly known as yellowcake is not subject to safeguards, despite its potential for easy conversion to target specimens for plutonium production. You are not entitled even to look at the other facilities if Iraq has not adhered to its obligation under NPT, to report to the IAEA that material subject to safeguards is located in these facilities. You are aware that the role of the inspector is limited to verifying only material declared by Iraq or France. You have no authority to look for undeclared material. Your job is to verify that the declared material accountability balance is correct. The IAEA does not look for clandestine operations. The IAEA in effect conducts an accounting operation.

The amount and level of enrichment of the reactor fuel elements is indicated on your computer printout. But you notice that 100 tons of uranium in the form of U_3O_8 is not on the list.

This is not an oversight but a reflection of that fact that even though Portugal reported the shipment to the IAEA, it is only a formality. The 200,000 pounds of U_3O_8 is not subject to safeguards. Had this uranium been in a slightly reduced form such as UO_2 , it would have been under safeguards; but this loophole could enable Iraq to do as it pleases with the U_3O_8 . And so long as it does not report that the U_3O_8 has been converted into a material that is in the safeguarded category, you have no right to inquire of its whereabouts. You are disturbed by this because you realize that in the other Italian supplied fuel processing equipment which

are not under safeguards, Iraq possesses the capability to convert in a rather simple fashion the UO_2 to UO , or even better to uranium metal.

This could then be made into uranium targets which when bombarded by neutrons in the reactor core or blanket would be partially converted to plutonium. The targets could then be disassembled and reprocessed in the unsafeguarded hot cells and pilot reprocessing facility and the plutonium recovered. Since the UO_2 is not under safeguards, the material accountancy balance will not show that material has been withdrawn. The plutonium could therefore be accumulated without IAEA awareness. So long as Iraq does not live up to its obligation to admit to irradiating UO_2 or uranium metal in the reactor, you as an inspector have no recourse but to limit your inspection to the declared inventory.

As an inspector you have become aware that as much as 17-24 kg. of plutonium could be produced each year with the Osirak reactor. Even if only one-third of this amount was produced in the first few years of operation of the reactor through the use of the attendant processing facilities, Iraq could acquire a stockpile of plutonium sufficient to make several Atomic bombs. This is because in spite of having signed the NPT, the most sensitive facilities in the nuclear reactor complex could remain outside of the purview of the IAEA as long as Iraq did not declare that they contained either plutonium or uranium metal or oxide.

During these years when the plutonium stockpile is growing, Iraq could master the techniques of fabricating the plutonium configurations required for a nuclear weapon.

Equally disturbing to you as an inspector is the realization that under the present negotiated agreement between the IAEA and Iraq, you will be limited to only three inspections per year, usually spaced at approximately four month intervals. Since the entire reactor can be emptied of the clandestine uranium target specimens within days, you as an inspector face the fact that by the time you arrive to verify the declared inventory of fuel elements which power the reactor, all evidence of illicit irradiations could be covered up.

Furthermore, under the present safeguard approach for material test reactors such as Osirak, no use of T.V. or photographic surveillance is made. Such surveillance could possibly provide an indication of accelerated withdrawal of specimens from the reactor prior to an inspection. While it is recognized that such surveillance alone would not prevent clandestine plutonium production in the reactor, it could serve to reduce the ease by which the present *laissez-faire* approach to safeguarding large scale material test reactors allows for optimized production of plutonium 329 which has a low plutonium 240 content. Such low PU-240 fuel is ideal for nuclear bomb construction, particularly for a country whose bomb making capabilities are at an early stage of development.

In contrast to MTR's in light water nuclear power reactors it is comparatively very difficult to divert any of the plutonium generated during operation, and the high-fuel exposure times lead to a buildup of the undesirable plutonium 240 isotope. This significantly increase the level of sophistication necessary to produce a useful bomb from light water power reactors and also greatly increases the difficulty of reprocessing the fuel for plutonium recovery.

Moreover, unlike the light water nuclear power reactors where the IAEA TV and photographic surveillance have proven to be successful, MTR reactors do not readily lend themselves to unambiguous interpretation of surveillance results.

This is because in research reactors, the planned mode of operation is for frequent insertion and removal of experiments and radioisotopes. Consequently the cameras would only reveal the frequency and time when experiments were inserted and removed from the reactor, in between inspections. The amount of material removed and the nature of the material i.e.; are they isotopes for hospital use, or plutonium, could not be ascertained. However, given the low level of materials research activity in Iraq, such surveillance could provide an indication of whether the amount of material withdrawn from the reactor is far in excess of any conceivable experimental research program.

Faced with these obstacles and constraints, you may now be wondering exactly what does an inspector actually do in the course of performing a safeguard inspection of the Osirak nuclear complex. So much of the potential safeguarding activities are beyond the scope of your inspection and the most sensitive facilities in fact are not even subject to safeguards.

Your inspection assignment is actually quite narrowly focused. First, you will sit down with the operator of the nuclear reactor and review your computer listing of the nuclear material which has been declared to the IAEA. This inventory should correspond to the declared inventory appearing in the facility's listing.

France as supplier of the enriched uranium fuel will have notified the IAEA of the type and amount of fuel delivered to the reactor. You will determine that the amount recorded by the operator is consistent with the amount reported to the IAEA by France.

If there is new, unirradiated fuel in the inventory, you will measure the fuel with a stabilized assay meter to determine that the elements indeed contain enriched uranium and have not been replaced by dummy replica fuel. This is particularly important in the case of the Osirak fuel, since it would be a relatively easy matter to melt down the weapons grade highly enriched uranium fuel plates for use in a nuclear bomb. If the fuel elements are already in the reactor and have been irradiated, the inspection procedure normally requires that you visually identify the fuel elements. They can normally be observed under the approximately 20 feet of water. To confirm that these elements are not dummies, you have the right to ask the operator to turn on the reactor. When the reactor is operating, you should then see a characteristic blue glow known as "Cerenkov radiation" emanating from the core. This is indicative of operating radioactive fuel elements.

Having done these checks you have basically performed the most important elements of a nuclear safeguards inspection of a research reactor.

Thus far, this has been the easiest part of the inspection. The most difficult part lies ahead.

You will now return to Vienna and report that your inspection disclosed no discrepancies between the operator's records and that of the agency. You will report that you verified the unirradiated fuel with your stabilized assay meter and that you verified the irradiated fuel in the core by counting the elements and by virtue of seeing the reactor in operation. The difficult part of the job is that you must prepare yourself mentally to ignore the many signs that may indicate the presence of clandestine activities going on in the facilities adjacent to the reactor, facilities which you were not permitted to inspect, unless the host country has informed you that fuel elements from the reactor were transferred there. You will now complete a standard report, filling in the blanks, you will try to forget that you have just been party to a very misleading process.

It is partially the result of such feeling that I was prompted a year ago to write a report of my concerns about Osirak to the Department of State U.S. mission to the IAEA. With your permission Mr. Chairman, I would like to read a portion from that document.

"The available information points to an aggressive, coordinated program by Iraq to develop a nuclear weapons capability during the next five years.

"As a nuclear safeguards inspector at the IAEA, my concern and complaint is that Iraq will be able to conduct this program under the auspices of the Non-Proliferation Treaty and while violating the provisions of NPT. The IAEA safeguards are totally incapable of detecting the production of plutonium in large-size material test reactors under the presently constituted safeguards arrangements. Perhaps the most disturbing implication of the Iraqi nuclear program is that the NPT agreement has had the effect of assisting Iraq in acquiring the nuclear technology and nuclear material for its program by absolving the cooperating nations of their moral responsibility by shifting it to the IAEA. These cooperating nations have thwarted concerted international criticism of their actions by pointing to Iraq's signing of NPT, while turning away from the numerous, obvious and compelling evidence which leads to the conclusion that Iraq is embarked on a nuclear weapons program."

The U.S. mission representative indicated that he shared my concern and that he had forwarded my report to ACDA. He further indicated that ACDA was well aware of most of what I had reported and that an effort was being made to improve the IAEA approach to safeguards in Iraq. But as the most recent IAEA internal documents regarding these discussions show, there remains a very strong resistance to upgrading safeguards in the large scale research reactors, which constitute the most dangerous threat to nuclear nonproliferation. The time is now at hand to act. No better time is likely to exist in the future for improving the IAEA safeguards system.

There is no other viable substitute for the IAEA. It is a very necessary agency with perhaps the most important job of all international agencies. It employs highly competent, motivated and sincere people, nearly all of whom share the same ideals and goals with respect to nuclear nonproliferation.

But the IAEA has been hampered by narrowly focused rights to conduct inspections bestowed by the Member states. These rights need to be broadened and the IAEA must be enabled to conduct more comprehensive and better quality inspections. Each member state should ask itself whether its security and the collective

security of the world community will be better served by improving the confidence and respect for the IAEA, or whether unbridled proliferation and short term commercial advantages should take precedence.

As Senator Cranston stated in his opening remarks before the Committee yesterday "The very survival of our civilization is placed at risk when the capacity to produce weapons of mass destruction is allowed to spread around the globe. We must all work together on this problem. There can be no more important task."

TYPES OF REACTORS

The CHAIRMAN. Thank you very much, Mr. Richter.

We will operate this morning under a 10-minute rule.

Gentlemen, if you wanted as a nation to secretly build a bomb, would it be the better part of prudence and wisdom to choose the Osirak type research reactor made by the French? In other words, would you consider it one of the better or one of the worst types of reactors for producing raw material for nuclear weapons, Dr. Selden?

Dr. SELDEN. Mr. Chairman, I believe that the question is a little difficult to answer because it has a great deal to do with the issue of safeguards and how those safeguards are enforced. This specific reactor has enriched uranium metal as fuel elements. That metal is possible to use in constructing weapons. There is no question that plutonium can be produced in this reactor, perhaps enough plutonium for a small number of weapons per year. So the issue is really one of safeguards rather than of technical possibility.

The CHAIRMAN. But my question is: If your design and purpose was to build weapons and weapon capability, is this the particular reactor you would select for that purpose? Is it the best one you could select for that purpose? Or is it at the other end of the spectrum, one of the worst reactors you would pick, if that were your particular purpose?

Let me read to you a judgment on this particular question from technicians in the State Department:

As we outlined in an attached assessment, plutonium production in a reactor such as the Osirak would be modest, and the IAEA procedures will be designed to detect such production. We also note that there are other research reactor types, such as natural uranium reactors, which are significantly greater plutonium producers.

Dr. SELDEN. That is correct.

The CHAIRMAN. So I put the question to you again. If your purpose was bomb production, is this the reactor that you would spend your money on and put your hopes behind, or would you have selected some other one?

Dr. SELDEN. For the purpose of producing plutonium there are many reactors which are far better than this reactor.

The CHAIRMAN. Thank you.

Dr. Kouts.

Dr. KOUTS. Mr. Chairman, if I were trying to do this clandestinely, I would not select this reactor, because one of the first things I would have to do is arrange for a supply of enriched uranium to fuel my enterprise and that becomes well known and suspicions are raised at that point.

I certainly espouse the same point of view as the State Department has told you. There are reactors that could be included in completely clandestine operations which are never revealed whatsoever, and

these would be based on the use of natural uranium and probably graphite.

Mr. RICHTER. Senator Percy, may I add to that?

The CHAIRMAN. Yes, Mr. Richter, please.

IRAQ WANTED GRAPHITE REACTOR

Mr. RICHTER. I think the Government of Iraq would agree with Dr. Kouts and Dr. Selden. They also wanted a graphite reactor from France, but France recognized that this particular type of reactor, a graphite reactor, had very large capabilities for plutonium production. And France said, "No way are you going to get that reactor." In a typical Middle East bargaining fashion, Iraq said, "Well, if you are not going to give us that reactor, what will you give us?" And they said, "Well, we can give you the Osirak."

So it is not that Iraq did not want to get the best system possible. They just could not get it.

The CHAIRMAN. Yes. The question facing this committee, though, is justification for bombing it. So, what they were bombing was not the best reactor for the purpose of giving them capability to make weapons but one of the poorer types.

Mr. RICHTER. No, not one of the poorer types. You would not say that was one of the poorer types; would you?

Dr. KOUTS. No. I said that if I would try to do this on a completely clandestine basis, I would not choose a reactor which required enriched uranium. In order to keep this enterprise going for a year, they would have to continue to receive enriched uranium over the course of a year, perhaps to the tune of about 100 to 200 kilograms of this material.

This is not something that you hide, the fact that you are getting this material. In fact, you have to declare it to the International Atomic Energy Agency. This gives them some inspection rights, and they start looking into things.

If I could build something completely clandestinely without buying it from outside, I could hide that enterprise. I thoroughly agree. If I were put into the position of having to start with a reactor that used enriched uranium, suppose I were in the position that the Iraqis were in, of negotiating for some sort of reactor with enriched uranium, this is a pretty good one to choose.

IRAQI PURCHASE OF YELLOWCAKE URANIUM

The CHAIRMAN. What possible reasons might Iraq have for purchasing such large stocks of yellowcake uranium?

Dr. KOUTS. I cannot think of any.

Mr. RICHTER. I can.

The CHAIRMAN. Yes. Mr. Richter.

Mr. RICHTER. Senator Percy, you were in another committee hearing when in my testimony I mentioned the 200,000 pounds of yellowcake natural uranium, purchased by Iraq. The point that I made was under International Atomic Energy Agency safeguards this yellowcake is outside of safeguards. It is not to be safeguarded. As a result, this gives the Iraqis the license to convert that yellowcake clandestinely into usable uranium oxide or uranium metal, which the Iraqis

then could irradiate in positions in the Osirak reactor in the period between IAEA inspections, withdraw it before the inspectors arrive, and reprocess it in the facilities provided by the Italians, which are also not under safeguards.

So they basically have a systematic approach available to them where they can use undeclared material to produce plutonium. And that entire process can be done outside of safeguards.

The CHAIRMAN. Is the size and scale of the Osirak type reactor excessive to Iraq's research needs, assuming their goal is to develop an independent nuclear capability, Dr. Kouts?

Dr. KOUTS. Yes; it is. It would take quite some time to use it in this way, but it is of such a size.

The CHAIRMAN. Could everyone hear that answer?

I wonder if you could repeat it, please, speaking right into the mike.

REACTOR CAPABLE OF ACHIEVING MODEST NUCLEAR CAPABILITY

Dr. KOUTS. I said, "Yes, it is of such a size." It is of a size adequate for achieving a modest nuclear capability. It would take some time to take advantage of a reactor of this size, and a technology based upon it. But it is consistent with that.

The CHAIRMAN. Thank you.

Mr. RICHTER. I believe, Senator Percy, I am not quite sure Dr. Kouts' statement was understood as I understood it. So I want to, if I might, clarify it.

Dr. Kouts, did you indicate that this type of reactor is a very large size material test reactor? Given the very small industrial base, the very small research base that the Iraq research establishment has, it may be far beyond the needs of such a small, relatively undeveloped state for doing materials and irradiation testing?

Dr. KOUTS. Yes; I believe that. I believe it is probably well beyond anything they need for the level of technology that they have. But this would not be the first time that a country has taken on such a white elephant.

If you go around the world, you will find almost every country has its own airline. These are airlines that do not bring any profit; the countries are not involved in aircraft industries to any extent. But they are a great showpiece. They are there for appearance. The reactors could have been taken on for that reason or partly for that reason.

FRENCH-IRAQI AGREEMENT

The CHAIRMAN. The French and Iraq, as we have learned, had had an agreement that French technicians would remain at the Osirak reactor through 1989. Would not these French technicians have had much greater access to the reactor than IAEA inspectors? And if there were indications that the Iraqis were taking actions to develop a weapon, would not the French technicians know about this? Mr. Richter, this fits right into your field.

Mr. RICHTER. Yes. Again, in my testimony I pointed out that the International Atomic Energy Agency's current contractual arrangement with Iraq was limited to approximately one inspection every 4 months. And given the proper irradiation scheme the Govern-

ment of Iraq would have been capable of producing as much as 8 kilograms of plutonium between each inspection.

The Iraqis would have been unable to unload the reactor because we give them 2 to 3 weeks' notice before our coming. Since there are no TV systems or cameras to look at what they are doing, before each inspection they could remove the material and when the IAEA inspectors were present they would see basically a clear reactor core and would have no reason to suspect that anything was wrong, because the sensitive facilities which could be used to reprocess the plutonium from this undeclared yellowcake is outside of safeguards.

Now, without knowing what kind of access the French technicians would have, what the limitations of their work would be, which areas would be off-base to them and where they would be able to go, it is very difficult to say whether the French would have any control over what was going on.

The CHAIRMAN. Thank you.

BOMB FACTORY

My last question relates to the statements made by Prime Minister Begin, which have been clarified since then. Can you tell us about the Osirak reactor and what was the likely function of the underground room described by Prime Minister Begin as a "bomb factory"? Would assembling a bomb in this room be either plausible or sensible? What was the nature of that room that he originally described as a bomb factory?

There is some clarification that later came out of Tel Aviv following his original statement.

Mr. RICHTER. I don't know of any such room. It doesn't appear in the design information. That is not to say that it doesn't exist, but I don't know that there is any evidence that there is such a room. However, it is quite possible.

Here I am just speculating that what he was referring to was the transport tunnel between the big reactor and the little reactor that the French had supplied. I don't know whether there would be any advantage in using that transfer tunnel to do any surreptitious work.

The CHAIRMAN. Dr. Selden or Dr. Kouts, was there any such room that could even by a stretch of the imagination be considered a bomb factory?

Dr. SELDEN. I am not familiar enough with the details of what actually was there, and I am not aware that there were rooms that would be suitable for that purpose.

Dr. KOUTS. No, sir, I understand from what I read in the press that there has been a lot of dispute on this subject and that room probably did not exist. This may have been the transfer tunnel about which Mr. Richter just spoke. If you wanted to construct a bomb factory, an unlikely place to put it would be under a nuclear reactor, however.

The CHAIRMAN. Thank you.

Senator Pell.

Senator PELL. Thank you, Mr. Chairman.

Actually, I think Prime Minister Begin changed his original statement that the secret chamber was 40 meters underground to 4 meters.

This apparently is not very far underground for any facility relating to a building of the size this reactor was.

THREE SIMPLE QUESTIONS

I thought that in the New York Times this morning, the author, Judith Miller, captured what we are trying to do in this hearing very well. She said what we are trying to do here is answer three questions: Was the Iraqi nuclear program capable now or in the near future of producing nuclear weapons? Second, if the capability existed, did Iraq intend to use the reactor and other facilities to make weapons? Third, if Iraq could have produced weapons and intended to do so, would the international system of inspections and safeguards have detected such efforts and stopped Iraq from acquiring the weapons?

Well, I think these three simple questions have digested what we are trying to do, and they could almost be answered by yes or no. With regard to the first one, is the Iraqi nuclear program capable now or in the near future of producing nuclear weapons, I gather the answer of Mr. Richter would be yes.

Mr. RICHTER. Most definitely, and I believe it was structured in such a way that it is very likely that they would have such a capability.

Senator PELL. Dr. Kouts, would you care to comment on that, although I know you were not on the actual installation?

Dr. KOUTS. No, but it is quite clear that the Iraqi reactor and its capabilities could have been an important part of such a program if the Iraqis had intended there to be one. It would not have been the whole program, by any means.

Senator PELL. But it was capable of producing nuclear weapons?

Dr. KOUTS. No; of producing material that could be used in another part of a program to produce nuclear weapons.

Dr. SELDEN. I agree with that.

Senator PELL. Thank you.

My second question is this. If the capability existed—and all three of you agree that it existed—did Iraq intend to use the reactor to make weapons? This is a little more subjective. What would Mr. Richter's view be from his experiences there?

Mr. RICHTER. I think that falls into the political arena. However, if you look at the evidence that exists, if you look at the kind of program that they have underway, if you look at the 200,000 pounds of yellowcake which they bought for God only knows what reason, you become very suspect. There is an old expression: If it walks like a duck, swims like a duck, flies like a duck, and quacks like a duck, well, then, it's a duck.

Senator PELL. Also that was the conclusion of the memorandum about which we had a little discussion earlier; would that not be correct?

Mr. RICHTER. What do I say to that?

Senator PELL. I don't think that is classified.

[Laughter.]

Senator PELL. If you would rather not respond.

Mr. RICHTER. I think it is implicit in my testimony that the elements are in place for such a program.

Senator PELL. Thank you.

Dr. Kouts.

Dr. KOUTS. Maybe we are sometimes guilty of ascribing to other countries more unity of intent than we have in our own. I would be surprised if there were not some factions, maybe important, maybe even ruling factions in Iraq, which so intended the use of this reactor. I would not be surprised if there were other factions which intended to use it in other ways, like as a research tool, as a national showpiece, as something of the sort.

Whether or not the actual use for the production of weapons would have prevailed and it would have been used in that way, I have no idea.

Senator PELL. Thank you.

Dr. Selden.

Dr. SELDEN. In short, the answer is, I don't know. There clearly are contradictory kinds of evidence suggesting both kinds of intended uses in this case.

Senator PELL. We don't know either, and that is the purpose of this hearing. We hope to come out at the end of these hearings that Chairman Percy is conducting with some sort of consensus view in this regard.

IAEA INCAPABLE OF SAFEGUARDING A FACILITY

Now, let me get to the third question. If Iraq could have produced weapons and intended to do so, would the international system of inspections and safeguards have detected such efforts and stopped Iraq from acquiring weapons? I think I know what Mr. Richter's answer is but I would like to hear it.

Mr. RICHTER. I believe that over the last 10 pages of my testimony—or at least I hope I have very clearly explained the loopholes and flaws in our system of inspection of material test reactors of this type. I hope it is clear to the members of the committee that the IAEA is incapable of safeguarding a facility of this type under the present safeguards approach.

I think there is no question that Iraq would be able to divert material from this reactor and reprocess it in the unsafeguarded facilities which have been supplied by Italy. Those facilities represent the full scope of capabilities required by Iraq to take the plutonium generated in the safeguarded reactor and convert it in unsafeguarded lines using the unsafeguarded 200,000 pounds of yellowcake.

Senator PELL. Thank you.

Dr. Kouts.

Dr. KOUTS. Senator Pell, your question is a very complex one and it deserves two answers: one is yes and the other is no. [Laughter.]

TECHNICAL METHODOLOGY INVOLVED

Certainly the narrow technical methodology which is involved in IAEA inspection and application of the safeguards that it conducts would not be able to determine whether Iraq is doing this if they did it cleverly enough, and they certainly could be capable of doing it cleverly enough.

As to whether or not the determination could be made that this is taking place or could be taking place, I think we have the proof of the pudding. Something has happened over there and a determination has been made based on evidence which has been generated as a result

of the existence of the nonproliferation treaty and the IAEA's the safeguard system.

Senator PELL. Thank you.

Dr. Selden.

Dr. SELDEN. I would again answer that I don't really know whether these safeguards could be bypassed. What I can testify to is that the quantities of material that are involved are adequate for a small weapons program.

Senator PELL. Thank you.

Now let me reverse the field a little bit. If the IAEA inspections are so inadequate, why is Israel reluctant to accept them? What would be your view, Mr. Richter?

ISRAEL'S RESEARCH FACILITIES

Mr. RICHTER. That is a very good question. I think first of all that you should know that we do make inspections at one of Israel's research facilities. It is a small research reactor, 5 megawatts. They no longer are being supplied with fuel by either the United States or France because of U.S. law and because France chooses not to, so the Israelis are limited in what they can do in that particular reactor.

But here again I have to speculate on what they have in their non safeguarded facility. It is likely that they are producing nuclear weapons material there and that, they probably haven't designed that facility as a subterfuge to IAEA safeguards since they never contemplated going under that regime. Consequently, to an inspector coming in it would be very obvious that they have a totally integrated production system.

However, in the situation in Iraq they are going about it in a very clever but not very subtle way. Therefore, they can say, well, we have signed the Nonproliferation Treaty so we are bound to let the facility be safeguarded. Nevertheless, we know ourselves what safeguards mean and we are not too concerned.

NATIONALITY OF IAEA INSPECTORS

Senator PELL. What percentage of the inspectors of the IAEA are of U.S. nationality and what percentage are Soviet nationality?

Mr. RICHTER. I am also glad you asked that question. There are very few Soviet inspectors because most of the countries around the world will not allow Soviet nationals into their facilities. The section I am in has the majority of Soviet inspectors. I am the token American, and I was put into that section when the previous token American left.

There are several sections that do have large representations of Americans. These are primarily the sections dealing with Japan, Taiwan, South Korea and the sections dealing with the EURATOM countries. I think we are looking at something of upward of 25 American inspectors and technical experts. But you have to realize that we are dealing with countries that have signed NPT and for political reasons are not motivated to produce nuclear weapons. So the majority of American inspectors are involved in activities which I would characterize as being routine inspections, without the same kind of overriding concern.

Also within the same section that I am in we have the other sensitive countries such as Pakistan and India and also Israel.

Senator PELL. In closing I would like to congratulate you and commend you very much. I think it was Robert Kennedy who said when times come that good men remain silent at things that horrify and disturb them, that is the time that our democracy is in trouble. I am paraphrasing it, of course. But I think the sacrifice you have made is great indeed, and there are not many people around the country who would give up the job that you have, who would endanger, as you have, your life and your family's lives and take the risk that you have because you believe it is the right thing to do. I think the country is very fortunate to have men like you, and I hope that success and a good life lie ahead for you.

Mr. RICHTER. Thank you, Senator Pell. I am quite touched by your comment. I would also like to say that the same was said to me by several other American inspectors at the agency who also felt strongly that I should do this.

The CHAIRMAN. Thank you, Senator Pell. I want to associate myself with your best wishes, and we appreciate Senator Cranston suggesting Mr. Richter be here.

Senator Mathias.

Senator MATHIAS. Thank you, Mr. Chairman.

Gentlemen, this is, I think, for the committee at large an educational experience. I can say for myself that it is an innovative experience, and so I hope you will be patient with us as we ask questions that may seem very simple to you or repetitive.

Has any member of the panel actually seen the Baghdad facility?

Dr. KOUTS. [Nods negatively.]

Dr. SELDEN. [Nods negatively.]

ACCESS TO IRAQI FACILITY LIMITED

Mr. RICHTER. I would like to make clear, as I hope I did in my testimony, and I am not sure you were here for that portion of it, Senator Mathias, that since 1976 only Soviet nationals and nationals from the East Bloc countries have had access to the Iraqi complex. They do that under very strict security.

The inspections have to be planned quite a long time in advance. Very long periods of notice are given, and the Iraqis pretty well determine exactly what time the inspectors can arrive. Part of this can be ascribed to their war situation.

Senator MATHIAS. That, of course, would be in addition to the French.

Mr. RICHTER. In addition, of course, to the French who were building it.

Senator MATHIAS. The French were there all the time.

Mr. RICHTER. Yes.

Senator MATHIAS. Except perhaps during a period of military operations?

Mr. RICHTER. Yes.

Senator MATHIAS. Have any of the panel ever been to Iraq?

Dr. KOUTS. [Nods negatively.]

Dr. SELDEN. [Nods negatively.]

Mr. RICHTER. [Nods negatively.]

TIME FRAME FOR PRODUCING WEAPONS

Senator MATHIAS. Dr. Selden in answer to a question just now said that in his judgment the Osirak test reactor was of such size that it might have been capable of producing a small weapons program. But, Dr. Selden, you didn't put any time frame on that. I wonder if you would amplify on that answer.

Dr. SELDEN. Yes, Senator Mathias. The time scales always are very difficult because they are very subjective. One has to know a good deal about the nature of the program, the amount of effort that is being expended on it in order to make those judgments. The overall time scale for getting geared up to a weapons program is at a minimum a few years and perhaps considerably longer than that, depending on the competence and number of people who are involved in it.

It is always possible that a great deal of the work is done in advance of producing the fissile material, so that in fact the time scale would be the scale of actually producing the material. Let me just talk about this possibility. This reactor is technically capable of producing plutonium at a rate that would allow you to build a small number, maybe one or more depending on how one actually did that, from plutonium produced in the reactor each year.

Senator MATHIAS. What do you think would be the probable earliest date that that could have happened?

Dr. SELDEN. Probably in the time scale of 1 year or so as an absolute minimum. I would suspect the time scale would be considerably longer than that on the basis of making judgments about being geared up to do a weapons design program.

COULD WEAPONS PROGRAM BE DEVELOPED?

Senator MATHIAS. Let me ask the whole panel whether you feel that, in your judgment, the Iraqi technicians operating alone could have avoided both the IAEA safeguards and French participation to produce the results that Dr. Selden just has outlined for us, having in mind both the possibility of international inspections and the French participation. Is it likely that a weapons program could have been developed?

Dr. SELDEN. Let me just pass and say that I really don't know the answer to that. There certainly are a lot of problems.

Senator MATHIAS. I can only ask you for your best judgment on it.

Dr. SELDEN. It would be a difficult thing to get around the presence of the French there all the time, but I will defer to others who know more on that issue.

Dr. KOUTS. I certainly would agree with that. It would be a lot easier to get around inspectors who come infrequently and only go to selected areas than it would be to get around the French, who presumably would have a pretty free access to the facility and access at times of their choosing.

Mr. RICHTER. Senator Mathias, I would like to, in a way, second what has been said in that regard. I think as far as the IAEA inspections, in my mind there is no question that those could have easily been handled. The subterfuge could continue in the presence of the IAEA inspections. However, it depends, in the case of the French

technicians. We have to know what kind of arrangements the French had, what access did they have, would they be able to go into the Italian-supplied hot cells?

The Iraqis could very well say, you Frenchmen are entitled only to the part of the complex that you helped construct, but these facilities, this reprocessing plant, these hot cells, this fuel fabrication line, this conversion line where we are going to make the material, where we are going to irradiate it in the reactor and produce the plutonium and then process that plutonium, you are not entitled to go into those Italian facilities, so you stay out of there. The French probably would have little basis for disagreeing. So we don't know, but that is a possible line of reasoning.

Dr. KOUTS. May I follow that up a little bit, Senator?

Senator MATHIAS. Please.

Dr. KOUTS. If I were on a French team with this sort of thing in mind, knowing that I was not able to go into areas that Mr. Richter talks about, I would look for telltale things. I would look for very heavy casks which are used to transport irradiated uranium from one place to another. I would look for handling of material using such irradiated casks. I would look for evidence that material of this kind is being moved around or hidden. I would look for unusual operation of the reactor as you can see it on the strip chart recorders in the control room. Things of this sort are the kinds of things you would see even if you were not able to go into other parts of the facility.

Senator MATHIAS. You know, as I listen to you, Dr. Kouts, and to Mr. Richter, I am reminded of my Navy training many years ago in which we were taught how to recognize aircraft, whether they were friendly or enemy aircraft. There were two methods. One was called the wings, tails, and fuselage method, and the other was the total impression method. I would say that Mr. Richter is a wings, tails, and fuselage man, and Dr. Kouts is a total impression man in this matter. Is that a fair analogy?

Mr. RICHTER. I think so; yes.

Dr. KOUTS. Yes.

Senator MATHIAS. Dr. Kouts, you would feel that looking at a complex facility and realizing that it is a system rather than a single piece of equipment, you believe there would be some sign of activity that a trained observer would notice?

DIFFICULT TO HIDE PROGRAM

Dr. KOUTS. Oh, yes, sir. I believe it would be extremely difficult to hide all of this. From what has been published about the hitherto secret French-Iraqi agreement on French rights, I think it would have been very difficult for the Iraqis to conduct much of a program without a French determination that they were doing so. I am pretty convinced of that.

Mr. RICHTER. Senator, I think the one thing that we have to keep in mind is, you have to ask yourself, what is the purpose of Iraq buying 200,000 pounds of yellowcake? It is an enormous amount of uranium for a materials irradiation program, and it is also material that is outside of safeguards.

What is the purpose of Iraq having a pilot or small-scale nuclear reprocessing plant? I mean, that kind of facility, there has to be some

logical basis for having that kind of facility. What is the purpose of having very large capability, hot cells which are not necessary for radioisotopes, or an experimental irradiation program? You cannot look at these things in isolation. It is a system.

The whole thing is geared toward giving me the impression that they are going to embark on a program to do this; otherwise, they wouldn't go about acquiring this very sophisticated and costly technology. Certainly they can afford it. But why have these things unless there is something you are going to do with it? What are they going to do with it? They haven't explained that adequately.

PLANT NOT FIRED UP

Senator MATHIAS. Now, this plant had not been fired up, if that is the proper term to use. As an English major, I am not at all sure that it is the term to use. [Laughter.]

But if it had been in actual operation, I presume that the danger of some radiation damage to surrounding areas would be greater in taking it out than before it was fired up.

Dr. KOUTS. Yes, sir; that is correct. It would not be nearly as bad as has sometimes been said in the press, as you read in some places in the press. But it would be an undesirable situation.

Senator MATHIAS. Well, it seems to me clearly undesirable. But what is your estimate of what might have happened if it had been in operation at the time of the raid?

Dr. KOUTS. I think radiation levels in the immediate neighborhood of the wreckage might have limited access to a lot of places. But radioactivity would not have spread very far.

Senator MATHIAS. What linear distance would you estimate? I know I cannot pin you down exactly, but what is your judgment?

Dr. KOUTS. Well, shall we say 1,000 feet, something like that. That is just a number out of the air.

Senator MATHIAS. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Mathias.

Senator Glenn.

Senator GLENN. Thank you, Mr. Chairman.

ATTENTION FOCUSED ON NONPROLIFERATION POLICY

Gentlemen, you represent a rare combination of expertise before us here today. We appreciate your being here with us. I think we also have a rare opportunity here in that, difficult though it has been to keep any attention centered on the nuclear nonproliferation policy, world attention finally has been focused by what has happened. So, I think we have a rare opportunity here. Your expertise adds to that.

Dr. Selden, you were one of two physicists who was given the task of the Nth country experiment in which you were to take unclassified material and see if you could design a bomb with that material. The fact that you not only did that but went on to other endeavors indicates that it can be done. We have the Rotow hearings that we have had here before and the others that did the same thing.

Dr. Kouts, you bring a whole different expertise to this area and your statements about IAEA in effect being the only game in town is correct. We do not have any other method. Mr. Richter has worked in that system and shows us some of the deficiencies of it.

Rather than trying to detail this to the point of whether it was or was not a subterranean place or could have been something like that, I would like to concentrate what time I have this morning at least in this round of questioning, on what we can do about this. I think if there is one thing that can come out of this that is constructive it is not nitpicking whether there was a room or was not whether there was or was not something else, but I think we can learn some lessons. The world finally has put on notice that we really do have to do something about nuclear proliferation.

Mr. Richter, I agreed 100 percent with that part of your statement which said no better time is likely to exist in the future for improving the IAEA safeguards system. We could do this with a materials accounting system probably in the earlier days of nuclear expansion around the world. Perhaps that was the best we could have done at that time.

But science does not stay within national borders. This information has spread. While the danger has increased, I think we also now need to increase the capabilities of IAEA and of NPT and put teeth in the world's nuclear policy for the first time.

WORLD NUCLEAR POLICY BASED ON MATERIAL ACCOUNTING

We are dependent on world public opinion to be the enforcing mechanism and yet we now know that is not accepted by at least one country. So where do we go now with our world nuclear policy?

We have based it now on materials accounting, basically materials accounting alone. Would you gentlemen think that we also should renegotiate these things and add to that equipment accounting? Would that be a major step forward? I would solicit your comments on that.

I have a series of five things here that I would like to go through and get your opinions on as briefly as possible, on whether you think that would be a major step forward. What about equipment accounting?

MATERIAL ACCOUNTING INADEQUATE

Mr. RICHTER. I agree with you completely that the current system which relies almost exclusively on material accounting is inadequate to the challenge of safeguarding these increasingly more dangerous facilities which are being spread around the world. The point which I made in my testimony was that the hot cells supplied by Italy, the reprocessing plant, the fabrication line, those are not under safeguards and they should be under safeguards.

Why should they not be under safeguards? Why should there be a loophole where you can take U_3O_8 and simply by transferring it out of a particular cell, convert it to plutonium and do as you wish outside of safeguards?

I think it is very important that the safeguards be strengthened so that you look at the whole system, not just the facility in isolation.

SENATOR GLENN'S PROPOSALS

Senator GLENN. Our 10-minute period goes so rapidly. Let me interrupt you and read off the proposals that I will make. I am prepared to send a letter to the President today proposing that, among other things: No. 1, that we reopen the nuclear suppliers conference, because that is the immediate first step of where the material information, technology, and equipment comes from. So, No. 1, reopen the nuclear suppliers conference with a view toward establishing truly meaningful restrictions on dangerous nuclear trade and improving the international safeguards regime, including sanctions for violators. That would be in the short term. We could do that immediately.

No. 2, a little longer term: Begin planning for a world nuclear energy policy conference that would, among other things, discuss concerns for national security and their relationship to nuclear activities, as well as possible NTP revisions to deal with those concerns.

No. 3 is formulate a separate U.S. position on minimally acceptable restrictions on transfers of sensitive materials, equipment and technology, that the United States will stand behind unilaterally and use whatever leverage is available to induce others to adopt such restrictions.

If my time permits, a little later, I will go into details about the types of things that I think should be discussed at any nuclear suppliers conference immediately, which would let us stop the flow of what is going on around the world, at least on a short-term basis. But certainly part of that could be summarized with the following proposals:

That we not only establish IAEA materials accounting, which we do now, and you very eloquently have pointed out the inadequacies of that system: but second, that we require equipment accounting; and third would be full inspection of all facilities; fourth would be inspection at any time, "roaming rights" as they have been termed; fifth would be open all these records to public inspection; sixth would be try to set up some agreement for cutoffs, in other words, penalties for violations.

That ~~would~~ put some teeth in the world's nuclear policy, if we could get that type of agreement, it seems to me. The IAEA is not perfect, ~~but~~ as Dr. Kouts says, it is the only, and as I indicated a minute ~~ago~~, it is the only game we have. I think to start over and throw it out would be a tragic error in spite of its inadequacies.

I saw you gentlemen making notes. I would be glad to repeat any of that that you like. Is there any part of that that you see as being an insurmountable barrier? Is there any part of that proposal with which you would disagree, or do you have additions that we could put to that list, add to that list, that would make it better?

I would solicit whoever wants to comment. Dr. Selden?

RESPONSE TO PROPOSALS

Dr. SELDEN. Senator Glenn, I think that is a major step forward. Let me just agree in general with the technical issues that you suggest, but also address the broad context you started with.

It is obvious that one of the issues that we need to address is the creation of an international environment where there is stability

BEST COPY AVAILABLE

without the need for developing nuclear weapons. The material for weapons can come from isotope separation processes as well as nuclear energy sources.

But the safeguards issues that you have identified seem to me to be ones that are quite clear and come as a result of identifying those things that you need to do with reactors to generate materials for weapons. Identifying those things leads you directly to that set of specifics which you have listed.

Senator GLENN. Thank you very much.

Dr. Kouts, would you care to comment?

Dr. KOUTS. Yes; Senator Glenn. These are very laudable concepts. I am very much in favor of strengthening what we have. We have to realize that the present IAEA system was itself built on a bloody battlefield. It was built by negotiations inside the safeguards committee years ago, in which negotiations the people who took part told me at the time that they thought they got all they could.

It may be possible under the present circumstances to get more. If so, that is well worth going after.

I would be very reluctant to take unilateral positions. I think when we have taken unilateral positions in the past we did not get very far.

Senator GLENN. We did that with NNPA and we hoped other nations would follow our lead. NNPA was the first legislation that I know of in any nation of the world that put some teeth into nuclear policy. Now it has been far from perfect, but we tried.

Dr. KOUTS. We did try.

Senator GLENN. We need to make some changes in that, but that can be part of our reconsideration.

Dr. KOUTS. That would be wise. I think our leverage is much lower these days than it was at the time that legislation was passed.

Senator GLENN. And world attention now gives us more leverage, too, right?

Dr. KOUTS. Yes.

Second, safeguards on equipment is something I think we would have to go into quite carefully just to see what it all means. Certainly the work that has been done by the suppliers conference in this direction has been very good and could be strengthened, there is no doubt about that. But again, this takes political agreement by many other countries.

The third thing that struck me as I heard it was the business of throwing everything open to everybody. I think it would be tremendous if we could get that agreed to. It would be very hard to get this agreed to, because the Agency system right now is based, as Mr. Richter says, on secrecy. You hold all of this information very well inside the place.

I have always felt this to be a real deficiency and one that really cuts into the effectiveness of the system. If we could get it reopened, that would be great.

INSPECTION REPORTS MADE ONLY TO IAEA

Senator GLENN. If I could interrupt just for a moment, as I understand it the inspection reports are made to management only in IAEA. Even the country inspected cannot get a copy of the report and no other country can request a copy of the report and get it for

BEST COPY AVAILABLE

their inspection, to see whether they are living up to it or not. That just adds to it.

Mr. Richter, how about this whole list? Would you add anything to that or do you disagree with any part of it?

Mr. RICHTER. I would have to think about whether there would be some additional specifics that could be added, and under the pressure of this hearing I am not prepared at the moment to offer any suggestions.

However, I would say, as I think you indicated earlier, that the time is ripe to do it now. In addition to this attack on the reactor, I think the French Government that is in power now will be much more receptive than the previous one and will not resist the efforts of the United States to strengthen the Agency.

Senator GLENN. I see that my time is up. But I want to say that I think we are at a real watershed right now. I think finally and at last world attention has been focused on this by what has happened, and out of this adversity that we perhaps share at the moment here we can take the opportunity to make IAEA effective and to make changes in our own policy here and hopefully world policy which will give us better control than we ever have had in the past over this monstrous problem.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Senator Glenn.

Senator GLENN. Mr. Chairman, might I add, if there are other recommendations that you gentlemen have, I would appreciate receiving them from you.

The CHAIRMAN. Fine. We will keep the record open for that.

Senator Boschwitz.

POSITIVE OUTCOME OF THE RAID

Senator BOSCHWITZ. Senator Glenn, I certainly urge you on in that direction that you are going because, as I said yesterday, and as you say today, perhaps the real positive outcome of this raid will be that we achieve greater safeguards and that we get a handle on the proliferation of nuclear weapons, which I consider to be the primary problem that will face us and our children.

Senator Mathias to my right has asked, Mr. Chairman, most of the questions that I was going to ask. I think he must have seen my notes. [Laughter.]

DELAYS AND NOTICE OF INSPECTIONS

Mr. Richter, in your testimony you said in response to one of Senator Mathias' questions that the Iraqis required a good deal of notice to be given. In your testimony you talked about 3 weeks notice, I believe. Did the Iraqis require more notice than normal?

Mr. RICHTER. Well, they are in a difficult wartime situation. The last inspection that took place in January, the inspectors had to make a connection through Amman, Jordan, and take a bus all the way through Jordan before they could reach the facility. There were some logistical problems, so the inspections were delayed several times and there were a lot of diplomatic efforts involved.

This is not true just in the case of Iraq. It is true for almost all countries. We have to get a visa before we go. We cannot just hop on

a plane and show up in a country and do these so-called unannounced inspections. We have to go through the embassy of that country. We have to get a visa. That takes time. So that is a problem.

Perhaps, Senator Glenn, that is an area where we could make an exception where an IAEA inspector has the privilege to show up without going through the visa application route.

Senator BOSCHWITZ. And without notice.

Mr. RICHTER. Certainly without notice. But once you go through the visa application route, you have given them all the notice they need.

Senator BOSCHWITZ. That is right.

Senator GLENN. Why do you not give them a permanent visa so long as they are an inspector?

Senator BOSCHWITZ. Yes. The letter does not specifically say without notice, Senator Glenn. Perhaps that is implied. But that certainly would be an important aspect of it.

I will ask this next question of each member of the panel. I very much share the viewpoint of my colleague Senator Mathias that this has been a most instructive morning and a most helpful morning, and that we are certainly not people by and large, with the exception of Senator Glenn, who have expansive backgrounds in this area.

IRAQ INSISTED ON HIGH ENRICHED URANIUM

What conclusion do you draw from the fact that the Iraqis insisted on 92- or 93-percent enriched uranium, that they refused the less controversial alternative called caramel? I wonder if each one of you would respond to that.

Dr. SELDEN. Senator Boschwitz, that really has two sides to it, which is a part of the dilemma of this whole problem. On the one hand, a reactor that contains highly enriched uranium has the drawback of having to be supplied with that isotopically enriched material. It also is not a primary producer of plutonium in the way that a natural uranium reactor would be.

On the other hand, the highly enriched uranium material by itself is a weapon material. It is unclear that the specific uranium material in the reactor is significant in determining whether a weapons program really exists.

Senator BOSCHWITZ. Dr. Kouts?

Dr. KOUTS. Senator, I think the significance is not the one that seems to be implied in the press. It is the weapons significance of the material itself which is important. Caramel would be material that you would not use in a weapon, whereas the U^{235} , the highly enriched uranium which they are receiving, could be used in a weapon.

But that would not be the method to use. That would not be the path to take anyhow. Probably the significance is attached to the flux levels in the reactor as a result of the use of one fuel compared to another. You get much higher flux in a highly enriched uranium fueled reactor than in one with lower enriched uranium fuel. Now, that could be important for weapons production or it could be important for research, either one.

Senator BOSCHWITZ. Pardon me. Mr. Richter, what conclusions do you draw? Do you draw any different conclusions that have been stated?

Mr. RICHTER. No. I think Dr. Kouts is 100 percent correct. I have always believed, contrary to what appeared in the press, that the 93-percent enriched uranium, which can, by the way, be very well safeguarded by the Agency because we do have a handle on it—I want to make it perfectly clear that there are places where the Agency can do a great job.

But in this particular reactor it is the hot cells, it is the reprocessing line, where we cannot do the job. But the reactor itself, the fuel in the reactor, the spent fuel, the fresh fuel, we can track those very well.

So I never agreed with what had been written in the newspapers, that the U-²³⁵ fuel itself was the source of the problem. As Dr. Kouts said, the source really is the excess reactivity that you have available to you from the 93-percent enriched fuel, which enables you to place additional uranium target specimens both within the core and the blanket, and allows you to produce very much increased levels of plutonium.

That is the significance of the highly enriched uranium in my view, because I do not believe that the Iraqis are in a position to have a very sophisticated materials testing irradiation program. They are at a very low level in nuclear research. The idea that they are going to use these high flux levels for any meaningful experiments is to me ludicrous. That is the excuse that you get.

HIGH FLUX LEVEL

Senator BOSCHWITZ. Both you and Dr. Kouts used the term "high flux level." Yesterday, as the chairman, Senator Percy, pointed out, we had some testimony saying that this particular type of reactor was the worst possible one to use in making plutonium which would lead to the production of bombs.

You responded to that earlier and the response that I got when looked into that question was, well, this is a high flux reactor. I do not know what that means, exactly. Would you respond again to whether or not this is the kind of reactor that one would use?

Mr. RICHTER. I think that both Dr. Selden and Dr. Kouts, indeed we all agree that this is not the worst possible type of reactor. It is not the best possible reactor, but it is not the worst. The best possible reactors are those that the U.S. Government employs.

Senator BOSCHWITZ. Did the Iraqis attempt to get a better reactor?

Mr. RICHTER. They tried to get perhaps not the best kind, but the second best that was available, a graphite moderate material uranium reactor of the type which the French use. But the French know very well that this kind of reactor can only have one possible use to produce plutonium, whereas for the MTR one, the use is a little more ambiguous.

If you wanted perhaps to structure your reactors in terms of the ones that could be best used for producing plutonium for weapons, I think it is probably a heavy water type like we have in Savannah River, perhaps a graphite assembly, which is the kind they wanted to get from the French. And this particular material test reactor is also a very good one. So it definitely is in the category of very good as opposed to mediocre or poor. It was the only one that they could have available to them, frankly.

Senator BOSCHWITZ. What does "high flux" mean?

Mr. RICHTER. It is just the number of neutrons which are available in the core. It is the density of the neutrons. The neutrons are what sustain the reaction, but the excess neutrons are those beyond what is required to sustain the reaction. They are available for conversion of the uranium to plutonium.

CONVERT URANIUM TO PLUTONIUM

So the higher flux you have the higher excess neutron, well, the higher flux you have the higher excess neutron inventory you will have available to breed or I should say convert, because breeding implies something else, uranium to plutonium.

Senator BOSCHWITZ. To convert, for instance?

Mr. RICHTER. Uranium to plutonium.

Senator BOSCHWITZ. To convert to plutonium, for instance, could 200,000 pounds of yellowcake natural uranium be put in the reactor as a blanket?

Mr. RICHTER. As a blanket and also inside the core. Earlier studies, had indicated that the blanket was the only feasible route, but subsequent studies have indicated that not only the blanket but the core itself is even a more valuable place to gain neutrons and produce plutonium.

Senator BOSCHWITZ. This reactor being a high-flux reactor could produce more neutrons, that would convert the yellowcake or the natural uranium?

Mr. RICHTER. Yes.

Senator BOSCHWITZ. Do either one of you gentlemen wish to comment on that?

Dr. KOUTS. That is about as close as you will come without a mathematical definition, Senator.

Dr. SELDEN. That is right. High flux means that it all happens in a relatively small space. There is a fact that was brought out earlier, which is that U.S. plutonium production reactors are of a different type. They are heavy water reactors, which is quite different from this reactor.

Senator BOSCHWITZ. Thank you, Mr. Chairman.

Senator MATHIAS. Would the Senator yield his last 30 seconds to me to follow that up?

Senator BOSCHWITZ. Of course.

FRENCH REPROCESSING PLANT

Senator MATHIAS. Are you familiar with the French reprocessing plant at La Hague? And it is the French program, is it not, to try to get all the spent fuels with which they have been associated back at La Hague, and for which they charge a fee and exercise control? Was there an arrangement of that sort with the Iraqis, so far as you know?

Mr. RICHTER. Yes. The French insist, as far as I understand it, on retrieving the U^{235} fuel after it is no longer useful for continuing irradiation. The point that is of importance here is the fuel itself will not be the source of the plutonium, because that fuel does not have uranium-238 to produce plutonium. It will be the U^{238} specimens inserted in the reactor which will be the source of the plutonium,

not the fuel itself. That fuel will be very well safeguarded, I can assure you.

Senator MATHIAS. Thank you.

The CHAIRMAN. Thank you, Senator Mathias.

Senator BOSCHWITZ, we have been looking for a technical counterpart on our side of the aisle to counterbalance Senator Glenn. You just keep plugging away at it and you may make it.

Senator GLENN. I think my technical expertise is overrated, Mr. Chairman.

The CHAIRMAN. Let me say that, for the benefit of our witnesses in the next panel, we will complete this panel and keep the record open for further questions to be submitted to you, but we will complete it with the first round. Our next panel will be called at approximately 12:15. We will stay right in session until such time as we complete the session this morning.

Senator SARBANES?

Senator SARBANES. Mr. Chairman, I will defer to Senator Cranston, I know he has been here all morning, and I will ask my questions after he has his turn.

Senator CRANSTON. Thank you very much, Paul.

ENDORSE GLENN PROPOSALS

First, I wish to endorse wholeheartedly the recommendations made by Senator Glenn for strengthening the procedures for inspection of nuclear plants around the world. I specifically endorse the recommendation that the records revealing what has been found in those inspections be made public.

In regard to the classification discussion we had a while ago, we now have some clarification concerning what was rather misleading information that we were given at 10:30 this morning by two State Department representatives, who disagreed with each other. It appears that the personal document given by Mr. Richter to the U.S. mission at the IAEA was not and never has been classified. We are now informed that the cable back to Washington from the U.S. mission which quoted this document in toto has been routinely classified secret.

Under such a procedure, the front page of this morning's newspapers could be classified by putting it in a State Department classified cable.

AGGRESSIVE COORDINATED PROGRAM BY IRAQ

I would like to address some questions to you, Mr. Richter. First, is it your conclusion, based on the available information, that this points to an aggressive, coordinated program by Iraq to develop a nuclear weapon capability during the next 5 years?

Mr. RICHTER. Yes, sir. That is exactly the point I made. Based upon all the evidence available, and the kind of facilities they have assembled, the material they have acquired, the limitation of the safeguards, the fact that the key sensitive facilities are outside the scope of the safeguards, I think this all points to the fact that they had a systematic, coordinated program underway.

Senator CRANSTON. Thank you.

In regard to the French-Iraq pact, about which we learned only yesterday, about which Senator Mathias has inquired, we have already seen just in the first few months of extensive French-Iraqi cooperation how unreliable such a secret pact is. The French went home for more than 6 months during the Iran-Iraq war and in fact were not fully monitoring the Iraqi site.

ISRAEL APPARENTLY UNAWARE OF IRAQ-FRENCH AGREEMENT

Israel apparently was not aware of the secret Iraq-French agreement. But even if Israel had known of the agreement, I can understand how a small vulnerable country like Israel might not want to put questions pertinent to its survival in the hands of a few French nuclear technicians, who worked and lived with their Iraqi colleagues in a country at war with Israel and pledged to Israel's destruction. Such a margin of error might simply be intolerable if you place yourself in Israel's shoes.

Further, Mr. Richter and Dr. Kouts have pointed out that the French technicians had no authority to inspect those portions of the Iraq nuclear program not supplied by France, like the Italian hot cells.

Mr. Richter, is it not a fact that IAEA technical specialists were deeply concerned about the direction of the Iraqi program, not just you but other experts there?

Mr. RICHTER. Yes, Senator Cranston. The IAEA had been quite concerned about the evidence which seemed to point to a capability on the part of Iraq to generate substantial amounts of plutonium in that reactor. As a consequence, the Director General had selected a group of what he considered to be his key safeguards technical specialists to look into this question.

STUDY PRODUCED FOR IAEA

As a result of their evaluation, a study was produced for the IAEA. It was informally transmitted to the IAEA by Professor Almenas from the University of Maryland, who happened to be a former professor of mine when I was there. In that study, he had calculated somewhere between 17 and 24 kilograms of plutonium which could be generated in that reactor.

Now, I want to say that I do not believe that Iraq would fully take advantage of this capability because to do so would require the Iraqis to make some modifications in that facility. They would have to augment the pumping capacity, they would have to add to the heat exchange capability. This might not escape the notice of the French.

But I would like to say that I do believe it would very likely escape the notice of the IAEA safeguards inspectors, because we generally do not concern ourselves with such detailed design verification.

But I believe that certainly something on the order of one bomb a year is very, very likely as a capability for that reactor over a period of 2 or 3 years, having gained experience in the interim in working with the plutonium. I say they have to go through a period of shaking down those reprocessing lines, and the cells which they received from Italy. They are going to have some initial problems and it is not going to be smooth sailing all the way. So I think you are looking at several

years before they would be in a position to produce plutonium, and then perhaps 1 or 2 years after that they might very well have a weapons capability.

Senator CRANSTON. I am going to try to cover a number of questions. If you give me brief answers, we can cover them all. If not, they will have to be in writing.

Did a number of IAEA technical specialists convene an extraordinary meeting earlier this year to discuss their concerns that clandestine plutonium production in Iraq might well go undetected by the IAEA?

Mr. RICHTER. Yes, sir.

Senator CRANSTON. Was that conclusion shared with the Agency's Deputy Director?

MARCH 10, 1981 MEMO

Mr. RICHTER. Not only was it shared, but I believe it was at his request that the study be made.

Senator CRANSTON. Regarding the memo of March 10, 1981, to Mr. Gruemm from Mr. Shea, the nine people, the specialists mentioned on this subject on the first page of the memo, are experts in this field?

Mr. RICHTER. Yes, they are experts in safeguarding by virtue of their long experience. Several of them are also very capable technicians and specialists.

Senator CRANSTON. Could you give me a brief summary of your understanding of the significance of that particular memo?

Mr. RICHTER. I think basically what the memo said was under the current IAEA inspection procedures the limitations under which we operate, the fact that those key facilities are outside the scope of the safeguards, we are going to have a very difficult time guaranteeing that that material has not been diverted.

Senator CRANSTON. The memo discussed, did it not, plutonium "diversion paths which are technically feasible"?

Mr. RICHTER. Yes. It refers to that.

Senator CRANSTON. Does that refer to possible plutonium diversion by Iraq?

Mr. RICHTER. Well, I think when you consider that this whole exercise was conducted with the Iraqi reactor in mind, although not specifically stated as such, but all the other parameters around the study are identical to the reactor one would definitely have to conclude that it was.

Senator CRANSTON. The memo states:

This concern would lead to the search for undeclared nuclear materials, and such efforts are not within the scope of INFCIRC-153.

Could you explain to the committee the significance of that statement?

Mr. RICHTER. The INFCIRC-153 is the basic document that encompasses the rights and responsibilities for safeguarding declared material and the facility that contains that declared material. Therefore, the other facilities, which do not contain declared material, are outside of our bounds.

That is what Senator Glenn had in mind through the changes he hopes will be implemented.

Senator CRANSTON. The memo states on page 2:

It was very unlikely that some member states would accept the inspection activities necessary. Extending safeguards for this purpose represents a fundamental change in the current scope of Agency responsibility.

Why do you think that statement was made?

Mr. RICHTER. Because INFCIRC-153 limits our ability, as I have just explained.

Senator CRANSTON. I have a couple of more points on those documents. Concerning the memo from Mr. Klik to Mr. Thorne dated June 3, 1981, would you identify who those people are?

Mr. RICHTER. Mr. Klik is the Director of the Safeguards Division, operations A, which primarily is the Far East section and the North American section, including Japan, Taiwan and South Korea, and Canada. Mr. Thorne is the section head of the Far East section.

SCORN PROPOSAL TO DETECT CLANDESTINE PLUTONIUM PRODUCTION

Senator CRANSTON. Mr. Klik suggests that an Agency proposal to seek to detect clandestine plutonium production:

Introduces an entirely new dimension in the safeguards policy whereby we go looking for clandestine installations instead of verifying statements. If we were to attempt to negotiate on the basis of this policy paper, the state involved would laugh their heads off.

Can you explain why states, parties to the IAEA, would scorn what seems to be an absolute must for the Agency if public confidence is to be justified, to seek to detect clandestine facilities in an effective way?

Mr. RICHTER. I think Mr. Thorne would not want to use those exact words if he knew they were going to be part of this record. I think he was really more explaining that they would meet with resistance.

I can understand the cause of his concern. It is that countries such as Japan and Germany, which are clearly not going to be embarked on a clandestine nuclear program, would feel that it was just too much for them to have this possibly overbearing presence of safeguards inspectors looking around at the large-scale material test reactors. He was concerned about perhaps jeopardizing the IAEA's and his very good relationships with those type of countries.

DISAGREE WITH DIRECTOR GENERAL'S CONCLUSION

Senator CRANSTON. I have one final question. Do you have any reason to disagree with the recent statements by the IAEA Director General that any significant plutonium production in the Osirak reactor would have been detected by the IAEA?

Mr. RICHTER. Senator, the thrust of my whole testimony today and what Dr. Kouts and Dr. Selden have also said was that it is clearly possible that Iraq could have thwarted the IAEA inspections. I know from my experience, having been to so many research reactors, how very easy it would have been for them to do that.

I just do not agree, I am sorry to say, with the Director General's conclusion.

Senator CRANSTON. Thank you very much. I want to thank you once again for your courageous and remarkably well-informed testimony and for the public and humanitarian service you have rendered. Thank you very much.

Mr. RICHTER. Thank you. It was a pleasure to be here and I really hope it does some good.

Senator CRANSTON. It will.

The CHAIRMAN. Thank you very much, Senator Cranston.

Senator PRESSLER.

Senator PRESSLER. Thank you, Mr. Chairman.

WEST'S POLICY ON NONPROLIFERATION

I want to join in the previous remarks. Is there a way that we can realistically improve the nonproliferation policies of the West, that really will work? I commend Senator Glenn for his suggestions and I join in supporting them. But there still will be a lot of loopholes; will there not?

Now, the West's policy on nonproliferation is different from that of the Soviet Union. The Soviet Union just held onto its nuclear technology and will not even let students from satellite countries become aware of how to handle nuclear matters.

But if we look at our policies, even if we add Senator Glenn's improvements, the Nonproliferation Treaty of 1968 is still inadequate. We have heard testimony this morning that about loopholes in the IAEA inspection system. Even if we had roaming inspectors, certainly you could not search an entire country.

We are probably guilty here in Congress in that our policies permit exceptions to the Arms Export Control Act and the Foreign Assistance Act. I know the Symington amendment on enriched uranium and the Glenn amendment on plutonium exist. But we make exceptions to those, as we did in the case of Pakistan in this very committee.

We know Pakistan is building a bomb. But yet we are continuing aid and so forth, and we made an exception.

My problem with this whole thing is the following. Mr. Chairman, I commend you for calling hearings in the nonproliferation area and I hope we hold them soon. I join you in that.

MANY COUNTRIES HAVE CAPABILITIES TO BUILD BOMB

But my problem is I feel we need a new policy because the present policy in the West has really been a disaster. There are probably 8 or 10 countries that have the capability of making a bomb. Even with the improvements mentioned by Senator Glenn, there still will be all sorts of loopholes; will there not?

Maybe we will have to go back to the days of Pax Britannica, when the so-called responsible powers limited by force what others states could do, as Israel did when it became apparent that somebody has a bomb or the capability to build it.

I mean, we are all happy with the proposals to improve the present system. But realistically is there any way to do it short of the way Israel did it?

Mr. KOUTS. I will try to answer you, Senator. There was a time during the negotiation of the NPT originally when something along

that line was tried by the nonweapons countries. There was an attempt made to get a commitment from the weapons countries that if any nonweapons country were threatened by some other country that had nuclear weapons, the other nuclear weapons countries would come to their aid.

STRONG COMMITMENT NOT MADE

This would be a strong basis on which to argue people out of getting their own weapons capability, because they would be protected anyhow. It might have been something, for instance, that would have worked in the Pakistan case, that kind of thing.

This was proposed to the United States, Britain, and the Soviet Union. Of course, everyone realized how useful that would be for the immediate purpose on hand. But it seemed to be a commitment we did not want to make, so a weasel-worded commitment was given in place of it. The strong commitment has not been made.

Now, you can still do something like that. But whether it is appropriate to do it, I do not know. Probably it is not appropriate to do it.

I would like to emphasize that the Agency safeguards that we have been talking about really are only one part of our nonproliferation program. They are intended to determine whether or not the undertaking that has been made under the NPT is being followed through. There are other ways by which we determine this, too.

Now, for our nonproliferation policy to work, we have to make sure proliferation does not take place. This means action is required once we determine that such a thing is taking place. This is only the information base on which you determine what to do, and it is what you do that matters. That is where I think strengthening could well be taken.

Dr. SELDEN. Senator, you are addressing a very broad issue and a very difficult question in terms of what will work. It is clear that nuclear weapons are a part, a very significant part, of an overall perceived need for a defense posture, or perhaps an aggressive posture, depending on the people involved. So the problem is one that is a very broad policy issue with respect to the relationship of nations with each other and their perceived needs to develop weapons. That is a major problem.

The safeguarding kinds of activities that are largely discussed, as Dr. Kouts has said, are related to nuclear energy installations and activities surrounding those with materials that we know about. In fact, I think many of the suggestions are very valuable because they would allow the energy generation potential of reactor technology to be separated from the weapons potential. But it still does not address the broader issue you suggest, because there are ways to acquire nuclear weapon capabilities, other than building nuclear energy facilities.

Mr. RICHTER. The only thing I could add to that is, I think the people who have partly contributed to the problem in recent years are among our closest allies. This is really in an area out of my expertise. I think that certain aspects of the Soviet philosophy with regard to proliferation is commendable.

PRESSURE ALLIES TO BE MORE RESPONSIBLE

I think we should bring to bear more pressure on our allies to be more responsible. I think the United States is definitely taking a much more responsible position these days in terms of what it will export and will not export. We should bring to bear as much pressure as possible on our allies to act in a responsible way. Short of that, there really is not much more we can do.

Senator PRESSLER. But as a practical matter we have to decide where we have to go from here. I think Senator Glenn's suggestions are good, but even with them you can still find enormous loopholes.

If the pattern continues, it will at some point just be unacceptable to us; would you not agree with that?

Mr. RICHTER. I tell you, frankly, when I look ahead I perceive a very gloomy future, I really do.

Senator PRESSLER. Even with the improvements the agreements just were not signed by other countries. They would not participate.

Mr. RICHTER. I think it is important to recognize that there are certain things that you can do to improve nonproliferation and things that you cannot do. Those things that you cannot do, you keep trying to do. You just cannot give up. It is too important.

Senator PRESSLER. I certainly agree.

ISRAEL DID THE ONLY THING THEY COULD

I began in these hearings to be somewhat of a critic of Israel. But as time has passed, I have come to believe, based on the information Israel had, it probably did the only thing that a country could do, and probably something our country down the road will do at some point. I do hate to predict that.

One thing we do need is to review, especially with the new administration, our arms control policy. We have had hearings on that recently, but I could not really understand what our policy is going to be. Hopefully, after the new ACDA Director is in place we will have a better chance to know. But I do think that this committee should continue in the area of nuclear nonproliferation hearings to come up with a new policy, because the present policy has been a disaster.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Pressler. Again, I would like to commend you on the close way that you are following nonproliferation matters as the chairman of a very important subcommittee.

Senator Sarbanes.

Senator SARBANES. Thank you, Mr. Chairman.

DISCRETE POINT IN SUPPLYING NUCLEAR TECHNOLOGY

Gentlemen, I would like to ask this question. Is there a discrete point in supplying nuclear technology at which you can look at what is being furnished by the supplying countries and say to them, you have moved from the arena of supplying technology that can be used only or clearly primarily for peaceful purposes into a technology that can be used for military purposes as well? Can you then continue along a spectrum that takes you into the technology that is the most military of all? Or is it intertwined at all points on the spectrum?

Dr. SELDEN. Senator, I think the answer is that there is a continuum and it is intertwined all along until a near end point is reached. The dilemma is that you can identify the technical needs for a weapons program. You can also identify the technical needs for an electrical generation program. The operation of the reactor and so forth are technologies that have a great deal in common and form a part of either program.

It would appear that the dilemma is to identify those aspects of the program that are specifically directed toward a weapon capability and be able to monitor those in a way that you would know whether or not the facility is being used for a weapons program.

Mr. RICHTER. I think in the particular case that we were discussing here this morning, you have to assess what facilities and equipment are being introduced and ask yourself whether they are consistent with what that particular country needs; is it consistent for a country that has no known record of doing irradiation experiments, studies on material damage creep, studies of material swelling, to have a high-flux material test reactor; is it consistent for a country that claims it does not want to make plutonium to have a plutonium reprocessing cell?

I think there comes a point where you can say that clearly there are inconsistencies between the needs and what they have obtained.

Senator SARBANES. Thank you.

Dr. Kouts.

ABILITY TO PRODUCE WEAPONS

Dr. KOUTS. Senators, I think there are really three ingredients to the ability to produce weapons. One is to have enough dollars to do it. Now, it does not take very many. Just about every country has that already.

Senator BOSCHWITZ. What was that?

Dr. KOUTS. Dollars, money. It is going to cost something to do it. You have to invest some part of your national resources into doing it.

Second is people; that is the most important of all. Dr. Selden talked about some of these requirements. If you have the people, you are 90 percent of the way there.

The third is some capability in light industry, the ability to build things to within a thousandth of an inch and to do it over and over again to the same standards. It sounds like something so common that you question whether or not it could be that important. But it is not that common everywhere in the world, except as a superficial layer in some countries. Some countries do not have this capability. If you have all three of these things, you are already there, because the information on how to do it is also there. It is all out in the open literature.

Senator SARBANES. If I came to you, Dr. Kouts and Dr. Selden, and sketched out a hypothetical, described a country of the level of economic development of Iraq, and then described a nuclear facility and program that they were putting into place, would you look at that and ask, "What is going on here? Where are they really headed? What is the purpose and intention of this program?"

Dr. KOUTS. [Nods affirmatively.]

Dr. SELDEN. [Nods affirmatively.]

Senator SARBANES. The trouble with the record is it does not usually reflect nods.

Dr. SELDEN. The answer is "Yes, it does leave some question about what is going on."

Senator SARBANES. Actually, it is the sort of thing that would ring bells and set flags flying as far as potential weapons use or weapons development.

Dr. SELDEN. That is right. There are enough inconsistencies in what we see to give us some concern.

Senator SARBANES. Dr. Kouts.

Dr. KOUTS. I thoroughly agree. The whole purpose of the exercise is to carry you to the point where you have to inject the political solution. You certainly have enough information to do that.

Senator SARBANES. This was Senator Mathias' question, and I want to be clear on it. Once this plant had been fired up, an Israeli effort to preclude further development along this path toward weapons, if that is how it was perceived, could not have been taken without creating a problem of radioactivity.

Is that correct?

Dr. SELDEN. You certainly could not blow it up without radioactive contamination of the immediate area, at any rate.

Senator SARBANES. Once it had been fired up?

Dr. SELDEN. That is correct.

AGREEMENT KEPT SECRET FROM IAEA

Senator SARBANES. Let me ask this question: Did the people of the IAEA have any sense of a secret agreement between France and Iraq, the one that has just been revealed?

Mr. RICHTER. I think it was secret, and to my knowledge, they did not know about it, because I believe I was well aware of nearly everything that was going on in the Agency in this regard. And I had expressed this concern many, many times. Somebody would have said, "Hey, don't worry about it, because it is going to be taken care of." But everybody would shrug their shoulders and say, "Yes, well * * *"

Senator SARBANES. Mr. Chairman, I would like to observe for the record that I find it absolutely incredible that a secret agreement, whose existence apparently was known to no one except the immediate two parties, should now be put forward as a restraint or protection which should have affected judgments on the potential use of this facility and where this program was going. No one knew about the agreement. There is no way it could have shaped the opinions of outside countries or outsiders—the IAEA, Israel, us, or anyone else—about the potentials here. It was kept secret.

I have seen some reports asserting that agreement, whose existence is now public knowledge, should have affected people's perception of the situation. It could not affect their perception of the situation if they did not know about it.

Mr. RICHTER. Senator Sarbanes, if I might ask a question which is the corollary to that statement, why would such an apparently beneficial oversight on the part of the French, be kept secret? Why did they not share that with the world and relieve their anxiety? That is an element that is missing.

Senator SARBANES. That is a further dimension, I agree. Looking at the agreement you have first to judge its efficacy; assuming it to

be effective, why was it not known? Then it could have had to enter into everyone's calculations of the restraints that existed upon the Iraqi nuclear program.

IAEA SUPERVISION EXCLUDED

The Italian hot cells were not under IAEA's supervision; is that correct?

Mr. RICHTER. That is correct. They were specifically excluded, and we have no design information on them whatsoever. Not only hot cells; we are talking about a major purchase of \$50 million worth of equipment which included pilot reprocessing facilities.

Senator SARBANES. In other countries, does IAEA face the same situation, in terms of matters being excluded from its supervision?

Mr. RICHTER. Iraq is the only situation where an NPT country appeared to be embarking upon a program that was going to produce clandestine material.

PAKISTAN AND INDIA OPENLY DENIED ACCESS

In my section, we are certainly faced with the same situation in Pakistan and India, but they have openly denied us access to all of their nuclear facilities. They are not signatories to NPT. We make inspections under what are called "special transfer agreements," where a country has transferred material to India, such as we have and the Soviet Union have, which entitles us to safeguard that particular material.

But where India has its own material where they are doing their processing and irradiations of their own material, they deny us access to that.

Senator SARBANES. But with respect to NPT countries?

Mr. RICHTER. This is the only case we have where an NPT country, which we usually do not worry about, gives us cause for great worry. If you look at all the countries where we make inspections, the ones that have signed NPT for political reasons just do not appear to be embarked upon a weapons program.

NUMBER OF COUNTRIES NOT NPT SIGNATORIES

The ones that have not signed NPT—and we can go through the list: We are talking about Argentina, Brazil, South Africa, Israel, India, Pakistan: I may have left out one or two, but we are talking about all of the key countries that are on the verge or already have it but are not considered nuclear weapons states—they have not ratified NPT. They have been forward and said, "We want to retain our options to do as we see fit."

Senator SARBANES. I think this is a very important point. Let me try to make sure I understand it. Looking at the range of countries, you have a number of countries who are not NPT signatories, where either they have made it clear that they are pursuing a weapons direction or there is very good reason to think it.

Then you have the NPT countries. You are stating that there is this concern at least about Iraq.

Mr. RICHTER. Yes.

Senator SARBANES. What about Libya?

Mr. RICHTER. Libya is not in my section. The Libyans are in a very early stage of development. They also have signed the NPT. I think they likewise will be a cause for concern. They have a research reactor under construction.

But since they are not in my section, I have not been intimately involved in what is going on there. They are in the section for Africa. We make the cut in geographical terms.

Senator SARBANES. Mr. Chairman, I see my time is up.

I would just observe that we have here the added dimension of a country that is using the NPT—certainly, that is what a lot of the testimony has suggested—as a cover for weapons development. That, of course, may establish a precedent which other countries may then choose to follow.

I asked about Libya. They could portray themselves one way through the NPT but then seek to use it as a cover, moving out of the category they would otherwise be in of NPT nonsignatories with all of the scrutiny and examination that brings with it.

Thank you.

Senator GLENN. May I make a brief comment?

The CHAIRMAN. Senator Glenn.

NPT NOT A PERFECT SOLUTION

Senator GLENN. I think we are aware of previous difficulties when we leaned on other nations such as South Korea and Taiwan. We have Libya that at least is rumored to be internationally out trying to buy a weapon—period—just buy it outright without going through the formulation stages we are talking about here this morning. We also have Iraq.

So there are four or five nations right there which under NPT were still doing some things. NPT, I agree, most of the 114 nations under NPT have been very good and they are abiding by this. But we have some of these now that we need to put a little more teeth into NPT, if we possibly can negotiate that in the future. So I would not want anyone to think that NPT is a perfect solution to our problems.

Mr. RICHTER. No. But as you just mention in the case of South Korea and Taiwan—and I am sure you know more about this than I do, Senator—apparently, we were successful. They do adhere to NPT fairly scrupulously.

Senator GLENN. There was a lot of backstage international political pressure that went into that, as some of the people behind you there can testify.

The CHAIRMAN. Gentlemen, I wish to thank you very much indeed. We have covered many of the areas that were covered with the Central Intelligence Agency yesterday.

That was in executive session, however, it was not available to the public. I think you have made a major contribution today to better public understanding and better understanding on our part as to the nonproliferation aspects of this, the nature of the international inspection system in this area, and what must be done to improve that system.

But I think the long-range implications of your testimony will be very apparent and extraordinarily helpful. We thank you very much.

I would like to insert in the record at this time without objection a report from the Congressional Research Service, Library of Congress, entitled "How Long Would It Take for Iraq To Obtain a Nuclear Explosive After Its Research Reactor Began Operation?"

A second report from the Library of Congress, "Possible Contamination of Baghdad From Bombing of the Iraqi Reactor."

And comments by the State Department on the statement of Senator Cranston at the Senate Foreign Relations Committee hearings yesterday.

[The documents from Congressional Research Service and comments from the State Department follow:]

HOW LONG WOULD IT TAKE FOR IRAQ TO OBTAIN A NUCLEAR EXPLOSIVE AFTER ITS RESEARCH REACTOR BEGAN OPERATION?¹

The Congressional Research Service frequently has been asked how long it might take Iraq to obtain a nuclear explosive after its research reactor began operation.

If the Iraq research reactor had been operated in typical research fashion, and if international inspectors and French technicians operating the reactor all could have been fooled, then some plutonium might have been produced and recovered annually from its operation. Such amounts, though, would have been small in comparison with the amount needed to produce a weapon. A guess would be no more than a kilogram a year in comparison with the 5 kg of plutonium needed for a sophisticated device and the 15 needed for a simpler device.² Keeping in mind that more plutonium would be needed in the laboratories and shops than finally goes into a device, the minimum amount needed might have ranged from 10 to 30 kg. Assuming then that as much as 1 kilogram a year might have been produced in routine operation, and disregarding the likelihood of detection by inspectors, observation or intelligence, one can guess it would have taken from 10 to 30 years for this reactor in normal operation to have produced enough plutonium for one device.

If, instead, the reactor had been operated solely to produce as much plutonium as possible, perhaps as much as 20 kilograms, but more likely 6 to 10 kg a year of plutonium might have been produced.³

If Iraq had equipment capable of processing the irradiated uranium to quickly recover this contained plutonium; if the design and engineering of the explosive device had already been done and was successful; if all parts of the device had been made and put together except for the plutonium; and if the unusual operation of the reactor could go unobserved, then some months after a full year of operation, Iraq might have enough plutonium for one sophisticated device. Assuming several months to fabricate the plutonium into already designed shapes, then Iraq in theory might have had one sophisticated device within two years. Note, if it is assumed Iraq could not design a sophisticated device, then perhaps more than two or more years of reactor operation would have been needed plus several months for reprocessing and fabrication of plutonium into previously designed shapes.

On the whole then, if the above series of assumptions turned out to be favorable, which seems unlikely, the reactor might have produced enough plutonium for a sophisticated device in about a year, or for a simpler device more than two years. Whether Iraq also could have completed development and engineering for a nuclear explosive within this time appears debatable, particularly if reliability and predictability in operation of the device were major design criteria.

¹ By Warren H. Donnelly, Senior Specialist, Environment and Natural Resources Policy Division, Congressional Research Service, the Library of Congress, June 18, 1981.

² These are the figures published by the Stockholm International Peace Research Institute.

³ 20 kg is the unlikely maximum. A more probable amount would have been 6 to 10 kg. These figures are based on information obtained by the author from the Arms Control and Disarmament Agency and DOE's Brookhaven National Laboratory.

A different set of suppositions begins with possible diversion by Iraq of replacement fresh nuclear fuel for the reactor. In theory, seizure of two fresh cores each containing 12 to 15 kilograms of highly enriched uranium would provide enough weapons grade material for one nuclear explosive. If the detailed design and engineering of the explosive had been complete and the device was already assembled except for its nuclear charge, then the time from diversion to completion of a device would be to extract the uranium from the fuel element plates, convert it into metal, fabricate it into previously designed shapes, and complete the assembly of the device. Depending upon assumptions about the quality of the technicians and their ability to handle highly enriched uranium without a disabling radiation accident, this could range from a few weeks to a few months. Note, the French government says that fresh fuel would have been made radioactive enough to require handling by remote control, which would have made more difficult the recovery of the enriched uranium.

In summary, if acquisition of nuclear weapons materials were the only limitation of Iraq's ability to produce a nuclear explosive and if Iraq could successfully make a sophisticated explosive in a first attempt—which are rather implausible assumptions—then Iraq might have had one plutonium device in somewhat more than a year or one uranium device within a few months. If a simpler design were used, the time for a plutonium device could be somewhat more than two years. As for a uranium device, it is not plausible that Iraq could divert enough fresh fuel to make one.

POSSIBLE CONTAMINATION OF BAGHDAD FROM BOMBING OF THE IRAQI REACTOR¹

Would bombing the Iraqi research reactor after it had gone into operation have exposed the population of Baghdad to radiation? This question has been frequently put to the Congressional Research Service.

The potential exposure of the people of Baghdad to radioactivity if the Iraq research reactor had been bombed after it began operation would have depended upon the amount of radioactive materials in the reactor, how much of it might be released, in what form, and the weather conditions.

The radioactivity in the reactor would consist of fission products in the core and in any blanket of natural uranium around the core. The radioactive inventory would be least just after a partial change of fuel for the reactor and greatest just before a scheduled fuel change. At that time, the reactor could contain about 2.4 kg of fission products in its core² and a much smaller amount in the blanket.³

For radioactivity to reach Baghdad, the core and blanket would have to be vaporized, the vapors escape from the building and be lifted by heat energy of the bomb to altitude, and then drift towards Baghdad, with the vapors condensing into particles which would begin to fall out under the path of the cloud.

To get some idea of how much radioactivity might reach Baghdad, it is assumed that:

1. The core is hit directly from above.
2. The energy released by the bomb would vaporize the core instead of simply smashing it into pieces.
3. The bomb would release enough heat to lift the radioactive vapor to altitude where it would begin to condense and fall out.
4. The wind is toward Baghdad and is moving fast enough to carry the cloud over the city before all of the condensed particles fall out.

¹By Warren H. Donnelly, Senior Specialist, Environment and Natural Resources Policy Division, Congressional Research Service, The Library of Congress, June 18, 1981.

²Operation of this type reactor requires about 1/4 of the fuel to be changed every three weeks. Just before a fuel change, one third of the fuel would have 30 percent burnup, one third 20 percent and one third 10 percent. If the core contains 15 kg of highly enriched uranium then the amount of U²³⁵ fissioned in the core would be

$$15 \text{ kg} \left(\frac{.3}{3} + \frac{.2}{3} + \frac{.1}{3} \right) = 15 \text{ kg} \left(\frac{.6}{3} \right) = 2.5 \text{ kg.}$$

which would give rise to that quantity of fission products.

³The amount of fission products in normal uranium present in the reactor would depend upon its quantity and how long it had been exposed to neutrons in the reactor. The source of the fission products would be fissioned U²³⁵, which is only 0.7 percent of the uranium. So most of the fission products would be in the highly enriched uranium of the core. If one excess neutron is available from each two fissions in the fuel and if all of these are absorbed in the natural uranium either to produce plutonium in U²³⁹ or fission in U²³⁵, then for every kilogram of fission products produced in the core, 0.5 kg of plutonium would be produced in the natural uranium and about 3 grams of additional fission products.

5. Half of the fission products present are lifted into the cloud, i.e. 1.2 kg.

6. Half of the cloud's contents fall uniformly over the city, i.e. 600 grams.

7. The area of the city is 78 million square meters (i.e. 10 km in diameter).

Using these assumptions, and without regard to their probability, the contamination of Baghdad could be

$$\frac{600 \text{ grams}}{78 \times 10^6 \text{ m}^2} = 7.7 \times 10^{-6}$$

grams of fission products per square meter.

The short term effect upon the people of Baghdad would depend upon the radioactivity of fission products. The intensity and nature of this radiation would change continually during the hours after the release of fission products into the environment, which prevents simple analysis. For purposes of analogy, one can estimate what the exposure would be if the contaminant was radium instead of fission products, for both radium and fission products are strong emitters of gamma radiation which would be the principle source of potential injury. Taking, for purpose of illustration, the radiation from a gram of radium to be roughly equivalent to that from a gram of fission products, which is a substantial simplification, then the contamination of Baghdad from about 8 micrograms of fission products per square meter could be thought of as approximated by about 8 micrograms of radium per square meter. Since the radioactivity of 1 microgram of radium is 1 microcurie, such contamination would be about 8 microcuries per square meter.

To cause an exposure lethal for half of those exposed, a person would have to receive a whole body exposure of 500 roentgens. A microcurie of radium causes an exposure of 1 microroentgen per hour at a distance of 1 meter from a source. So a contamination equivalent to about 8 microcuries of radium per sq. meter would cause an exposure of about 8 microroentgens per hour. At this level, a person would have to be exposed for many million hours to receive a potentially lethal dose.

Such a level of contamination would be detectable by sensitive instruments, but would not cause a possible source of lethal exposure.

A longer term risk which is the subject of continuing controversy would be the long term effect of ingesting small amounts of the fallout with possible appearances of cancer in some of those exposed many years later.

The earlier assumptions made in this analysis need some comment.

Assumption 1.—The bomb hit.

The probability of a direct hit on the core is small.

Assumption 2.—The effects.

A near miss could damage the reactor, perhaps break open the pool and cause a loss of cooling water, or jam the reactor controls so that it could not shut down. Either case could present a risk of local contamination of the fuel overheated and ruptured. However, most of the escaping radioactivity would be radioactive gases, iodine and xenon, which could be released comparatively slowly and present no noticeable radiological risk to Baghdad. If the reactor core were broken apart, there would be radioactive debris at the site which could be dangerous until collected and moved to safe containment.

Assumption 3.—Vaporization.

The reactor's fuel consists of a collection of plates each with 13 grams of highly enriched uranium in 220 grams of aluminum. The heat energy necessary to vaporize the 744 plates in the core would be large and seems unlikely to be available from a chemical explosive.

Likewise, while a chemical bomb might throw debris into the air, it seems unlikely that it could provide enough heat to lift a cloud to several tens of kilometers into the air. At lower altitudes, most of the radioactivity would fall to earth near the reactor.

Assumption 4.—Wind and weather.

On a purely random basis, the chances would not favor wind in the direction of the city with enough speed to carry the cloud.

Assumption 5.—The amount of fission products lifted.

An illustrative assumption. However, it seems unlikely that all of the vaporized material would be lifted and none thrown out at the surface.

Assumption 6.—The amount reaching Baghdad.

Again an illustrative assumption. The actual amount would better be estimated by the ratio of the area of the city to the total area receiving contamination. This would depend upon cloud height, precipitation—if any, wind speed, and possi-

bility of wind shear, i.e. lower levels moving in different directions. While uniform fallout would be unlikely, variations would have little effect on the main point of this analysis.

Assumption 7.—The area of the city.

In the absence of specific information, the area was roughly estimated from a map of Iraq which indicates the city would fit within a circle of about 10 km diameter.

While the question did not mention it, another group of people might be exposed to radiation as a result of attack on the operating reactor. This group would include the scientists, engineers, technicians and other workers at the reactor and the Iraq nuclear research center. The most likely result of a successful bombing which destroyed the reactor after it had started up would be dispersion of radioactive pieces of fuel and parts of the core within the reactor building perhaps outside it for several hundred feet. If some of these pieces were picked up and carried by an unsuspecting persons, they could receive a dangerous exposure. However, the radioactivity could easily be detected by simple monitoring of the equipment so that dangerous pieces could be quickly picked up and put into shielded containers to contain their radiation. How much the exposure to individuals might be is problematical, for it would depend upon so many assumptions. Presumably a few might be exposed to high, but not lethal, amounts while most would receive little.

CONCLUDING COMMENT

The assumptions about the bomb, its effects, and weather all would maximize possible contamination of Baghdad, which means that the likely exposure would be less, unless the attack was made with a nuclear weapon that exploded at ground level. That, of course, would change the entire situation.

In conclusion, the above analysis indicates it would be most unlikely for an attack with conventional bombs upon the reactor when operating to have caused lethal exposures to radioactivity in Baghdad, although some people at the reactor site might receive some exposure.

STATE DEPARTMENT COMMENTS ON STATEMENT OF SENATOR CRANSTON

At the request of the Chairman of the Foreign Relations Committee, the following comments are provided on Senator Cranston's statement.

We would note that our comments are partial and preliminary since we received Senator Cranston's statement late yesterday morning, and some of the referenced documents (which appear to be partial copies) only mid-day yesterday.

Certain general comments are in order.

First, we should reiterate that the IAEA safeguards system, though vital to the non-proliferation effort, is only part of that effort. Other elements of that effort include special restraint with regard to sensitive areas, and minimizing or avoiding presence of weapons-usable material, such as HEU. The fact that the IAEA does not possess such features as enforcement powers or intelligence capabilities has been clear from the beginning, and does not alter the importance of the monitoring function for which the IAEA is responsible.

Second, the IAEA safeguards system is under continual development and review, and application of safeguards at various facility types are evolving. The U.S. has been very active in participating in development of the legal and conceptual basis for safeguards and the practical and technical implementation procedures. The whole premise of these U.S. efforts is that developments and improvements are needed. We have worked extensively on strengthening the IAEA and its legal basis, and are determined to continue to do so. We are also devoting substantial effort to provide the IAEA with improved hardware and training. The fact that active debates and discussions evidently are taking place within the IAEA secretariat illustrates that they too are constantly reassessing their procedures to identify possible improvements. In fact, we are encouraged by progress made by Dr. Gruemm and his staff in upgrading and standardizing procedures.

Third, in commenting on this matter, it is critical to realize that the IAEA system is dependent in substantial measure on the *overall* respect with which it is regarded by its member states, and with which members of the agency staff can deal with each other. We are not prepared now to comment on legal considerations and the responsibilities of IAEA member states and agency personnel under the IAEA statute with regard to respect for confidentiality of information. But there are obviously limitations on the degree of detail the U.S. (or other member state) should expect to know with regard to internal and discussions and debate

of the IAEA. The IAEA and its staff has, under the agreements, limits with regard to disclosure of information obtained by the IAEA from member states.

We would hope to avoid, in addressing this issue, the compromise of the strong U.S. interest in preserving continued effectiveness in our workings with the IAEA. We would like to add our concern over publication of interoffice IAEA memoranda. The authors of the two we have been shown are diligent, responsible, and highly motivated inspectors with considerably more credentials and experience than the individual whose views are now being made public.

In his statement Senator Cranston challenged the judgments made by IAEA Director General Eklund that it would have been very difficult for Iraq to produce significant quantity of plutonium by misuse of the ORSIRIS research reactor without IAEA detection. Senator Cranston based his assertion, as we understand it, in large part on the views expressed by Mr. Richter. The diversion scenario to which Senator Cranston referred involved possible illicit use of undeclared natural uranium in the OSIRAK reactor during the interval between IAEA inspections. As we outline in an attached assessment, the plutonium production in a reactor such as OSIRAK would be modest, and IAEA procedures will be designed to detect such production. We would also note that there are other research reactor types, such as natural uranium reactors which are significantly greater plutonium producers.

POSSIBLE PRODUCTION OF PLUTONIUM IN OSIRAK

In order to make an estimate of the upper limits of possible clandestine plutonium production from a reactor of the OSIRAK type it is necessary to make several "high case" assumptions as to other capabilities which would become available. They are:

(1) Capability for the production or acquisition of metallic natural uranium dioxide fuel elements by Iraq. A capability to produce up to 200 elements a year is assumed;

(2) Reactor operation without start-up or other problems for at least 300 days/year at rate power, and availability of the necessary accelerated delivery of HEU fuel; (At this operation rate, several fresh cores per year are required. Thus, contrary to the implication in Senator Cranston's statement production could have been halted by France.)

(3) Natural uranium fuel elements placed both in and surrounding the reactor core in some way which would escape detection;

(4) Existence of facilities in which all of the irradiated natural uranium fuel elements could be reprocessed shortly after removal from the reactor.

The reactor operation for this scenario is the loading of 20 to 30 natural uranium fuel assemblies in the core and as a blanket surrounding the core at each refueling shutdown, assumed to be every 6 weeks.

Calculations indicate that the plutonium produced from this operation would be 5-10 kgs/years contained in 150-200 elements (5-7 tonnes uranium). These assumptions are not now credible in a variety of ways, such as with regard to absence of detection and presence of reprocessing capability and fuel fabrication capability. Even so, this "high case" scenario plutonium production, while substantial, is well below that cited in Senator Cranston's statement.

DISCUSSION OF IAEA SAFEGUARDS APPROACH TO OSIRAK-TYPE REACTORS

1. The IAEA has for some time recognized that its procedures should deal with the possibility of clandestine irradiation of natural uranium in a safeguarded reactor. In February 1979, in the official contribution of the IAEA to INCFE there appears the statement that one of the two basic diversion threats for reactors is "the use of safeguarded fuel for the irradiation of undeclared fertile materials (and consequent production of plutonium of uranium-2333)." This statement is in the context of power reactor safeguards, but the potential production capability of the larger research reactors is recognized, as is the fact that IAEA safeguards approaches for such reactors need to deal with this particular type of diversion strategy. The confusion on this point in Senator Cranston's statement seems to arise from the use of unassessed internal IAEA material representing preliminary views of a few individuals. Furthermore, the context in which this material has been quoted is not clear.

2. There is also confusion in the statement concerning the rights and responsibilities of the IAEA with respect to clandestine facilities. It is quite clear that the IAEA has no authority or responsibility to search a country for clandestine facilities. It is equally clear that the IAEA must, and does, take into account

in designing its procedures for facilities where safeguards are carried out the possibility that there may be clandestine facilities elsewhere in the country.

An essential and established part of the safeguards system is verification of the declared design of a facility where safeguards are to be applied. Where use of camera surveillance is to be considered, the verification of facility design includes verification of the integrity of containment to ensure that there are no routes whereby clandestine fuel elements could be secretly inserted and removed. If there are routes that could be so used, seals and cameras are used to detect misuse of such routes. These procedures are well established for power reactors but are also relevant to, and have been applied at, research reactors where these concerns might be relevant.

3. The question of whether such unreported or clandestine irradiation of uranium would be detected by IAEA safeguards at a reactor does indeed depend upon the nature of the inspection activities carried out. It is our understanding that the detailed arrangements under which IAEA safeguards are to be applied in Iraq are under negotiation. (The basic safeguards rights and obligations of the IAEA are contained in the Iraqi Safeguards Agreement, which is in force and which provides for the ad hoc inspections carried out to date.) As part of this negotiation, we further understand, the IAEA is in the process of deciding how best to detect clandestine irradiation. Camera surveillance, which we understand is used at some other research reactors, is certainly a prime candidate for this purpose. Other means, such as unannounced or surprise inspection, radiation monitors and crane monitors, may also be useful. Some combination is like to be best.

The production of a significant amount of plutonium would involve a relatively large number (in the order of hundreds, depending upon the particular scenario postulated) of natural uranium elements. Each time an IAEA inspection was to be carried out, such clandestine elements would have to be removed from the reactor, and concealed somewhere to avoid detection by visual inspection. This represents extensive fuel movement, detectable by camera surveillance and, because of the extent of the activity, distinguishable from movements involved in legitimate research irradiation activities. These clandestine elements, being highly radioactive, need to be stored underwater and, if, for example, were to be placed in the canal between the two reactors, would also be detectable by visual inspection. These visual inspection activities are normal for such reactors and coupled with camera surveillance and the verification of the HEU itself can provide effective safeguards.

We are in full agreement that it is essential that the IAEA be encouraged and fully supported to implement such an inspection system.

5. The amount of inspection activity under the Iraq safeguards agreement is not, as the statement asserts, limited to only three inspections a year. The effort is limited by Article 80(a) of that agreement to 50 man-days for route inspection. Additional effort is allowed for ad hoc inspections of receipts of fuel from other countries and for special inspections if the information obtained, inter alia, through route inspections is not adequate. This amount of inspection would not normally be carried out at a research reactor. The actual effort anticipated will be specified in the facility attachment now being prepared.

6. It is true that inspectors are individually accepted by inspected states. While there are certainly differences in the experience and training of individual inspectors, we generally believe that the IAEA inspectors are sufficiently motivated and geographically mixed that any collusion with inspected states is extremely unlikely.

7. Senator Cranston's statement says that the facilities provided by Italy would not be subject to safeguards. Under an NPT-type agreement, safeguards are to be applied at such facilities when nuclear material is present. While a state in principle might, in violation of such an agreement, not report the facility, that would seem very improbable when the existence was widely known and indeed the facility was built by foreign personnel.

The CHAIRMAN. Our final panel today will consist of Dr. Albert Carnesale of the John F. Kennedy School at Harvard University, and Mr. Myron Kratzer of the International Energy Associates, Ltd.

Dr. Carnesale and Mr. Kratzer, we welcome you to this panel. We appreciate your presence. I presume you both have statements that you will be making?

Mr. KRATZER. Senator, my statement is not a prepared one, but there are opening remarks that I can make.

Mr. CARNESALE. The same applies to me. Do you have any preference?

The CHAIRMAN. Why don't you start off, Dr. Carnesale?

STATEMENT OF ALBERT CARNESALE, JOHN F. KENNEDY SCHOOL OF GOVERNMENT, HARVARD UNIVERSITY, CAMBRIDGE, MASS.

Mr. CARNESALE. My assignment was to try to relate this event to the broader considerations of nonproliferation rather than to discuss specifically the Israeli attack.

It is important to keep in mind that we are focusing today on the relationship between the proliferation of nuclear weapons and civilian nuclear facilities. Control of civilian facilities only deals with part of the proliferation problem. We also have to deal with the incentives for proliferation, and we have to strengthen the disincentives for countries to acquire their own nuclear weapons.

But we must not ignore the relationship to civilian nuclear power and to civilian nuclear facilities. And we should keep in mind that this Iraqi facility is different from the kinds of nuclear power reactors that are spread around the world. The light-water reactors that are used to produce power are fairly well safeguarded under the current regime, because neither the fuel that they use nor the spent fuel which comes out can be directly fabricated into weapons.

So if you have reasonable safeguards and knowledge of the operating history of the reactor, you are in pretty good shape. And IAEA safeguards of light-water reactors provide two essential ingredients: adequate transparency and adequate warning time. With adequate transparency, you have a fairly good notion of what is happening at the facility. As to warning time for a power reactor, note that the time elapsed from when spent fuel would be diverted to when a nation might make a bomb from the plutonium in that spent fuel is substantially longer than for a reactor such as the one in Iraq. The Iraqis could take the highly enriched uranium and make weapons out of it very quickly.

There is a big difference between kinds of reactors, and we should not condemn the safeguards of power reactors as we look at the special case of this material testing reactor.

The real problem in safeguarding nuclear materials and safeguarding nuclear facilities is with what we call the sensitive materials, highly enriched uranium and separated plutonium, and also with the facilities that contain those materials.

The reactor in Iraq did contain highly enriched uranium which could be directly used for weapons. It did not contain separated plutonium and would not contain separated plutonium. It could produce plutonium; that is certainly true. But then that plutonium would have to be reprocessed; that is, separated from the other parts of the spent fuel elements. This could possibly have been done in the hot cells at rates that people have argued about before you today.

How do we deal with these sensitive materials? They are the real problem. That is what we should be focusing on.

First of all, we all are going to have to be willing to sacrifice something. Sometimes sensitive materials are convenient to use for

reasons that have nothing to do with weapons, but we should be prepared to give some of those conveniences in the interest of nonproliferation.

Highly enriched uranium and separated plutonium should be present only when absolutely needed for a legitimate reason. The burden of proof of need should be on those who want to have them present. And they should be present only in quantities that are needed.

Highly enriched uranium is not needed to produce nuclear power. We do not use highly enriched uranium in any of our power reactors. It is a convenience in certain kinds of research reactors. It does enable you to do certain kind of experiments that you could not do with moderately enriched uranium or low-enriched uranium.

But one pays a high price for that convenience in terms of the non-proliferation risk and in terms of the ambiguity of what the facility might really be used for. It is not absurd to use highly enriched uranium in a research reactor. We do it ourselves in civilian materials testing reactors. But you can do the experiments, although not as conveniently, with moderately enriched fuel.

To me, the cost in political terms, and in military terms, of having highly enriched uranium spread all over the place where it is not absolutely essential is just too high.

Plutonium also, it is worth noting, is not needed for producing power in the kinds of reactors that we use now. Separated plutonium would be needed for breeder reactors. And if the world is to move to a breeder economy or a so-called plutonium economy, we are going to have to find ways to deal with plutonium.

One of the things that is being worked on now is an international plutonium system. A number of countries are trying to negotiate such a system under the auspices of the IAEA. If such a system is to have any meaning at all, it has to be transparent: people must know where the plutonium is. And it must provide adequate warning time: you cannot just come in and get your plutonium, run home, and put it in bombs.

There has to be some inertia in the system. And there has to be demonstrated need for the plutonium.

We have heard this morning some ways that one might improve safeguards. The frequency of inspections is an obvious one. The freedom that the inspectors might have is another obvious one.

One that was not talked about too much but would have been very helpful or could be very helpful with the kind of reactor that is in Iraq is the quality of surveillance. If, for example, you had tamper-proof TV coverage and camera coverage of that facility, including the swimming pool, you would have gone a long way to making any of the plutonium scenarios easily detected. That is a technology that is readily available. We are not talking about some far out wild dream in some technician's eye.

We need comprehensive safeguards. They have to be full scope. It just is an accident of history that some of the facilities you have which clearly might be useful for producing weapons might be under safeguards and others might not. That just does not make any sense at all.

We have heard this morning about the problem with some of the facilities provided by Italy. The reason those are not subject to safe-

guards is because the Iraqis at this stage maintained that they were not being used for uranium, thorium, or plutonium.

If the Iraqis were to state that they were adhering to the NPT, but were going to separate some plutonium, those separation facilities automatically would come under safeguards. Any irradiated uranium would come under safeguards. All of the facilities that are relevant to the manufacture of nuclear weapons should be safeguarded.

The classical objective of safeguards is to deter diversion of nuclear materials to nuclear weapons. But that is not the only objective. The other objective, which is at least as important, is to give confidence to other nations that material is not being diverted. It is not just a deterrence action. It is the notion that we know what is going on there. And that, to me, was more of the problem in the Iraqi case. I do not think the Israelis felt quite confident that they knew what was going on. There was a bit too much ambiguity.

We all have to sacrifice, as I have said, to enhance nonproliferation goals. We have to recognize that there are reasons for wanting sensitive materials and facilities in addition to wanting to produce bombs. One such reason is nuclear research, just advancing knowledge. These countries do have nuclear scientific establishments. And as one who is trained as an engineer, I know that one wants to practice one's profession: to make bigger and better whatever it is. And whatever it is might be isotopes for hospitals or it might be bombs.

One might want to use sensitive materials for nuclear power reasons, to reduce dependence on others, to become more self-sufficient. These are strong motivations that we have ourselves, and so do others.

Prestige was mentioned earlier as a motivation for national airlines. There are other examples that might strike closer to home. The United States did not go to the Moon for microeconomic reasons. That had nothing to do with it. There were good reasons for having a space program, but they didn't include dollars or "a need to go to the Moon."

The Space Shuttle is another good example, because of its ambiguity. If I were a Russian, I would think it had important military implications. That does not mean that the only reason for the Space Shuttle is military, but we do not have to deny that it has military implications.

Finally, one may want sensitive facilities simply for a weapons option. You realize we are talking about a country whose potential adversary has nuclear weapons. It is not absurd to think Iraq might have wanted to keep the option open.

We have to keep our priorities straight. Proliferation is one of the greatest threats to the survival of mankind, not to mention to the security of the United States. These factors of convenience and prestige pale by comparison.

There is one message I want to leave with you: Do not throw out the baby with the bath water. Safeguards continue to be very, very valuable, especially with regard to civilian nuclear power reactors. There are many of them around. Safeguards have been very effective and are very effective in that domain.

There is room for improvement of safeguards but because they are not perfect in some kinds of facilities, let us not badmouth them too much and find ourselves without them. Our problems would be

multiplied manyfold if there were no safeguards on all of those light-water reactors around the world, each of which, by the way, produces about 650 kilograms of plutonium a year, 10 times more than this Iraqi reactor, depending on whose estimates you accept.

If you did away with safeguards on those reactors, think of what our problems would be like—650 kilograms per year of plutonium per reactor. We have a clear need for safeguards to provide adequate protection in reality and in perception.

As far as the Israeli action is concerned, or other actions like it in the future, this must not be considered as acceptable behavior.

If you are a party to the NPT, if you adhere to safeguards, if you have obeyed all the rules, and still the United States says that it is all right for someone to destroy your facilities, then: Why should anybody adhere to the NPT? Why should anybody allow international inspectors in? Why should they permit safeguards? For what reason? Why should anybody forgo the advantages of using highly enriched uranium? Why should anybody forgo the advantages of using plutonium? Why should anybody forgo a weapons option?

The solution to that is to improve the rules. The solution to that is not to throw away the regime that we now have.

Let me reiterate two things. Consider first the feeling that the horse is out of the barn with nonproliferation. Well, some horses are out of the barn, maybe 6 or 8 or 10. But we have got 140 horses that are still in the barn. Let us not burn down the barn. Let us not throw away what we have.

The other thing that I wanted to reiterate is that civilian nuclear facilities are only part of the proliferation problem. A comprehensive nonproliferation policy involves a lot more than safeguards on civilian nuclear facilities. It relates directly to alliance structures. It relates directly to security guarantees. It relates directly to our rhetoric about nuclear weapons: Do we consider nuclear weapons to be the most important thing in the world? It relates directly to the political influence that countries have when they do not have nuclear weapons. And it relates directly to the control of our own arsenals.

The United States has over 15,000 nuclear weapons, yet we tell the rest of the world that we are going to increase the number, and we are going to enhance their characteristics, because the 15,000 are not quite right. And we tell each other country that for its security, it is inappropriate to have even one. I just do not think that is going to wash for very long.

Thank you, Mr. Chairman.

Senator BOSCHWITZ [presiding]. Mr. Kratzer, we have a vote on, so we are going to be sliding in and out. It is the desire of the chairman to continue the testimony through the vote.

If you would proceed, I ask you to please excuse us as we get up and down. And in the event that I leave, please go over what you said after I come back.

STATEMENT OF MYRON KRATZER, INTERNATIONAL ENERGY ASSOCIATES, LTD., WASHINGTON, D.C.

Mr. KRATZER. Thank you very much, Mr. Chairman. As the last of your witnesses this morning, I think it would be very difficult for me to be original. If you gentlemen are going to be gone from time to time,

I think almost by definition you will not be missing a great deal, because so much of it has been said, and said very well.

I wanted this morning to address myself to the question of safeguards and its role in the broader nonproliferation system that has been touched on. It is a system that I think has been aptly called the nonproliferation regime. It is important to recognize that safeguards are part of that regime. They are a very important part, but they are by no means all of it.

Let me just identify briefly what some of the other important elements of the nonproliferation regime are. First of all, we have the bilateral and occasionally multilateral agreements for cooperation between parties. We have 30-some-odd of those agreements ourselves. These are the instruments by which we agree to cooperate with other countries in exchange for controls that give us assurance that our cooperation will not be turned to military purposes.

These are the agreements in general which contain the underlying commitment of countries that they will not engage in military activities at least with regard to help and assistance that they get from a particular contributor or supplier.

Second, we have the IAEA itself, its statute and the organization which has come into being under that statute. It implements not all but a good part of that cooperative regime. It, in turn, supplies cooperation or extends cooperation in exchange for these controls, these safeguards which countries give.

We have the Non-Proliferation Treaty, and that is extremely important, and I will not go into the obvious reasons why it is. The treaty filled a very important gap that existed before its existence, by making it possible for countries that were willing to adhere to it to put not only selected facilities under the safeguards of the Agency but their entire nuclear activities; to pledge, in effect, that they would not engage in the production or development of nuclear weapons or their acquisition by any other means.

A very important part of the nuclear nonproliferation regime is export policy. And that comes in two kinds: It comes in terms of national policy. We have it here. We have the Nuclear Non-Proliferation Act. We have the provisions of our many agreements, and we have national policy which implements those agreements and that legislation.

But in addition to that, there is another extremely important aspect of export policy, and that is the concerted export policy that suppliers have agreed to follow. We have the London suppliers guidelines, as they are usually known, under which almost all, I would say, of the both present and prospective important suppliers of nuclear cooperation and nuclear assistance, materials, and the like, have agreed to follow some very important restraints.

We have, finally, what I would call a very broad consensus—we would like it to be universal, but it is not—that nuclear weapons are not a wise choice for countries to make to improve their national security. They often give evidence of this, some 140 countries have, by adhering to the Non-Proliferation Treaty. In general, the consensus against the use and acquisition of nuclear weapons has been adopted, and it operates importantly not only on the countries which share it but on the countries which may not.

I have talked largely in terms of that part of the proliferation issue which arises out of the use of nuclear energy for civilian purposes. And as Mr. Carnesale has just said, that is really only a part of the issue, although it is a very important part.

But we cannot forget, if we want to put this problem into perspective, that there are other ways to go about getting nuclear weapons and nuclear weapons material and there are other activities that do not have anything directly to do with nuclear power and the peaceful uses of nuclear energy which are designed to avoid that-taking place: incentives which we give to countries, guarantees which we give to countries to decide that their best interest, and their national security interests in particular, are best served by not acquiring nuclear weapons.

Now I want to turn to the safeguards which have been the focus of much of our discussion here this morning. I would like to say what they are, and I would like to say what they are not.

They are not a system for preventing by the imposition of any physical barriers the diversion of materials to nuclear weapons or to other unauthorized purposes. They are a system for detecting diversion and through that detection, deterring it.

Safeguards are not an intelligence system. They are not an intelligence system which allows the International Atomic Energy Agency to search out broadly in a country facilities which might be designed to have a nuclear purpose but which have not been so declared, even if by having such facilities a country is in violation of its agreement.

But I do want to emphasize—and I want to return to this point later that the IAEA does have very broad rights for pursuit of nuclear material, not simply nuclear material which has been declared, but nuclear material which in any way can be traced to declared nuclear material.

Under the NPT and under the agreements which have come into being under the NPT, under the IAEA safeguards system and the agreements by which it is implemented, the obligations of the country—and I want to emphasize this, and I am going to return to it later—the obligation of the country is to put all of its nuclear material under safeguards, all of its nuclear material is subject to safeguards. And that obligation has nothing to do with whether or not that material is declared.

The Agency's right and the Agency's obligation is to apply its safeguards to all of the nuclear material which is in that country, and that obligation and that right have nothing to do with whether or not the material is declared.

Now, let me turn to just a brief rundown of how we got where we are. Safeguards are evolutionary. It is really quite an unprecedented step. It is a major departure in our foreign policy, in international relations in general, to have international undertakings, these pledges not to engage in the production and the development of nuclear weapons, subject to verification.

For centuries, I suppose, the history of the world was that countries agreed to do certain things with other countries and they may or may not do them, but there was no way until an overt violation occurred to verify that that in fact was being done.

Secondly, safeguards are very much an evolutionary thing because they are new. It has gone along step by step. I can remember that we originally negotiated safeguards to apply to reactors of less than 100 megawatts. That was later extended to apply to larger reactors. We then tried to extend—and we were successful in extending—the system to more complex facilities which handle material of a sensitive nature in bulk; reprocessing facilities and the like.

In doing that, we were able to get international agreement on the very important principle that there could be continuous inspection—it is sometimes called “resident inspection”—at those very sensitive and important facilities.

Finally, the NPT came long, and there was a general feeling that the safeguards system ought to be reviewed in light of this very new development that not simply selected facilities in a given country but all of the country’s facilities would be subject to safeguards, all of its material would be subject to safeguards.

And this opened certain opportunities for rationalization of the system, certain opportunities for cross-checking the material which left one facility and reached another facility and so on. But it also placed a very large new obligation on the Agency, which demanded that it use its resources in the most rational way possible.

Now, the effort which that led to was undertaken around 1970 in negotiations in Vienna, the development of the Agency’s safeguards system applicable to countries which are parties to the Non-Proliferation Treaty. And that system has the rather unlikely and unpronounceable name—it has been referred to here earlier today—of INFCIRC-153, which means information circular 153.

This is a system developed to guide the Agency as well as the parties to the Non-Proliferation Treaty as to the manner in which safeguards would actually be applied to them under the treaty.

And I think that I could do nothing more constructive this morning than to cite some of the provisions of this document which is, of course, a public document. And we, as well as other members of the Agency, gave it our support. I will try to be brief, but I think when I do this you will recognize that it does not conform in many important respects to some of the impressions which might have been left here this morning.

First of all, let me cite article II. Application of safeguards, which I have already referred to. “The Agency should provide for the Agency’s right and obligation”—and I will leave out some of this.

Senator BOSCHWITZ. Pardon me, Mr. Kratzer, I do not want to be discourteous or interrupt your testimony. I am not sure if the chairman will get back in time to relieve me so that I can leave to vote. I would like to ask for a short recess until the chairman or I return. I would like to hear your testimony. It is a very interesting development historically of the various safeguards that do exist. I will be right back.

Mr. KRATZER. Thank you, sir.

[Brief recess.]

The CHAIRMAN [presiding]. Mr. Kratzer, would you please continue where you left off? We are sorry for the interruption by the vote.

Mr. KRATZER. Thank you, Mr. Chairman.

I think I perhaps had gotten to the only part of my presentation which has not already been very well covered anyway. So I would be very happy to do that.

I was citing certain provisions of the Agency's safeguards system, INFCIRC-153, to provide a flavor of how this document works, how the system does in fact apply safeguards to parties to the Non-Proliferation Treaty.

The first provision of that which is important is article II, or paragraph 2 of it, which states that:

The Agency has the right and obligation to apply safeguards to all peaceful nuclear material within the territory of a state.

The obvious importance of that, Mr. Chairman, is that the Agency safeguards are applicable not simply to material that is declared but to material that is there whether it is declared or not. If it turns out that there is material in the country subject to safeguards which is not declared, then a violation has occurred.

I think it is interesting that on September 23 of last year the IAEA issued a press release, entitled "Iraq and the Non-Proliferation Treaty," which stated, in part, that, "IAEA safeguards would also cover any other facility"—it was talking initially about the Osirak reactor—and it goes on to say that, "IAEA safeguards would also cover any other facility which may be put in operation and any other nuclear material which Iraq may import or produce."

So I think there has been some misconception as to whether this so-called undeclared material is in fact subject to safeguards and whether plutonium produced from its use would be subject to safeguards. It clearly would be.

I would next like to touch on the question of what the Agency does in its safeguards system to perhaps deal with this contention that we find on many occasions, that it is simply an accounting system which largely takes the state's results and accepts them.

Now, this was bitterly debated in the development of this document in 1970. And in paragraph 7 it states that the Agency is to verify the findings of the State system, not simply to determine that they have a system or even to determine that they have a good system, but to verify those findings themselves and to do this by independent measurements and observations.

Let me turn next to another paragraph which is directly related to that and which I think helps one understand how the Agency does this. This is paragraph 29 of the document. It again deals with the question of whether the Agency system is simply an accounting system, a system under which people fill in blocks and come back to describe how much material they saw and whether the numbers add up.

Paragraph 29 says:

To this end, the agreement—meaning the agreement between the Agency and the state—should provide for the use of material accountancy as a safeguards measure of fundamental importance, with containment and surveillance as important complementary measures.

And I think the meaning of containment and surveillance—and particularly of surveillance—is quite clear here. The Agency' inspectors are supposed to go out and they are supposed to look at what is going on and they are supposed to go back and report on what is going on.

There is also, I think, some misconception as to the role of the Agency's new system, the one applicable under the NPT, in regard to facilities. Certainly, the system does focus on nuclear materials. I think this is a proper focus. It is, after all, the diversion of material which has to take place before an undesirable result, the unauthorized development of nuclear weapons can occur.

But obviously, also, those materials are produced in facilities, and this document deals in considerable detail with the question of facilities.

Under paragraph 8, a State which is safeguarded under this system is required to inform the Agency of the features of facilities which are relevant to safeguarding such material. That is expanded on in several provisions of the document, paragraphs 42 to 48, which require the State to provide design information on facilities into which safeguarded nuclear material will be introduced before that introduction takes place.

And it also gives the Agency, under paragraph 48, the authority to inspect, to verify that the facilities are built as designed; in other words, to inspect those facilities before the introduction of special nuclear material.

So the concept that the Agency has no authority to look at facilities as such and that it has no authority to look at facilities before material is placed in them is incorrect. And we find in paragraph 106, I believe, a definition of facilities which states that:

A facility means a reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant, or a separate storage installation, or any location where nuclear material in amounts greater than one kilogram is customarily used.

Now, that I think more or less covers the waterfront. Those are facilities as defined by the document. The Agency has the right to receive design information on them, it has the obligation to verify that design information, and it clearly has the right and the obligation to inspect them routinely when they do contain safeguarded material.

Another important provision of the document—and I might add that most of these provisions were not present in earlier Agency safeguard systems; these represent upgradings of the system in several very important respects.

One important provision of the document is what do you do about the findings that the Agency gets. And under paragraph 19 the Board of Governors of the Agency, on the basis of information supplied by the Director General—and I think it is interesting that what the Director General is to supply is not simply accountability information but all relevant information—the Agency must make a finding if it is not able to verify that there has been no diversion.

Now, I know those words are hard to follow, but it is important. In other words, it does not have to establish that there has been a diversion. It simply has to be unable to find that there is no diversion before it is to come in with a finding that there has been a departure from the agreement and to take the actions which the statute authorizes in those cases.

Next, we have had considerable testimony here this morning concerning whether certain quantities of natural uranium that might have been delivered were under safeguards or not. And this is dealt

with by a particular set of provisions of the document, paragraphs 33 and 34, which deal with the starting point of safeguards.

Paragraph 33 says that the agreement should provide that safeguards do not apply to material in mining or ore processing activities. That means, I think, clearly that once material leaves those activities it is no longer covered by that exemption.

It next states that when material—natural uranium in other words—is transferred to a state even though it is not yet purified material suitable for either introduction into a reactor, or introduction into an enrichment plant, that the exporter, if he is a party to the treaty—obviously, the Agency cannot impose this obligation on nonparties—the exporter, if he is a party to the treaty, is required to inform the Agency of the export; the recipient, if he is a party to the treaty, is required to inform the Agency of the import.

So that even this nonupgraded material, sometimes referred to as yellowcake, must be reported to the Agency upon its export and it must be reported to the Agency by the importing state if it is a party to the treaty.

This is a form of safeguards. It is not the full safeguards involving reporting and inspection and so on. That is made clear by the last paragraph, of the last phrase of paragraph 34, which says that once that material is upgraded into a form which allows it to be placed in either a reactor or in an enrichment plant, that it becomes subject to the other safeguards procedures specified in the agreement.

I can remember that we argued for quite some time in Vienna in 1970 to get that word “other” in there. In other words, that material, that material imported by a country from a supplier of natural uranium is subject to safeguards. It is subject to the safeguard that it must be reported, that its presence in the country is to be made known to the Agency—and for an obvious purpose: so that if there is ever any reason to believe that it is entering unauthorized channels, something can be done about it.

Next, I would like to turn to the provisions that are more or less the heart of the safeguards system, the provisions which regulate the Agency in terms of the inspection activities.

There are several kinds of inspections that can be undertaken, and I do not believe that this distinction, which is an important one, has been made clear. Before a so-called subsidiary agreement is entered into, the Agency has the right to make what are called ad hoc inspections. These inspections have no limitation in number. They have few limitations in terms of access, because the agreements have not yet been reached on exactly how the safeguards ought to be applied, how often they will normally occur, and so on.

That was done very deliberately. In other words, what I am saying is that the Agency's inspection rights are actually broader before one of these detailed agreements is developed than before. And that was done very deliberately in order to give the Agency the right to apply considerable leverage on an inspected country to make it enter into suitable agreements.

Senator BOSCHWITZ. Does every country enter into an agreement with respect to the inspection?

Mr. KRATZER. Every country which is a party to the Non-Proliferation Treaty.

Senator BOSCHWITZ. But the IAEA, the inspections for each country is a negotiated matter between the country and the IAEA; is that it?

Mr. KRATZER. Yes, sir. Let me explain the process.

First, let us assume that it is an NPT party state. The process is somewhat different if it is not. For an NPT party state, it is required by the treaty to enter into a safeguards agreement with the Agency within a specified period of time after becoming a party to the treaty. That agreement contains in agreement language essentially the contents of the document, INFCIRC 153, that I have been citing.

As soon as that agreement is entered into, an inventory must be submitted, and then the Agency has the right to begin to apply its safeguards in that state.

The next step is that there must be a subsidiary arrangement or agreement in which the details of the reporting system, the details of the inspection system and so on are specified perhaps in somewhat greater detail. And it was understood and anticipated at the time that negotiating that subsidiary agreement could be a fairly time-consuming procedure and that it might give some countries which wanted to minimize inspections an opportunity to do so by being dilatory in their negotiation of the agreement.

To avoid that situation, the basic agreement which exists between the Agency and the inspected country gives the Agency broader inspection rights initially than it might have later, when the subsidiary agreement is entered into, so that there can be no benefit in a country's being dilatory in entering into these agreements.

Under these ad hoc inspections, and I might add that that was the state of affairs that prevailed at the time in Iraq, the Agency's right to conduct inspections is not limited as to frequency. It is not limited as to access of inspections in any substantial degree.

Now, after one of these subsidiary agreements, was entered into, the Agency begins conducting what are called routine inspections. These agreements identify the so-called strategic points where the inspection effort will be concentrated, the points where measurements will be concentrated, the frequency in general terms or the intensity with which the inspections will be carried out.

But then it goes beyond that. It says that the Agency can undertake special inspections. One of the circumstances under which it can undertake special inspections is if it considers that it is unable to do its job, in other words if it does not like what it is getting in terms of information.

If it feels that the information is inadequate or the explanations of any unusual circumstances are inadequate, it can undertake special inspections. If the state refuses to accept those special inspections, then the Board of Governors has the right to direct that they take place without going through the dispute procedure that the system provides for.

Basically, in other words, there is not an upper limit on the Agency's inspection rights under the system other than that imposed by the Agency statute itself, and the language of that is extremely broad. It authorizes the Agency to do whatever is necessary to account for materials that are subject to safeguards and to assure itself that agreements are being complied with.

So this system in its totality, and it has to be looked at in its totality, is not limiting on what the Agency can do.

The CHAIRMAN. Mr. Kratzer, I must leave, regretfully, in about 10 minutes. Have you reached a point where there could be a logical cutoff? I would like to ask a few questions before I leave and then I will ask Senator Boschwitz if he can chair the hearing to its conclusion.

Mr. KRATZER. Yes, Mr. Chairman, I will bring this to a close. I will end with one further provision only. This is section 79, which more or less identifies the concept behind the Agency's inspection activities, by which it decides how much intensity, how much access is required, and so on. It states that in the maximum or limiting case inspect en regime shall be no more intensive than is necessary or sufficient to maintain continuity of knowledge of the flow and inventory of nuclear material.

So the concept of continuity in knowledge, that the IAEA must always have knowledge, whether obtained by materials accountability or whether obtained by containment and surveillance, of how much material is in the facility and what has flowed through it in between inspections if they are intermittent inspections, is very basic to the system. If the Agency is not there all the time, then it must satisfy itself that the nature of the facility or the arrangements which it makes for surveillance by instruments and so on give it continuity of knowledge, not a situation where important things can happen in between inspections that it never has any knowledge of.

Let me just close by saying that these requirements are not easily met in many cases. I cannot go into detail because of the shortage of time. But safeguards are a tough job. Technically, the Agency is still, obviously, developing, perfecting its capability.

What I believe to be the case is that that process is ongoing, it is important that we stimulate it, it is important that we do everything in our power to make sure that they fully comply, that they fully fulfill the obligations of this document, and that they do a good job. But the basic understandings by which they can conduct a good safeguards system are at hand. It is not something that has to be renegotiated.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much. And I want to thank both of you for being with us.

Senator Glenn has mentioned a number of times our taking the long look and using this situation as a chance to reassess where we stand and where we are going.

NUCLEAR PROGRAMS SECURITY CONCERN OF U.S.

I would like to ask you first to what extent, as a general policy matter, you believe that nuclear programs of other countries are a national security concern of the United States of America itself?

Mr. KRATZER. Well, I think clearly, Mr. Chairman, they are. We have followed the policy of non-proliferation since the beginning of the atomic era. I think it is really one of the constants of our foreign policy and with good reason.

The CHAIRMAN. Dr. Carnesale?

Mr. CARNESALE. I share that view. Unfortunately, there is ambiguity in nuclear programs, whether they are military ones or civilian ones. Therefore, to some extent both must be our concern.

The CHAIRMAN. Do you believe that the U.S. Government therefore has the right and the duty to do everything possible to get other nations to accept non-proliferation standards?

Mr. CARNESALE. "Everything possible" is too sweeping. It depends what the costs are. I can think of costs that might even be greater than the nonproliferation benefits. But is it in our interests to pursue nonproliferation goals and to do our absolute best to inhibit the spread of nuclear weapons? The answer clearly is "Yes." Everything possible? I could certainly think of some things to which the answer would be no.

Mr. KRATZER. I share Mr. Carnesale's view. I would add that it is not always obvious how you best achieve the goal that we all agree on. It may not always be by exerting particular forms of leverage that might lose the cooperation of a country, which we know from a lot of experience to be essential to the achievement of our goals.

The CHAIRMAN. In essence would you say from what you have seen so far that the Reagan administration is going to take an activist or a pacifist role in its efforts to deal with international proliferation problems? Have you gotten any signals that you have detected as experts in this field?

Mr. CARNESALE. There have not been very many signals. But I do know that they have a difficult conflict to reconcile. Hawks, like doves, hate proliferation. There is no difference between them. And I do not think anyone has accused the current administration of being particularly short on hawks. So I think their concern for proliferation will be at least as great as that of any other administration we have known.

The conflict comes because it also appears that this administration is very strongly in favor of nuclear energy. When you talk about the ambiguous facilities, when you talk about the connection between nuclear energy and nuclear weapons, that is when the going gets tough. Sometimes you have tradeoffs to make, and to the best of my knowledge they have not yet figured out how to reconcile those conflicting interests. But there is evidence that those conflicting interests are there and are very strongly held.

U.S. MUST BE RELIABLE SUPPLIER

The CHAIRMAN. There may be one other conflicting problem on which we would appreciate your comment. We have heard through the years that the United States must be a reliable supplier, that it is better to have a dependence on the United States than dependence on some other country which might have a much more liberal attitude on this matter.

Do you believe the United States should be an active and reliable supplier of nuclear materials? If so, how can such an approach be coupled with a quest for tough international standards?

Mr. CARNESALE. We may both want to answer that. I would say yes, we should be a reliable supplier. But we should ask, reliable supplier of what. Should we be a reliable supplier of separated plutonium? My answer is "no." Should we be a reliable supplier of highly enriched uranium? As a general rule, my answer is "no."

Should we be a reliable supplier of those materials and equipment which are essential for a reasonable nuclear power program and a reasonable nuclear research program? My answer is "yes."

Mr. KRATZER. Mr. Chairman, your two questions give me my first opportunity to disagree somewhat with Mr. Carnesale. I think that the conflict that sometimes is cited or suggested between the widespread use of nuclear energy under good nonproliferation policy and the achievement of our nonproliferation objectives is virtually nonexistent. I think that the widespread use of nuclear energy under good policy is not in conflict with the achievement of our objectives, but very much in favor of it, for a lot of reasons that I will not take the time to go into.

But certainly one of them relates to this question of reliability of supply. We are by all odds the sparkplug of good nonproliferation policy in the world and we have been from the beginning. And it is very much in our interests to maintain reliance on ourselves, to demonstrate that we are going to be, that we have been good suppliers, that we are going to continue to be good suppliers, even as we seek to upgrade, in areas where that might be necessary, some of our nonproliferation policies.

There was a statement that appeared in a decision by a British justice who was conducting an inquiry on the establishment of a facility in the United Kingdom, a reprocessing facility. I do not know if I can do it exactly, but I can come close to quoting him. He said: "I refuse to believe that the best way to make a new bargain is to break our last one."

I think we have to honor our contracts and our commitments. We have to have stability of policy if we are to have the kind of voice that we want and need in nonproliferation policy development.

The CHAIRMAN. I will have a few other questions for the record and we will keep that open for your response.

CAPABILITY OF IRAQ REACTOR

My last question pertains to the same subject that I put to the previous panel. If your intention was to go into developing a weapon capability or developing a reactor for plutonium production, is the particular reactor that Iraq had the one that you would acquire? Is it the best one? Is it somewhere in between? Or is it, as one witness indicated, the worst one that you would pick for that particular purpose?

Would you take into account, also, the intention of Iraq to purchase a better one for that purpose, or for other purposes? Would you comment technically on what we can determine of their intentions, by what they actually had, and the capability of this particular reactor?

Mr. KRATZER. Mr. Chairman, I have very little new to add to what was said before. I think it clearly is not the best reactor in terms of efficiency of plutonium production. Certainly it is not the best reactor in terms of the ability to produce plutonium and hope to escape detection. I think that is a very important point.

But it is a reactor of which there should be, and I think were, legitimate concerns. In other words, it is a plutonium production reactor. I think for the purposes of the discussion today that is a more important point.

I think one lesson that we certainly cannot avoid taking away from this, and it certainly is not a new discovery, is that when there are facilities in a country which do not bear a reasonable relationship to

that country's nuclear needs, to its nuclear capabilities, then there will be concern. That is an important aspect.

The knowledge that that is so has been integrated into our nuclear energy policy for a number of years. It was not there to begin with because it was not happening. But when it began to happen in the early 1970's, we saw very quickly the implications of countries, even if their intent was not known, getting facilities which were so far removed from what could be reasonably expected of them in terms of their economic requirements, technical interests and capabilities, that we decided to do something about it.

RESTRAINT ON EXPORT OF SENSITIVE MATERIALS

In the London supplier guidelines that I referred to earlier, one of the important provisions is that there shall be restraint on the export of sensitive materials and sensitive facilities to sensitive regions of the world. Sometimes we would have wished more restraint would have been exercised. But at least we have been successful in getting that principle accepted.

The CHAIRMAN. Thank you.

Dr. Carnesale, could you comment on that question?

Mr. CARNESALE. Certainly. It is not the best reactor, but certainly it is not inconceivable that it could have been the best reactor available to them for that purpose. Something that we have ignored this morning in large measure is that this reactor used as fuel highly enriched uranium, and while it was discussed that the safeguards on that would be adequate, if Iraq or any country that had such a reactor were willing simply to violate and abrogate the NPT and tell the inspectors, I am sorry, you are not allowed in any more, that is it, overtly not covertly, they could fashion weapons directly from the highly enriched uranium fuel.

As a plutonium producer, it is not a very efficient one. But we are finding more and more around the world that countries would like to maintain this ambiguity, enhance their weapons capability, get a little bit closer to being able to do it, without ever making an overt decision, an unambiguous decision to go for nuclear weapons. And in that light, this is not a very bad choice, although it is not a very good choice if you made an unambiguous decision to go for weapons.

JUSTIFICATION FOR ISRAEL'S CONCERN

The CHAIRMAN. Thank you. Maybe you could just give me a yes or no on this concluding question. Given the information available to you at this time, do you think there was justification on technical grounds for Israeli concern that there was a near-term risk that Iraq could develop a nuclear weapon?

Mr. CARNESALE. It is very difficult to judge intentions. This is more a matter of intentions of Iraq than technicalities. If this reactor were located in Mexico, I do not believe the United States would preempt. So I do not think it can be separated from the politics.

As to why Israel did it now rather than wait, I believe the notion about radiation spreading around is a silly reason. Compared to bombing the facility and killing everybody in it, contamination for a thousand yards around it is a secondary consideration.

The timing of the raid relates far more to other things. For example, where might AWACS have been next month? If it had been 200 miles further north, this mission could not have been carried out. Where might air defenses have been deployed? If there were some further north, this mission could not have been carried out.

The focus on radiation on Baghdad is misleading. And as far as Israel's domestic politics are concerned, I find it hard to believe that Mr. Begin would do it simply to get elected. I do not find it so incredible that he would believe that it is essential for Israel and that a following administration, if not his own, would not have the backbone to do it. I do not find that so incredible.

The CHAIRMAN. Mr. Kratzer.

Mr. KRATZER. Mr. Chairman, I think the question you asked was whether there was reason for concern. I would like to answer that question and that question only. And I think the answer to that question is that there was reason for concern.

Mr. CARNESALE. I was really answering the question you asked about was it justified.

The CHAIRMAN. Do you want to comment as to whether you feel the action was justified?

Mr. KRATZER. I am not anxious to, Mr. Chairman. [Laughter.]

I think that the magnitude of the response is of such a magnitude that one cannot but hope that another way to resolve the issue could have been found.

The CHAIRMAN. Thank you very much, both of you.

Senator Boschwitz, would you be good enough to chair the conclusion of this hearing? Senator Glenn, it is your turn next.

Senator GLENN. Before the chairman leaves, I would ask him to stay just for a moment. I was told a little while ago that Mr. Eklund is in New York to appear at the U.N. or to be in New York for something, probably today.

WHAT CAN WE DO TO STRENGTHEN THE IAEA

My main line of questioning and that which I wish to continue is, what can we do in the future to strengthen IAEA, NPT and all of this. I am not interested in the committee getting together with Mr. Eklund just to go over details of the raid and things like that, unless the committee wanted to do that.

But I would like to have an unofficial coffee or something like that if Mr. Eklund is going to be in here next week, to get his views firsthand on how he thinks we can strengthen IAEA. I think that would be very valuable. I am making some suggestions in that regard, as I did this morning, and will be following up on additional details with that as we continue.

I would like to see if we might be able to get some connection with Mr. Eklund and get his views directly on how we could strengthen IAEA. Could we have the staff contact the State Department and find out what Mr. Eklund's schedule may be while he is in the States and perhaps get together with him in an unofficial meeting of some kind?

The CHAIRMAN. Certainly. The staff can make those contacts, Senator Glenn, and then determine on what basis it would be best.

Senator GLENN. I just wanted to make certain that the chairman

was apprised of this before he left and either for him to indicate some support for going ahead with this or perhaps to set up some schedule over the weekend, if that is possible.

The CHAIRMAN. I will check with the staff and see if that is possible.

Before I leave, I want to report to the committee that a memorandum is now en route to the committee from the State Department on the question about Mr. Richter's testimony this morning. They have dictated by telephone to the staff the following official State Department position on the memo read by Mr. Richter, and I will quote:

In our judgment, Mr. Richter was not entitled to disclose this information and it was entitled to be protected as foreign government information under sections 1-301(b) and 1-505 of EO-12065.

Senator BOSCHWITZ. Anybody would realize that. [Laughter.]

The CHAIRMAN. Senator Boschwitz.

Senator BOSCHWITZ [presiding]. I hope, Senator Glenn, you will allow me to join with you if this gentleman does come down from the IAEA because, while I am not a member of that subcommittee, I would like to participate.

Senator GLENN. I would hope we would make this a full committee function and not just the subcommittee, if he can make himself available to us.

Senator BOSCHWITZ. Do the Senators wish to proceed or do you want to break for lunch?

Senator GLENN. I would prefer to go through just my questioning and then I will be finished and you can do what you like beyond that. [Laughter.]

IAEA MEMBERSHIP

Before I get into the main point I want to make, let us tidy up a few things. Can you specify how you get to be a member of IAEA? I will state my understanding that there is no requirement for signing NPT, there is no requirement for full-scale safeguards. It is just that if there is any facility in a particular country that they have agreed to put under safeguards, whether it is a small little test reactor or whatever, as long as there is some facility under IAEA safeguards they may become members of IAEA if they wish that membership. Is that correct?

Mr. KRATZER. No, sir. It is a bit broader than that. Essentially, any member of the United Nations or any member of the U.N. specialized agencies can take up membership in the IAEA, and many who have no facilities have done so.

Senator GLENN. So if a country had a lot of facilities and wished IAEA membership and was not an NPT signatory and had nothing under any safeguards of any kind, they still could be an IAEA member?

Mr. KRATZER. Yes; it could.

Senator GLENN. Are there such members?

Mr. CARNESALE. The United States.

Senator GLENN. I mean nonweapons states.

Mr. KRATZER. Who have no facilities under safeguards?

Senator GLENN. Yes.

Mr. KRATZER. Well, given the event of the large membership of the IAEA, which is some 140 countries, I think the answer is there

are many states which joined it as a matter of general practice of joining U.N. agencies and have no nuclear programs, but they are in it.

Senator GLENN. I am thinking more of counties that have a nuclear program, but nothing under safeguards, nothing under NPT.

Mr. KRATZER. I guess I do not agree quite with Mr. Carnesale, because of our agreement to put our facilities under the IAEA. But a country that does meet that test is the Soviet Union. But that is a weapons state.

A nonweapons state that has nothing under IAEA safeguards, although it has such facilities, I cannot identify any in my mind.

Senator GLENN. I could not think of any either. I just wondered if there were any.

Our support for IAEA, and I think it is important to realize what a thin line we have here. I am a supporter of IAEA. I got the extra million dollars, which I think you recall, back some years ago when they decided they were not going to be able to send their people off from Vienna to visit some of these places. We got an extra \$1 million to help them make some inspections.

\$29 MILLION OF IAEA BUDGET FOR SAFEGUARDING

The figures I have just been given are that this year the total IAEA budget is \$99 million, I was told of which only \$29 million goes for safeguards, and that is for both personnel and equipment. Do those figures sound about right to you?

Mr. KRATZER. I have not reviewed them recently, Senator. I have no reason to doubt them, but they do sound about right.

Senator GLENN. Well, you know, we are spending hundreds of billions of dollars all over the world on this sort of thing and yet the safeguarding effort, if that is correct, the safeguarding effort in toto for IAEA, the total budget for it would be about one-fifth the cost of the new Hart Office Building next door, or it would be certainly not more than the cost of two F-16's for instance. It indicates what a pittance we are putting into the safeguard effort.

Mr. KRATZER. Senator, you have made a very important point. Safeguards are not costing the world a lot. I would go a step beyond that and say they are not a burden on the cost of nuclear power. It is an insignificant fraction of the cost of generating nuclear power. It would be very unwise to limit the safeguards system and its effectiveness because of some imagined limitation on the availability of funds and personnel.

Senator GLENN. There is another point I want to make here.

Mr. Carnesale, you commented just a moment ago on the Baghdad situation. I believe the chairman put into the record a little while ago a report from the Congressional Research Service entitled "Possible Contamination of Baghdad From Bombing of the Iraqi Reactor." Now, I have not really studied it. I just saw it this morning for the first time. Have you had a copy of that or a chance to look at it?

Mr. CARNESALE. It was shown to me just a little while ago. I have not had a chance to see it. But I believe my findings are consistent with the conclusions of that report.

Senator GLENN. Fine. I just wanted to get to that. Now let me go back to the main subject that I want to pursue.

We do have world attention on this problem. We have seen the inadequacies. But rather than just wring our hands, where do we go from here? I think that is the attitude that you gentlemen have both expressed here, too. I don't know if you were both in the room this morning when I read off my list of things that I would propose to do.

REOPEN NUCLEAR SUPPLIERS CONFERENCE

No. 1, I am sending a letter to the President this afternoon that would reopen the nuclear suppliers conference. Hopefully we could get some agreement there toward establishing truly meaningful restrictions on trade and improving international safeguards. That is No. 1, for the short term.

Second, begin planning for a world nuclear energy policy conference that would discuss these national security and other things that relate to nuclear activities. And third, decide what unilateral action, if any, we would be willing to take on our own in this regard, which I suppose would be similar to the Nuclear Non-Proliferation Act provisions.

Now, pursuant to IAEA specifically, I propose that we not only base IAEA on materials accounting but that we go beyond that and include equipment accounting, the possibility of full inspection of all facilities, the inspection at any time, or "roaming rights," as they have been called; that we open up public records, make public these reports; and then finally, No. 6, if we can agree to some penalties or cutoffs for violations.

I would like your comments on what you think of that. Then I would like to go through a number of additional proposals here that would spell out some details under those more broad headings if we have time to do it within my 10 minutes.

What are your comments? No. 1, is it possible to get that kind of agreement? Two, do you agree with this list? Well, let me reverse those. Do you agree with this list, are there things I should add to it or strike from it? Also, is it possible to do?

Mr. CARNESALE. Perhaps if I go first that will give Mr. Kratzer the advantage of being able to think before he speaks, which I won't have.

Senator GLENN. He would always do that.

Mr. CARNESALE. On the world nuclear energy policy conference, to an extent we have just been through that exercise.

Senator GLENN. Nuclear suppliers.

Mr. CARNESALE. OK. The first issue is the nuclear suppliers. Let me combine that with the world nuclear energy policy conference for a moment, in part because nuclear suppliers, of course, to some extent is a misnomer. It really does include not only suppliers, but recipients as well. It was expanded to do that, as I recall, in its most recent version.

It hasn't met for some time, primarily because the role of the suppliers conference was to some extent being met by the International Nuclear Fuel Cycle Evaluation [INFCE], which had 66 countries involved. INFCE examined the relationships between nuclear power and the proliferation of nuclear weapons, and also ways to make nuclear energy more widely available.

NUCLEAR SUPPLIERS CONFERENCE A USEFUL FUNCTION

I think the nuclear suppliers conference can serve a useful function, although I can see political difficulties with reactivating it. I find it difficult to believe that a world nuclear energy policy conference would serve a useful function—having been the representative of the United States to the Technical Coordinating Committee of the International Nuclear Fuel Cycle Evaluation for 2 years.

I think that simply calling another conference on what is very much the same subject would not be likely to be received very well unless you had very clear ideas of what it was you wanted to accomplish and just how.

Senator GLENN. This would specify nuclear energy.

Mr. CARNESALE. INFCE was the nuclear fuel cycle evaluation. I must confess as an academic that I have a natural affinity for conferences, but that one I would be very careful about.

Senator GLENN. Wasn't INFCE mainly oriented, though, wasn't its prime purpose, or at least it started out, to find out whether we had other than uranium-based fuel cycles that were less weapons prone?

Mr. CARNESALE. No. That was one of the working groups, but INFCE looked far more broadly at the connections between nuclear energy and the proliferation of nuclear weapons. As a matter of fact, if you would have asked any nuclear engineer at the outset if INFCE would find nuclear fuel cycles that use things other than uranium and thorium as a raw material, he would then have told you the answer was "no." I think we all knew better than that.

Unilateral action? Certainly, with all of the reservations that we talked about this morning and of which you are very aware. There are costs and benefits associated with unilateral actions. You have to select them very carefully. They can be counter-productive. The IAEA measures sound useful.

"ROAMING RIGHTS"

"Roaming rights." Let's assume we could get everybody to accept them. I could imagine IAEA inspectors from the Soviet Union arriving in the United States talking about their "roaming rights" and asking to get into the Oak Ridge National Laboratory.

Senator GLENN. What if you limited it to nonweapons states?

Mr. CARNESALE. Well, that is always our easy way out, to say this is for you guys and not for us. I like that, but I can think of about 145 countries that wouldn't.

Senator GLENN. That has always been the difficulty. You sit down with someone and say we can have this information and use it but you can't. As I spelled out yesterday at our hearings, we have had a dual track here. We are trying to get control of existing weapons states through SALT and trying to prevent this spread of weapons to smaller and smaller nations, and hopefully they would understand the advantage of this. It hasn't worked out to anybody's satisfaction, obviously, but it is still the track we have followed.

Mr. CARNESALE. There are security implications of roaming rights. Forget Oak Ridge. How about a Minuteman base?

Senator GLENN. What if you could limit it to nonweapons states?

SECURITY CONCERNS

Mr. CARNESALE. Nonweapons states have security concerns that make them worry about the intelligence that roaming inspectors can pick up, just like nuclear states. There is no difference there except we also have nuclear facilities.

Senator GLENN. That is the reason we had the raid on Baghdad, concern about weapons.

Mr. CARNESALE. Security concerns.

Senator GLENN. I was thinking of your "roaming rights" and what that would have done and not done. That would have really solved that situation.

Mr. Kratzer, do you have any comments on the list I made up? I fully realize, I would add, the difficulties in some of these. I did not say this was an easy list. It was an optimistic, ideal list.

Mr. CARNESALE. If I thought they could be implemented, I would love them all.

Mr. KRATZER. Senator, I think that these are all constructive concepts. I think we should take into account that in the outside real world of negotiation with other sovereign countries, there are many tradeoffs that have to be considered. Take, for example, the concept of reconvening the suppliers conference or something like it. I think it is clear that there has to be continuing consultation among suppliers.

We also know that when that occurred in what was intended to be a confidential manner—but unfortunately that goal was not achieved, and every meeting that I attended was the subject of articles in the Washington Post or the New York Times—it generates a great deal of opposition, which interfered with the capability of achieving the very results that you wanted to get.

As I said, I think we clearly have to have suppliers' consultation. I think we ought to think long and hard about how to do it and what format to do it in because I am not at all sure that something that has the trappings of an international conference among suppliers will serve our nonproliferation interests.

MORE RECIPIENT COUNTRIES THAN SUPPLIERS

Turning to the world conference, I think, much as Mr. Carnesale does, it would tend to be a replay of INFCE. I think INFCE had many commendable results but I think it also demonstrated that there is simply a limit beyond which you cannot go in getting countries who are by and large recipients to agree to restraints on cooperation, and the numbers are such that that would be the character of any world conference. There are many more recipient countries than there are suppliers.

Senator GLENN. Let me add that I looked at that as a secondary and longer term thing. The immediate first problem that appeared to me was to try to stop some of this flow now if we possibly can, or at least put it under better control, put it under some much tighter controls than we have now.

Probably if you picked the right half-dozen nations around the world, you might have 75 or 80 percent of the nuclear trade involved just with half a dozen countries. That is a figure off the top of my

head but I would guess it is not too far from being correct. So if you get together now with those nuclear supplier countries and not with the 140 that you are talking about, which gets into a big mini-U.N. and I wouldn't propose that we do that, you really can make a very positive step forward, it seems to me, in getting the major nuclear suppliers and those that are subs under that here.

If you can get that 6 to 15 nations together and decide what they are going to do, then it seems to me that could carry great weight in stanching this flow temporarily and putting it under really meaningful controls for those who have a desire, a need and a use for the peaceful development of nuclear energy. I am not trying to get the whole group of 140 together as nuclear suppliers. That would be just a first step.

CONSULTATION AMONG SUPPLIERS ESSENTIAL

Mr. KRATZER. Senator, I tried to address that point. As I said, I think it is absolutely essential that there be consultation among the suppliers. I think the form that it takes is of some importance. I think if we try to over-formalize it we make it visible, and if we make it visible, we make it difficult.

Now in fact the suppliers, understandings that arose out of the London suppliers meetings are of a continuing nature. One of those understandings is that there are to be continuing consultations. I would assume that that consultation goes on all the time. I also believe that the de facto situation in terms of restraint of suppliers and what they are now supplying, the arrangements that they are now entering into, is considerably better than the words of the London guidelines which say restraint shall be exercised.

I think something considerably better than restraint is being exercised. I think a number of major suppliers are for all practical purposes simply not doing it. There is a de facto moratorium on entering into new agreements.

One of the things we should realize is this. It doesn't make it any better. It doesn't mean that we shouldn't have been concerned with what was going on in Iraq. We should be concerned perhaps with what was going on in several other countries. But the fact is, and it is a somewhat comforting fact, that these are old arrangements. They were entered into some time ago. I know of no post-1977 arrangements that really give us cause for concern, and I think that is a very good sign. I think it is a result of a lot of initiatives from the Congress, from the administrations of the past and I am, sure the present one will build on those.

So we really have a better situation today than these remnants of old arrangements might suggest if you just look at that alone.

AMAZING WE HAVEN'T HAD MORE TROUBLE

Senator GLENN. I would tend to agree with you. To put it in different words, it is amazing that we haven't had more trouble. That would be another way to put it. That is true. If you look at that way, NPT and IAEA have worked. But I think, as I said earlier today, we are at a watershed period. I think the spread of this science,

the spread of this information—is no longer limited to a small group within the world.

It is spreading and very rapidly becoming so available that anybody who wants to move in this direction, including weapons, rapidly is getting the capability to get it. That means we have to tighten up the organizational aspects of this, the penalties, the violations, get new restrictions on this in some way.

We have to do this in the interest of the whole world. It is not something that can be done just on a bilateral basis. This is not something that will affect just one tiny, little place if there was a nuclear explosion on that place in a border war. This has flown around the world and is likely to get other people involved.

I think we have a warning here. For the very long term—I hate to put a polyanna, rose-colored glass on this—but you might say in the long run Israel's action, if it results in a world awareness now being focused on the concerns that some of the smaller nations of the world, including Israel, have on what may happen if their neighbors get this capability, if that results in us finally being able to mobilize world attention, opinion, organization and sanctions on those who would violate what is in the common interest of every nation of the world, then it may have turned out to be a very fortuitous thing to have happened.

Now, I will not put that strong a rose-colored glass view on it. I wish some other options had been exhausted, too, along with Mr. Kratzer as he said earlier, but we are in the situation that we are and I think it provides us an opportunity.

Let me say that I appreciate the chairman's forbearance in allowing me to go what must surely be beyond 10 minutes. Thank you.

Senator BOSCHWITZ. We didn't have the timer on, Senator.

I want to tell you, as you well know, that I very much agree with you. In my opening remarks in the first round when we all made comments rather than ask questions, that was my comment. Indeed if the long-run result of this is that firmer nuclear nonproliferation safeguards are put into place, the Israelis may have done the world a favor through their actions. And the Israelis apparently felt that they didn't want to be held hostage as we found our people being so held in the country of Iran.

I have no further questions. They would be repetitions of the questions that we have asked the others.

Senator, do you have anything further?

Senator GLENN. I have nothing further. I appreciate your being here, gentlemen.

Senator BOSCHWITZ. I appreciate it, too, and I appreciate your coming here and being so patient.

This committee is adjourned.

[Whereupon, at 1:50 p.m. the committee adjourned, subject to call of the Chair.]

THE ISRAELI AIR STRIKE

THURSDAY, JUNE 25, 1981

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, D.C.

The committee met, pursuant to notice, at 10:15 a.m., in room 4221, Dirksen Senate Office Building, Hon. Rudy Boschwitz presiding.

Present: Senators Percy, Mathias, Boschwitz, Pell, Biden, Glenn, and Sarbanes.

OPENING STATEMENT

Senator BOSCHWITZ. This morning, the committee is continuing its hearings of the attack by Israel on the Iraqi reactor. We are very pleased to have with us this morning as our first witness, Congressman Bingham. Then we will hear from Congressman Markey and Congressman Lantos.

I believe Congressman Bingham will conduct a hearing on a similar subject in the House of Representatives. We will try to accommodate his schedule and see if we can't finish with his testimony by 10:30 or 10:40 this morning.

Congressman Bingham is one of the principal experts of the House on nonproliferation. He is a principal sponsor of the Nuclear Non-Proliferation Act of 1978. He is chairman of the House Foreign Affairs Subcommittee on International Economic Policy and Trade. Last year, he was involved in discussions with administration officials on the sale of Italian hot cells to Iraq.

Congressman Markey is chairman of the House Interior Subcommittee on Oversight Investigations, which has jurisdiction over the Nuclear Regulatory Agency. He is a critic of the existing IAEA safeguards and author of a forthcoming book on nuclear proliferation.

Congressman Lantos also will be with us. He is a member of the House Foreign Affairs Subcommittee on Europe and the Middle East.

Gentlemen, we look forward to your views. It is important that we, in the Congress, as well as the administration exchange views and try to work together to build a better nonproliferation framework upon the wreckage of the Iraqi reactor. Indeed, this is a goal which we certainly should seek.

Once the smoke clears away from the Baghdad bombing, including what I think is some pious hypocrisy, I think we are going to see that the Israelis have focused our attention on what is going to be one of the really important issues of the coming years. Indeed, it is one of the important issues of our day.

Senator Pell, do you have an opening statement?

Senator PELL. I am pleased to join Senator Boschwitz in welcoming Members of the House this morning. Each has, I believe, an important contribution to make, and I look forward to their testimony.

The committee's investigation has been conducted without preconception or prejudgment. As a result, the committee and the public should be better able to assess both the attack and the administration's actions to date, as well as any decisions and actions the administration may take in the near future.

At this point, two conclusions appear particularly pertinent:

First, the Congress and the administration must work on a bipartisan basis to develop policies and programs in the Middle East and other regions which will help to promote stability and encourage peaceful solutions. We must do our utmost to ensure that the effort to achieve a settlement in the Middle East is not further derailed. The long-term security interests of Egypt, Israel, and their neighbors can only be met by a just and lasting peace.

Second, we must recognize that any retreat from a strong commitment to an international nonproliferation regime will only raise incentives for countries which feel threatened to take matters into their own hands. We have worked for years with others to develop strong controls on nuclear transfers. This incident has served to focus attention on the present nonproliferation regime—showing both strengths and weaknesses. It is clear to me that it is critical to us and all nations that we work with renewed vigor to overcome present weaknesses and build upon the strengths.

Thank you very much.

Senator BOSCHWITZ. Congressman Bingham, we welcome you to our hearing and ask you to proceed.

STATEMENT OF HON. JONATHAN B. BINGHAM, A REPRESENTATIVE IN CONGRESS FROM NEW YORK

Representative BINGHAM. Thank you very much, Mr. Chairman and members of the committee. I am grateful for the opportunity to appear before you today.

Senator BOSCHWITZ. Congressman Bingham, please pardon me.

Senator Mathias, do you have any opening remarks?

Senator MATHIAS. Mr. Chairman, I will not delay the Congressman other than to express my warm welcome to him.

Representative BINGHAM. Thank you very much, Senator.

Senator BOSCHWITZ. Senator Biden tells me that he is without a voice this morning, so he will forgo whatever statement he might have.

Joe, did you want to offer a statement?

Senator BIDEN. No, I'm just anxious to hear the testimony. Thank you.

Senator BOSCHWITZ. Congressman, pardon that interruption, and please proceed.

Representative BINGHAM. Thank you.

I am happy to have the opportunity to share with you a few views on U.S. nuclear nonproliferation interests and policies, particularly in the light of Israel's recent attack on the Iraqi nuclear research facility.

You have had the same presentations from the administration as we have had in the Foreign Affairs Committee on our side. If yours were anything like ours, they have served more to obfuscate than to clarify the nature of the Iraqi nuclear threat.

What, in fact, I have been told repeatedly over the past year by administration officials—that is, officials of this administration and particularly of the previous administration—is that the diversified and sophisticated nuclear equipment, training, and materials which Iraq acquired only make sense in terms of a desire to have a nuclear weapons capability. This view is strengthened further by looking at what Iraq tried to purchase but could not: A French gas graphite reactor similar to the one used to produce plutonium for the French nuclear weapons program; and, from Canada, depleted uranium rods suitable for the production of significant quantities of plutonium in the Osirak research reactor.

To my knowledge, no actual bomb design had occurred in Iraq before the Israelis chose to destroy the Osirak reactor. The point is, however, that past history provided little basis for confidence that the international community was willing or able to stop Iraq from taking this last step. Neither Italy nor France would agree to responsible export controls. The IAEA could not guarantee the world “timely warning” of a nuclear diversion with such sophisticated nuclear technology and materials already in place in Iraq. And, even if “timely warning” were possible, no country or institution was openly prepared to threaten or impose meaningful sanctions on Iraq if that country violated its IAEA or NPT obligations.

Israel, therefore, had every reason to be alarmed by Iraq’s nuclear progress.

In this statement, Mr. Chairman, I would like to underscore the fundamental weaknesses of the current nonproliferation regime and suggest the outlines of an enlightened strategy for the new administration. I propose to do this by tracking the problems encountered with the Iraqi nuclear experience.

First, it is my perception, having followed nuclear proliferation matters very closely, that Iraq’s nuclear program never was taken seriously enough by those most concerned about U.S. security interests. As a result, the issue was never raised, to my knowledge, when top ranking U.S. defense officials met with their European counterparts. Similarly, neither the White House, the Defense Department, nor the State Department focused on how Iraq’s nuclear ambitions could reduce dramatically the West’s ability to defend its fundamental interests in the Persian Gulf region. The United States failed, moreover, to appreciate how seriously Israel viewed the security threat and how Israel might act to defend her perceived self-interest.

In my view, U.S. nuclear nonproliferation policies must be extremely sensitive to the security implications of nuclear proliferation. The United States should press this concern with our allies at the highest levels, both since the process of viewing the problem this way can help to demonstrate the real world “costs” of proliferation, and as a means of building support for the far less costly preventive measures which the United States and its cooperating partners can and must soon take.

Second, Iraq was able to contract for substantial quantities of 93 percent enriched uranium for research activities, and did not

have to commit itself to return any of the spent fuel which could be converted to weapons use. I strongly advocate that the United States take the initiative with other nuclear suppliers: (1) To ban completely exports of highly enriched uranium; (2) to require as part of any research reactor contract the return of all spent fuel; (3) to step up significantly research and development of alternative, more proliferation-resistant research reactor fuels; and (4) to establish a policy of retrieving all commercial, as well as research reactor spent fuel, from volatile regions of the world.

The United States should be far more willing to accept and store in this country U.S. and foreign-origin research and commercial spent fuel—an effective nonproliferation strategy vigorously pursued by the Soviet Union.

The administration also should actively support the establishment of regional and multinational spent fuel storage centers.

Third, Iraq was able to obtain from Italy and France very sensitive and sophisticated nuclear technology, training, and equipment which is potentially directly usable for the manufacture of nuclear weapons, and for which there was no conceivable economic justification.

I long have pressed for a high level, concerted campaign by all nuclear suppliers to identify and curtail transfers of sensitive nuclear technology and materials, including so-called dual use and gray area items which contribute to advanced nuclear operations. Already, Germany and France have agreed not to export reprocessing and enrichment technologies; now is the time dramatically to expand that list of suppliers that will exercise restraint and of sensitive items that ought to be restrained from export.

In pursuing this task, the United States can and should exercise the leverage it has by virtue of its veto over European and Japanese requests for permission to reprocess or otherwise use U.S. origin nuclear materials.

I would note that I do not share some of my colleagues' views that a strengthened U.S. nuclear nonproliferation policy should include export bans on conventional nuclear power plants and fuel, a position which I would consider self-defeating. Rather, I have stressed the need for universal standards, such as full-scope safeguards, to apply to such exports, and for much greater emphasis on increasing the efficiency of conventional nuclear reactors so as to conserve uranium supplies and remove incentives for premature introduction of sensitive, less proliferation-resistant nuclear technologies.

Fourth, the United States had some difficulty during the early stages of Iraq's nuclear program keeping informed of all activities. Eventually, however, as in the case of Pakistan, by improving intelligence sharing with other nuclear suppliers, the United States was better able to monitor Iraq's pursuits, to share specific concerns with other nuclear suppliers, and even to tip off supplier governments about their own industries' indiscretions. The present administration should build upon this cooperation on proliferation-intelligence-sharing and seek generally to improve the U.S. ability to detect nuclear activities, including, of course, events such as apparently occurred over the South Atlantic in September 1979.

Fifth, in the early stages of the Iran-Iraq War, Iraq suddenly refused to accede to the IAEA's request for an inspection of its nuclear

facilities. This unprecedented action, combined with the fact that the IAEA has little experience safeguarding sophisticated nuclear activities and no sanctions powers, have served to undermine international confidence in the IAEA system. The solution clearly is not to abandon that system but rather significantly to strengthen it and to give it teeth.

In my view the present administration should assign a high priority to developing with other nations credible sanctions policies against IDEA or NPT violators. There should also be an unequivocal commitment to increase funding and support for the IAEA's safeguards operations. No one should be fooled, however, into believing that proliferation problems will go away if we just shore up the IAEA. As I already have indicated, safeguards are intrinsically limited for some sensitive nuclear technologies.

Sixth, and finally, Iraq has succeeded, using its oil leverage, in negotiating a potentially very troublesome nuclear cooperations agreement with Brazil. As Brazil develops its own nuclear capabilities, with the generous help of Germany which has supplied enrichment and reprocessing technologies and materials, the pressures only can increase to share these capabilities. This example illustrates the multiplier effects of proliferation and underscores the urgent need for a strong administration position against the spread of any nuclear weapons capabilities. The new administration also must seek to insure that the toughest possible controls are incorporated into existing nuclear supply contracts to govern third party transfers.

Mr. Chairman, it already is evident that recent events in Iraq have served dramatically to heighten international consciousness about the threat and consequences of nuclear proliferation. I have sought in this testimony to prescribe ways of taking advantage of this awareness.

The most important thing that the new administration can do at this point is publicly to articulate a firm commitment to direct substantial U.S. resources to the task of preventing the spread of nuclear weapons and of the capability of manufacturing nuclear weapons.

The Carter administration had the best of intentions, and did succeed in important ways in slowing down proliferation. But the Carter administration failed to maximize its influence and leverage with European suppliers and too often backpedaled on proliferation when faced with difficult choices.

I would be happy to answer any questions the committee may have. Thank you.

Senator BOSCHWITZ. Because Congressman Bingham has to leave to conduct another hearing, I thought we would ask him some questions before we asked the other two Congressmen to present their statements.

Representative BINGHAM. I appreciate that courtesy Mr. Chairman. We are hearing from Mr. Richter this morning on our side.

DESIRE TO OBTAIN NUCLEAR WEAPONS CAPABILITY

Senator BOSCHWITZ. In the second paragraph of your prepared statement, you say that you were told repeatedly by the administration that the Iraqi nuclear program made sense only in terms of a desire to obtain a nuclear weapons capability.

I wonder if you would expand upon that a bit.

In addition, did this come up as part of the State Department's effort last year to persuade you to drop your opposition to the shipment of U.S. engines for the Iraqi missile frigates being built in Italy?

Representative BINGHAM. Mr. Chairman, I would say that for roughly 2 years we have been in frequent communication with representatives of the executive branch on the great concern that they had about the development of a nuclear weapons capability in Iraq. We were briefed on a number of occasions and we were kept advised of the steps that were being taken, the approaches that were made to Italy and to the French Government in an effort to stop or slow down cooperation with this program. As I have said, the concern was based on what was being done and the fact that there really seemed to be no explanation for that activity except in terms of developing a weapons capability.

You are quite right in suggesting that this was linked to the question of the sale of engines for frigates to be built in Italy and sold to Iraq. The question was linked in this fashion: It was felt if the sale of the engines went forward and was not blocked by the Congress, it might be possible for the administration to get better cooperation from the Italian Government in terms of slowing down or stopping Italian-Iraqi nuclear cooperation.

Senator BOSCHWITZ. That did not happen, of course.

Was there any fear at any time on the part of the administration about what the Israeli reaction would be to the development of the reactor and its potential?

Representative BINGHAM. I do not recall any specific discussion of that phase of the problem. I do not recall any specific statement that it was possible that the Israelis might launch an attack.

I do recall discussions along the lines that from the point of view of Israel's interests and security, which is of direct concern to us, it was more important to try to head off Iraq's nuclear proliferation capability or nuclear weapons capability than it was to prevent Iraq from getting four frigates that would be used in the Persian Gulf and would not be a direct threat to Israel.

In this sense Israel's interests were referred to; but I do not recall any expression of fear that Israel might launch an attack.

Senator BOSCHWITZ. Senator Pell?

Senator PELL. Mr. Chairman, I have no questions. But I wish to congratulate Congressman Bingham on an excellent statement. It contained many helpful, positive, and forward-thinking suggestions.

Thank you very much.

Representative BINGHAM. Thank you, Senator Pell.

Senator BOSCHWITZ. Senator Mathias?

Senator MATHIAS. Thank you, Mr. Chairman.

I think what Representative Bingham has done here this morning is to give us an example of how you can carry out the advice that old friend of mine gave me many years ago. He said, "When you are served lemons, make lemonade." [General laughter.]

I think we are faced with a very serious situation, one that is troubling in many respects.

But the Congressman has managed to take this tragic occasion and turn it into an opportunity to improve the future. That certainly is the positive way to approach any difficult situation.

I congratulate you, sir, on the way in which you have done that.

U.S. SHOULD STORE FOREIGN-ORIGIN RESEARCH AND COMMERCIAL SPENT FUEL

I am interested in several of the specific points in your statement. One is that the United States should be far more willing to accept and store in this country U.S. and foreign-origin research and commercial spent fuel.

I have been extremely interested in this subject, as has Senator Glenn, for some time. As you well know, we have over a million gallons of liquid nuclear waste stored in this country in several locations. These are highly toxic and very dangerous. Something is going to have to be done with them. This is our own domestic nuclear waste.

So, while I do not disagree with you that we can have a greater influence in the world if we are willing to accept and store other people's nuclear waste, we must get on top of our own.

FRENCH VITRIFY NUCLEAR WASTE

I am wondering if you have any preferred method to do this. For example, the French nuclear industry has undertaken to vitrify nuclear waste at Marcoule. They are storing it in a vitrified form. Do you advocate that method?

What approach do you take?

Representative BINGHAM. No, sir. I am not an expert on the best method of final storage of nuclear waste. The French method, to which you referred, as I understand it, applies to fuel that has been reprocessed. But reprocessing itself does not solve the waste problem, and indeed may complicate it in some ways.

However, what I think we can do is to provide for the same kind of temporary storage arrangements for foreign spent fuel in this country—and the quantities would not be very large as compared with our own problem—that we make for our own spent fuel.

Senator MATHIAS. Excuse me, but aren't you just talking about spent rods?

Representative BINGHAM. That's right.

Senator MATHIAS. You would just put the spent rods in onsite storage?

Representative BINGHAM. For the time being, that is an acceptable procedure. I think it would help so much the U.S. nonproliferation effort.

SPENT RODS EXCEED ONSITE STORAGE

Senator MATHIAS. But "the time being" is running out on us. At Calvert Cliffs, just 25 miles from Washington, the spent rods have exceeded the onsite storage and we will have to close down Calvert Cliffs unless the rods are reracked, which might bring us up another 7 to 10 years. But those 7 to 10 years in nuclear terms go by very fast because so much leadtime is necessary.

As long as I have been in the Congress, we have been talking about how we are going to manage the nuclear waste problem. The industry and the research people keep telling us that we have the method in the laboratory but we are just not ready to put it into the field.

Representative BINGHAM. Senator, may I just say that I believe there may be the necessity for providing away-from-reactor storage before we have found an acceptable form of long-term storage.

I agree with you as to the necessity for pressing ahead and putting a very high priority on the problem of storage generally. But I think we have to recognize that in trying to find long-term storage technologies, we are seeking to solve a problem such as we have not encountered in any other field that I can think of, and this is to arrive at a solution for something that is going to last 10,000 years.

Senator MATHIAS. Yes, it is an unprecedented problem, not only in our time, but in the whole history of the human race.

Representative BINGHAM. Right.

NOT EXCLUSIVELY A FRENCH EFFORT

Senator MATHIAS. On the other hand, it is a problem that is growing. I would just call your attention to the French effort to deal with it, which is impressive. It is not exclusively a French effort. The vitrified waste ultimately will have to be stored somewhere. The Italians are looking at storing it in clay, the Germans are looking at storing it in salt, and the French themselves are looking at storing it in granite. So, in other parts of the world there is a very vigorous effort to go forward in this.

Another recommendation you made was to require, as part of any research reactor contract, the return of all spent fuel. I certainly agree with that. There was such a contract in effect, as far as the Iraqi reactor went; was there not?

Representative BINGHAM. That is not my understanding, Senator. Do you mean so far as the French were concerned?

Senator MATHIAS. Yes.

They were delivering very limited amounts of the fuel, 11.5 kilograms at a time, I believe. I thought that the program was so designed that the quantities that would be on the ground at any moment would be very carefully controlled.

Representative BINGHAM. But there was no written contract that they were going to bring it back, at least not that I am aware of.

Senator MATHIAS. I understood that it was intended to go back to the reprocessing plant at La Hague on the English Channel, which is where all the French reprocessed fuel is recovered.

In fact, they were very clever in the way they financed La Hague, by insisting that the fuel come back there. As I understand it, they assess their customers not only the cost of the reprocessing, but even the cost of some of the capital that went into the construction of the reprocessing plant.

Representative BINGHAM. Senator, I am informed that the facility at La Hague is not capable of reprocessing the high enriched uranium spent fuel that was involved at the Osirak reactor.

Senator MATHIAS. Well, we will look into that further.

At any event, I agree with you that this should be a part of any process.

Representative BINGHAM. The Soviets have done that.

Senator MATHIAS. I have one final question.

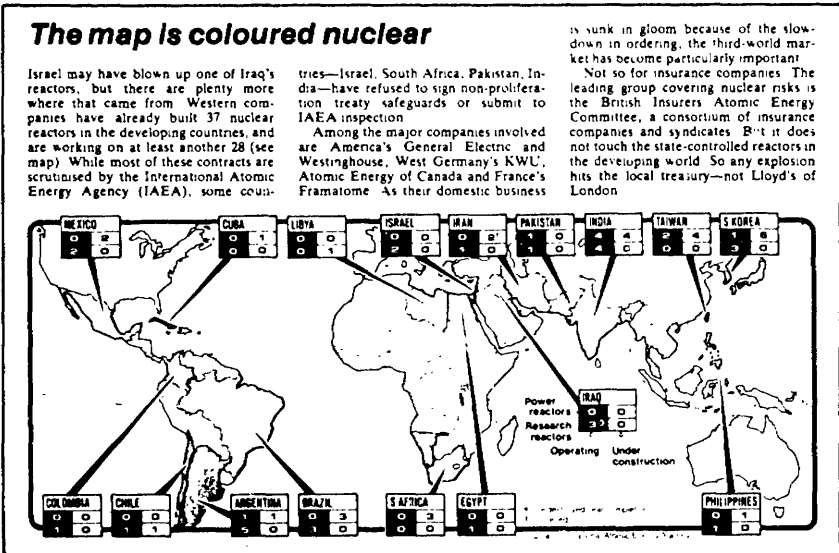
In this past week's issue of "The Economist," there appeared a very interesting chart or map, which indicates the location of all research reactors of the Third World.

Have you seen that?

Representative BINGHAM. No; I have not.

Senator MATHIAS. I would direct that this chart be made a part of the record at this point.

[The chart referred to follows:]



Senator MATHIAS. I will also ask our staff to see that you get a copy of it. I am sure you will find it interesting.

These facilities are located in very critical places.

IRAQIS REJECTED LOW-ENRICHED URANIUM

Representative BINGHAM. Let me comment briefly. As you know, in the INFCE studies, one of the things agreed upon was the possibility of using low-enriched uranium in research reactors. You don't get the same consequences in terms of proliferation that you do with high-enriched uranium. As we understand it, the Iraqis rejected any notion that low-enriched uranium might be substituted in the case of the Osirak reactor.

Senator MATHIAS. The point of my question is this.

These reactors, as indicated on the chart in "The Economist," are located in very sensitive and critical parts of the world, such as Libya and Pakistan. There apparently is one operating in Iran, although our testimony here was in conflict with that. There are some in other very delicate and sensitive locations.

What should the neighbor of any one of those reactors do if it gets a genuine concern and fear that that reactor is going to be turned into a weapon to be used against its people?

What should the Tunisians do if they get upset about the Libyan reactor? What course of action would you prescribe for them?

Representative BINGHAM. Senator, that is a tough question to answer. I suppose each case is different.

Senator MATHIAS. But that is the question before the Congress of the United States as it contemplates your recommendations. I think we have to think about that.

Representative BINGHAM. Yes, sir, we do. But I do think it depends on what the actual situation is. Many research reactors present no proliferation dangers, as such.

Senator GLENN. Would the Senator yield for a moment?

Senator MATHIAS. Surely.

Senator GLENN. I have to run to the floor as there is a vote on. But before I leave, I want to pay tribute to Congressman Bingham.

I have no questions for him this morning. I am glad to have his suggestions. He has been a pillar of strength over in the House. When we were in the India fuel fight last year, he won it 3 to 1 in the House and I lost it 48 to 46 here in the Senate. He obviously did a better job than I did.

You have done a great job on this and have been a leader in this area in the House. It has been very difficult to keep international attention focused on this, and you have done as much as anybody in the Congress. I just wanted to make a public statement on that before I leave to vote.

I am glad you are here this morning and am sorry that our hearing must be so truncated.

Representative BINGHAM. Thank you very much.

Senator BIDEN. Before you dismiss him, Mr. Chairman, may I ask one question before leaving to vote?

Senator MATHIAS [presiding]. The Senator from Delaware.

Senator BIDEN. Thank you.

Congressman, I apologize for the sound of my hoarse voice this morning.

U.S. INTERESTS MIGHT HAVE BEEN AT STAKE

You indicated at the outset—at least it was implied in your statement—that U.S. interests might have been at stake if, in fact, the Iraqis developed a nuclear capability. You went on to point out that the administration needs to raise nonproliferation to a higher profile.

My question is this. The statement that Candidate Reagan made during his Presidential campaign was to the effect that the spread of nuclear weapons was “not any of our business.”

Do you think this added to the feeling of insecurity that the Israelis had, coupled with the fact that there is evidence that the Iraqis were aiming toward a nuclear capability, a bomb producing capability at that facility?

This is not a partisan question. I am very serious. I know that you know what you are talking about in this area.

Representative BINGHAM. I think that was a most unfortunate statement and one that I do not think the administration today

is following; that is, it is not following any such policy. I think it is genuinely concerned with nonproliferation.

Senator BIDEN. Do you think the administration has convinced the Israelis and the rest of the world that it really is concerned?

Representative BINGHAM. My own feeling is that the Israelis felt that the activities of the United States to date had been ineffectual, which was the case. They have been.

Senator BIDEN. I would just cite to you page 6 of today's New York Times. Under Secretary James Buckley said, with regard to Pakistan:

I was assured by the Ministers and by the President himself that it was not the intention of the Pakistani Government to develop nuclear weapons.

He apparently told this to the Senate Governmental Affairs Committee.

The article says:

Buckley added that Pakistan, which has not signed the 1968 agreement to curb the spread of nuclear weapons technology, has made no promise not to seek a weapons making ability or nuclear explosion, such as the one in India in 1974.

This is Buckley and I quote:

"One has to make a distinction between a nuclear option and a nuclear weapon," he told the Senate panel.

You may think that the administration has communicated to the world that it takes nonproliferation seriously, but it has not made it known to the Senate, it has not made it known to this Senator.

I think this was one of the reasons why the Israelis felt they had to move when they did.

Senator MATHIAS. Congressman, we must vote. If you have time to remain, we would be happy to have you do so. Otherwise, we will excuse you.

Representative BINGHAM. Thank you very much, Mr. Chairman.

Senator MATHIAS. The committee will stand in recess until 11 o'clock.

[A brief recess was taken.]

Senator BOSCHWITZ [presiding]. I now will ask Congressman Markey and Congressman Lantos to come to the witness table at this time.

We welcome both our friends from the House here today to testify. Gentlemen, you have my apologies for the delay, which was caused by a vote on the Senate floor. Let us now go forward. I do believe we will have adequate time between votes to fully hear both your testimonies and to ask such questions as the committee might wish.

Thank you for coming.

Congressman Markey, would you please begin.

STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM MASSACHUSETTS

Representative MARKEY. Thank you, Senator.

I thank you for the opportunity of allowing me to testify here today.

Unless the Reagan administration, the Congress, and the American people become serious about stopping nuclear proliferation, there is a real possibility that atomic bombs will explode in American cities during the 1980's.

I am not talking about Russian bombs, because the United States can retaliate in a devastating fashion, sufficient to deter any Soviet strike. The major threat in the world today is not the arms race between the United States and the Soviet Union. It is the spread of nuclear weapons under the guise of commercial nuclear power technology to unstable nations and eventually to terrorist groups.

It is obvious, Mr. Chairman, that a crude atomic bomb delivered by an international terrorist group—

Senator BOSCHWITZ. Pardon me, Congressman Markey. Our committee chairman, Senator Percy, is here and wishes to make a short statement.

The CHAIRMAN. Thank you.

Mr. Chairman, I very much appreciate your chairing these hearings today. I just wanted to stop by to tell my colleagues how much we appreciate their presence here today.

This is a very difficult problem that we are facing, and we need all the guidance we can get. I know that your testimony today will be very valuable.

I have an unavoidable conflict which I could not get out of, so I shall have to leave. But I did want to stop by personally to thank you very much for coming over to be with us.

Senator BOSCHWITZ. We thank you for stopping by, Mr. Chairman. We are particularly pleased to have Congressman Markey with us, who is quite an expert in the field of nuclear proliferation. We do appreciate your kind remarks.

The CHAIRMAN. I will read the transcript of today's hearing with great interest.

Senator BOSCHWITZ. Congressman, please continue, and I do apologize for the interruption.

Representative MARKEY. Mr. Chairman, it is obvious that a crude atomic bomb delivered by an international terrorist group to any American city would cause one of the most serious national security crises in our history.

What Americans do not understand about nuclear power plants is that in this country we look upon them as generators of electricity—for example, there is Seabrook, Three Mile Island, and the other 70 nuclear power plants around our country—with a byproduct of radioactive waste. Many Third World countries, such as Libya, Pakistan, Iraq, and others, see nuclear power plants as a means to acquire nuclear bombs.

The facts are clear: every form of every fissionable material in every nuclear fuel cycle can be used to make military bombs, either on its own or in combination with other ingredients made widely available by nuclear power. Civilian nuclear reactors can be considered large-scale military production reactors with an electricity byproduct, rather than as benign electricity producers, with a militarily unattractive plutonium byproduct.

In other words, all nuclear power plants are potential bomb factories.

The distinction between the "peaceful atom" and the "military atom" always has been ambiguous. The Lilienthal Commission warned us in 1946 that:

The development of atomic energy for peaceful purposes and the development of atomic energy for bombs are in much of their course interchangeable and interdependent.

What the Israeli raid on Iraq has shown is that for many countries there is no difference between a bomb factory and a powerplant. No one told the American people that the export of nuclear technology, including nuclear reactors, could put nations a short distance away from atomic bomb capability.

The International Atomic Energy Agency was designed to inspect and detect diversions of nuclear material. The Israeli raid was a dramatic vote of no confidence in the IAEA system of safeguards and inspections.

Since the Israeli raid, we have learned from the courageous testimony of Mr. Roger Richter before this committee that the IAEA is an international charade, so riddled with loopholes as to make it a toothless tiger, incapable of adequate protection of the world community.

For starters, almost 50 nations do not subscribe to the IAEA safeguards. Countries which have signed the Nuclear Non-Proliferation Treaty are allowed to back out of it on short notice. It is possible for a country which is under IAEA inspections to take all the necessary steps to build a bomb and to escape detection.

The IAEA has fewer than 100 experienced inspectors, many of them poorly trained, to inspect more than 750 nuclear facilities worldwide. Apparently, the 1960 Safeguards Report of the IAEA indicates the agency did not carry out a number of inspections called for and that dozens of nuclear facilities throughout the world received no inspections whatsoever.

All of the inspection and investigation reports of the IAEA are kept confidential because of agreements of the agency and the host country; so there is no guarantee that the IAEA will blow the whistle, even if it does detect a diversion of nuclear material.

Even if Iraq or another country chose to build a bomb openly, there are no sanctions—I repeat, there are no sanctions—available to the IAEA to force such a country to give up the bomb.

The pitiful inadequacy of the IAEA is the world's best kept secret, hidden from the public by governments and industries which fear that billions of dollars in reactor sales and nuclear trade would be halted if the public knew the truth. The inadequacies have been well documented for many years. A 1975 GAO report lists many of the deficiencies that have been discussed by Mr. Richter and others in the wake of the Israeli raid.

The lesson of Israel's leveling of Iraq's reactor is that the Congress and the President no longer can be complacent about inadequate safeguards for nuclear technology. I strongly support the call of Senator Glenn for a reconvening of the nuclear suppliers conference to improve and strengthen IAEA safeguards. However, it is difficult for the world community to take the U.S. nonproliferation policy seriously for a number of reasons.

First, the Reagan administration never has articulated a nonproliferation policy, and it now appears that we will not get an administration policy until July. This implies a rather casual attitude for one of the most fundamental national security problems facing the United States.

Second, the Reagan administration has urged a renewal of military aid to Pakistan, which, if anything, has been even more overt than Iraq in its organized effort to obtain a nuclear bomb. The signal to the

world is to go ahead and construct a nuclear bomb; the United States will reward that effort with military aid.

Third, the Reagan administration has exhibited an almost fanatical devotion to the development of nuclear power in this country and abroad. Enthusiastically to endorse the plutonium breeder reactor and commercial reprocessing in this country undercuts efforts to communicate to other countries that plutonium and highly enriched uranium puts individual countries just a few weeks or months away from acquiring atomic bombs. One cannot zealously support the commercial use of plutonium and also be an advocate of nonproliferation. They are mutually exclusive concepts.

I have introduced a resolution in the House, Mr. Chairman, cosponsored by more than 40 Members of the House, which calls on the President to strengthen our nonproliferation efforts. I am not optimistic that the President will issue anything more than rhetoric and platitudes. I doubt that he will recognize that the IAEA is in need of substantial and fundamental overhaul.

It is my strong belief, Mr. Chairman, that the Nuclear Regulatory Commission temporarily should suspend further export licensing until it can certify to the Congress that IAEA safeguards have been improved sufficiently to protect U.S. nuclear materials and equipment sold overseas. This is the type of strong leadership which this country must take in order to prove to the world that it is serious about stopping the misuse of peaceful nuclear technology for the development of atomic bomb capability.

Thank you, Mr. Chairman.

Senator BOSCHWITZ. Thank you, Mr. Markey.

Congressman LANTOS, we would be happy to hear from you now.

STATEMENT OF HON. TOM LANTOS, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA

Representative LANTOS. Thank you, Mr. Chairman.

I want to thank you for the opportunity to testify before this Committee. In an attempt to save time, I will try to summarize my testimony and submit it for the record.

There are a few major points I would like to make, Mr. Chairman to put this whole Israeli move in its proper perspective.

The first point I would like to make is it was no surprise.

On March 24 of this year, on the floor of the House of Representatives, I gave a speech entitled "Nuclear Gamble Must Stop." I would like to read a couple of paragraphs from it, because I find it profoundly disturbing that the administration appears to be surprised by what happened when, in fact, it was so easily predictable.

This is what I said 3 months ago:

The specter of nuclear proliferation looms ominously before us. The radical and unstable regime in Iraq has begun an alarming escalation of atomic weapons development. Pakistan, India, and Libya are stepping up their own nuclear armaments programs. A dangerous potential exists in the explosive Middle East for a nuclear arms takeover by PLO terrorists.

Some of our European allies—France, Italy, and Portugal—supply essential hardware and technology to Iraq and Pakistan without stringent controls on their use. Through energy blackmail, Iraq barter high-priced oil for uranium stockpiles, sensitive technology, and sophisticated nuclear equipment.

Intelligence reports indicate that both Iraq and Pakistan will marshal their nuclear capability not for commercial purposes, but for the creation of a powerful nuclear arsenal.

I call on this Administration—

I said 3 months ago—

To take immediate and effective action to remind our European friends to stop their ill-conceived propagation of nuclear weapons. We must safeguard human existence on this earth from the horror of nuclear holocaust.

I was not the only one who spoke out on this issue, Mr. Chairman. Senator Cranston did in this body and many others have as well. I find the puzzled and surprised response of the administration one of the most profoundly disappointing aspects of the administration's foreign policy performance thus far.

The second point I would like to make is a historic one. It was exactly 25 years ago when the attention of the Western World was riveted on Suez while the Soviet Union crushed the Hungarian uprising. I think there is a profound danger that history will repeat itself. As we are mesmerized by the destruction of Iraq's nuclear capability, there is a profound danger that the Soviet Union will take over Poland.

I think it is mandatory that we do not become diverted in our attention to the Middle East and to the Baghdad episode, giving the Soviet Union a window of opportunity to move against Poland.

I also feel, Mr. Chairman, that there has been a naive or misguided attempt to portray this episode as an Israeli problem. I remember some years ago, when terrorism was viewed as an Israeli problem, because the victims of international terrorism some years ago were Israeli citizens. Tragically, terrorism has become very much of an international problem. As a matter of fact, terrorism has become a problem which in large measure has avoided Israel because that country has taken relatively effective measures to cope with it. I think this is likely to happen here. I fully concur with the comments of my colleagues, Congressman Bingham and Congressman Markey, that the real danger in the field of nuclear weapons does not come at the moment from the superpowers, but rather it comes from irresponsible, radical regimes or groups getting hold of nuclear weapons.

When a seller hungry for oil meets a buyer lusting after nuclear weapons, it will take more than a diplomatic chaperone to keep them apart.

Over the last decade, international terrorism has emerged as a routine tool of a number of fanatic organizations and Third World dictators. These political gangsters already have demonstrated by their despicable actions that utter disregard for human life. Only their present inability to acquire nuclear weapons, not any lingering sense of decency, has prevented these men from launching nuclear attacks. They are determined to overcome this temporary inability.

A nuclear bomb in the hands of Qaddafi or Khomeini or an Idi Amin is more likely to be used than the same weapon in the hands of major powers.

As much as I regret the fact that the Soviet Union possesses nuclear weapons, Soviet leaders appear to be somewhat more realistic, perhaps capable of being deterred by fear of massive retaliation. But some of the new nations and groups seeking nuclear weapons are so irresponsible, so irrational, so fanatical, that they could use them in an unprovoked attack to blackmail the West or merely out of spite.

If a terrorist nation or organization detonates a bomb in San Francisco, Paris, or Rome, there is a substantial likelihood that that bomb will be built from uranium mined in Brazil, enriched in a French reactor, or processed in an Italian hot lab. Some nations, whose defense policies allied themselves with the United States, are pursuing proliferation policies which pose a grave and increasing danger to our own national security. The time has come, Mr. Chairman, to insist on linkage between our military and economic alliances and relationships, and the practices of nations that regard the sale of nuclear hardware and technology as just routine business.

The only way the United States can protect itself from nuclear terrorism is to prevent terrorists from obtaining nuclear weapons in the first place. A nuclear bomb the size of a suitcase could be brought into an American harbor on any of a thousand foreign ships or smuggled across our porous border. We must be prepared to use the same methods to prevent the building of a terrorist bomb that we would use to stop an actual airstrike against the United States. The magnitude and the dangers of the steps necessary to prevent the acquisition of such weapons increases the longer we wait. Once we perceive a danger of nuclear arms falling into terrorist hands, our Government must act with dispatch. One ounce of prevention is better than a kiloton of cure.

If we are to survive in this age of nuclear terrorism, fundamental changes are essential in our approach to nuclear proliferation.

First, we must commit ourselves publicly and in advance to utilizing the full range of economic, political and, yes, military means available to us to prevent nuclear weapons from falling into terrorist hands. The levels of our past concern and activity have been inadequate in comparison with the dangers involved.

We must treat the imminent transfer of nuclear capacity to a Khomeini or a Qaddafi with the same gravity that we would regard the imminent arrival in the Port of New York of a ship carrying an Iranian or a Libyan bomb.

The United States has the economic, political, and military means to prevent, in most cases, the sale or transfer of dangerous nuclear materials or facilities to terrorist nations and radical groups. We must make it clear that we have the will as well.

Both deterrence and the appearance of fairness require that friends and foes alike know in advance that we are prepared to take such action and that we will do so without regard to any traditionally close relations with the nations involved.

Second, Mr. Chairman, we must develop procedures and strengthen our intelligence capacity for ascertaining when the danger of nuclear terrorism is so great that a nuclear quarantine, backed by all necessary measures, must be imposed to prevent the shipment of further nuclear materials to a particular buyer, or when steps must be taken to render inoperative equipment already in terrorist hands.

The act of singling out a nation or group for such treatment will be a difficult and unpleasant one. But we must be prepared to pay the diplomatic and economic price involved if we are to have an effective nonproliferation policy.

For someone born in the safety of the United States, Mr. Chairman, on whose shores no hostile forces have landed for over a century, it may be difficult to believe that a Qaddafi, a Khomeini, or an Arafat

really would use a nuclear bomb against the population of Israel. But I find it all too easy to believe.

Growing up in Nazi-occupied Europe, I saw men, women, and children being led off to their deaths by armed Nazi thugs. Every day during that period, tens of thousands were exterminated by radical, totalitarian regimes, while civilized nations refused to believe that people would intentionally execute innocent civilians.

Today we all live in a world in which there are both the murderous fanaticism and the technological capacity required to commit enormous crimes. Three decades ago, 12 million people, Jews and Christians, Poles and Czechs, Hungarians and Dutch, and many others, paid with their lives that the world might learn that these things can actually occur. That is a lesson that the Israelis have learned. They acted, as we should, to prevent the building of a terrorist bomb.

We have but two choices before us—to resolve now to use the stern measures that will be required for our own protection; or to prepare to submit to nuclear blackmail or nuclear attack. There is no third alternative. And there is no more sure and certain way to bring about another nuclear holocaust than to delude ourselves into thinking that it cannot occur.

Thank you, Mr. Chairman.

[Representative Lantos' prepared statement follows:]

PREPARED STATEMENT OF HON. TOM LANTOS

Mr. Chairman, thank you for the opportunity to testify before this Committee regarding the destruction by Israel of the nuclear reactor under construction in Iraq.

Nuclear non-proliferation is no longer a matter for diplomatic handwringing; it is now a matter of American self-defense. A decade ago the nuclear powers had little inclination to sell lethal technology or materials, and the possibility that some small nation or group would obtain or use a nuclear bomb seemed the stuff of science fiction. But we live now at the outset of an age of nuclear terrorism, and unless we recognize the enormous dangers, and are prepared to take the drastic actions that will be required to control them, the age of nuclear terrorism is going to become an age of nuclear catastrophe.

Several independent forces have converged to change irrevocably the realities of nuclear arms control.

The developed nations which possess the technology needed to build nuclear bombs are heavily dependent on imported petroleum. Some have demonstrated a perilous and short-sighted willingness to barter that nuclear technology for a promise of future energy supplies. When a seller hungry for oil meets a buyer lusting after nuclear weapons, it will take more than a diplomatic chaperone to keep them apart.

Over the last decade international terrorism has emerged as a routine tool of a number of fanatic organizations and third world dictators. These political gangsters have already demonstrated by their despicable actions their utter disregard for human life. Only a present inability to acquire nuclear weapons, not any lingering sense of decency, has prevented these men from launching nuclear attacks. They are determined to overcome this temporary inability. A nuclear bomb in the hands of Muammer Qaddafi or the Ayatollah Khomeini is more likely to be used than the same weapon in the hands of the major powers. As much as we may regret the fact that hostile superpowers possess such weapons, their leaders are realistic men capable of being deterred by fear of massive military retaliation. But some of the new nations and groups seeking nuclear weapons are so irresponsible, irrational or fanatical that they could use them in an unprovoked attack, to blackmail the West, or merely out of spite.

We must not delude ourselves into thinking that only Israel is endangered by nuclear terrorism. A decade ago many thought that only Israeli civilians would be the victims of conventional terrorism. Today the murder of innocent men, women and children goes on throughout the world. The terrorist networks which spread the arms and tactics first used against the Israelis will not shrink from

sharing whatever other weapons they are able to acquire. The vehemence and consistency with which the United States and "American Imperialism" are denounced in certain foreign capitals are all too similar to the threats hurled against Israel.

The source of the lethal technology, equipment and nuclear fuel which put nuclear weapons within the reach of these terrorists has been, not our traditional adversaries, but our western allies. The danger of a Soviet nuclear attack remains a real one, which we must seek to deter with our own forces and to diffuse through the SALT process. But if a terrorist nation or organization detonates a bomb in San Francisco, Paris or Rome, there is a substantial possibility that that bomb will be built from uranium mined in Brazil, enriched in a French reactor, or processed in an Italian "hot lab." Some nations whose defense policies ally themselves with the United States are pursuing proliferation policies which pose a grave and increasing danger to our national security. The time has come to insist on linkage between the military and economic alliance which we offer those nations and their practices regarding the sale of nuclear hardware, technology and fuel.

The only way that the United States can protect itself from nuclear terrorism is to prevent terrorists from obtaining nuclear weapons in the first place. A nuclear bomb the size of a suitcase could be brought into an American harbor on any of a thousand foreign ships, or smuggled across our porous border. We must be prepared to use the same methods to prevent the building of a terrorist bomb that we would use to stop an actual air strike against the United States. The magnitude and dangers of the steps necessary to prevent the acquisition of such weapons increases the longer we wait. Once we perceive a danger of nuclear arms falling into terrorist hands, our government must act with dispatch. An ounce of prevention is better than a kiloton of cure.

If we are to survive in this age of nuclear terrorism, fundamental changes are essential in our approach to nuclear proliferation.

First, we must commit ourselves, publicly and in advance, to utilizing the full range of economic, political, and military means available to us to prevent nuclear weapons from falling into terrorist hands. The level of our past concern and activity have been inadequate in comparison with the dangers involved. We must treat the imminent transfer of nuclear capacity to a Khomeini or a Qaddafi with the same gravity that we would regard the imminent arrival in the port of New York of a ship carrying an Iranian or Libyan bomb. The United States has the economic, political and military means to prevent, in most cases, the sale or transfer of dangerous nuclear materials or facilities to terrorist nations or groups; we must make it clear that we have the will as well. Both deterrence and appearance of fairness require that friends and foes alike know in advance that we are prepared to take such action, and that we will do so without regard to any traditionally close relations with the nations involved.

Second, we must develop procedures, and strengthen our intelligence capacity, for ascertaining when the danger of nuclear terrorism is so great that a nuclear quarantine, backed by all necessary measures, must be imposed to prevent the shipment of further nuclear materials to a particular buyer or when steps must be taken to render inoperative equipment already in terrorist hands. The act of singling out a nation or group for such treatment will be a difficult and unpleasant one, but we must be prepared to pay the diplomatic and economic price involved if we are to have an effective non-proliferation policy.

For someone born in the safety of the United States, on whose shores no hostile forces have landed for over a century, it may be difficult to believe that a Qaddafi, a Khomeini, a Hussein or an Arafat would really use a nuclear bomb against the population of Israel, the United States, or any other nation. But I find it all too easy to believe. Growing up in Nazi-occupied Europe, I saw men, women and children being led off to their deaths by armed Nazi thugs. Every day during that period tens of thousands were exterminated by the radical totalitarian regimes which civilized nations refused to believe would intentionally execute innocent civilians.

Today we all live in a world in which there are both the murderous fanaticism and the technological capacity required to commit enormous crimes. Three decades ago 12 million people, Jews and Gentiles, Poles, Czechs, Hungarians, and others, paid with their lives that the world might learn that these things can actually occur. That is a lesson that the Israelis have learned; they acted, as we should, to prevent the building of a terrorist bomb. We have but two choices before us—to resolve now to use the stern measures that will be required for our own protection, or to prepare to submit to nuclear blackmail or attack. There is no

third alternative. And there is no more sure and certain way to bring about another holocaust than to delude ourselves into thinking that it cannot occur.

[From the Congressional Record, Mar. 24, 1981]

NUCLEAR GAMBLE MUST STOP

Mr. LANTOS. Mr. Speaker, the specter of nuclear proliferation looms ominously before us: The radical and unstable regime in Iraq has begun an alarming escalation of atomic weapons development. Pakistan, India, and Libya are stepping up their own nuclear armaments programs. A dangerous potential exists in the explosive Middle East for nuclear arms takeover by PLO terrorists.

Some of our European allies—France, Italy, and Portugal—supply essential hardware and technology to Iraq and Pakistan without stringent controls on their use. Through energy blackmail, Iraq barter high-priced oil for uranium stock piles, sensitive technology, and sophisticated nuclear equipment. Intelligence reports indicate that both Iraq and Pakistan will marshal their nuclear capability not for commercial purposes but for creation of a powerful nuclear arsenal.

In the interest of international security, European nations must cooperate with the United States to restrict the supply of nuclear equipment to volatile regimes and insist upon inspection of nuclear facilities by the International Atomic Energy Agency.

I call on the administration to take immediate and effective action to remind our European friends to stop their ill-conceived propagation of nuclear weapons. We must safeguard human existence on this Earth from the horror of nuclear holocaust.

[From the Congressional Record, June 9, 1981]

NUCLEAR PROLIFERATION THREATENS THE MIDDLE EAST

● Mr. LANTOS. Mr. Speaker, 2½ months ago from this very spot I called attention to the growing menace of Iraq's irresponsible and reckless dictatorship moving inexorably toward the completion of its nuclear arsenal. The Iraqi regime is in the midst of a war of aggression against its Moslem neighbor; it has openly defied worldwide consensus concerning nuclear nonproliferation, and has repeatedly threatened the annihilation of Israel.

The Israeli Air Force with a preventative and limited strike has obstructed the completion of Iraq's weapon of mass destruction. Those who now criticize Israel's decision to protect its very existence would be the first to call for the obliteration of any nuclear facilities constructed in Cuba, so near our own borders.

Many were silent as Iraq threatened to defy the terms of the Nuclear Nonproliferation Treaty. Many were silent as several European powers supplied the Iraqi dictatorship with lethal nuclear technology. Will they continue to remain silent as even now Libya's Qaddafi installs his nuclear weapons arsenal? Will they act or will they choose to submit to nuclear blackmail and quietly hope that the Israelis will again take care of the problem? ●

[From the Congressional Record, June 10, 1981]

THE LESSON OF BAGHDAD

Mr. LANTOS. Mr. Speaker, 19 years ago all Americans supported and applauded President Kennedy's grim determination to take any action necessary to remove from Cuba offensive missiles aimed at the United States. Today there is not a Member of Congress who would not support President Reagan were we confronted with hostile nuclear capabilities by Castro's Cuba. The American people would indeed rejoice if the U.S. Air Force in a brilliant, preemptive strike destroyed Cuba's nuclear facilities. We would proudly and rightly call it an essential exercise of legitimate self-defense.

Well, Mr. Speaker, last Sunday the surrounded and beleaguered Israelis did exactly what we would do in our part of the world should the occasion arise. Instead of filling the air with holier-than-thou pontificating, we should learn the real lessons of Baghdad: First, that we and our allies must put the goal of nuclear nonproliferation at the top of our national security agenda; and, second, that democratic and free societies should be admired and applauded when they demonstrate their determination and ability to fight for their own survival.

[From the Congressional Record, June 11, 1981]

BREZHNEV DOCTRINE IS UNACCEPTABLE

(Mr. Lantos asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. LANTOS Mr. Speaker, the danger is profound that in a uniquely tragic way history will again repeat itself. Twenty-five years ago as the West was preoccupied with the Suez Crisis, the world stood idly by as the Red army with its well-known brutality crushed the heroic uprising of the Hungarian people, for freedom and independence.

Today, as many are mesmerized over the destruction of the nuclear capability of the radical and irresponsible regime in Iraq, the Soviet Union is again poised on the brink of crushing the budding independence of Poland.

The Soviet Union's brazen intimidation of the Polish people must not be allowed to go unchallenged. I call upon President Reagan to publicly declare, without delay, that our Nation rejects the pernicious Brezhnev doctrine which arrogates to itself by the divine right of Communist imperialism the license to subjugate its neighbors in Afghanistan, in Poland, in Czechoslovakia, indeed everywhere.

We as Members of Congress have a supreme obligation to the American people to focus on the dangerous Soviet fall game and not become distracted by the momentary sideshow in the Middle East.

Senator BOSCHWITZ. Thank you.

I thank both you gentlemen for your fine testimony before the committee.

PROLIFERATION OF NUCLEAR TECHNOLOGY

Mr. Markey, in your testimony you seemed to indicate that some of the problems foreseen by your colleague are going to be hard to avoid, because anybody who has a nuclear energy program is going to have the capacity, as an offshoot of that program, to produce nuclear weapons. And, as Congressman Lantos has said, these soon will be small enough to fit into a suitcase and thereby come into this country fairly unnoticed.

How would you address some of the problems in view of the proliferation of the nuclear technology in connection with energy? How would you address the problems and the rather profound viewpoint of the future that Congressman Lantos has?

Representative MARKEY. First of all, I think we dramatically have to strengthen the IAEA safeguards so as to give us an immediate ability to protect the world against the diversion of materials into nonpeaceful hands.

I think the U.S. Government, even in the budget process in which we now are engaged, has to respond to the Israeli attack, as well. The Israelis have indeed done us a favor because they have focused our attention upon the most serious problem facing the security of the world over the next couple of decades—the problem of horizontal proliferation.

Although vertical proliferation—the stockpiling of weapons by the superpowers—dominates today's discussions, the question of horizontal proliferation, that is, country after country getting the technology, receives only a fraction of the world's attention, although it is a hundred times more dangerous to world security.

LIMIT DEVELOPMENT AND EXPANSION

In our own country, in the present budget process we should not continue funding of the breeder reactor, we should not continue funding of reprocessing capacity, we should set an example for the rest of the world so that we have a moral position which is defensible at the point at which we ask other nations to join with us in attempts to limit the development and expansion of nuclear technology.

This is not an easy position to take. The marketplace over the past half a decade has dealt a terrible blow to the nuclear industry in this country. No new nuclear powerplants have been ordered in the last 5 years in this country. But, at the same time, the Reagan administration is about to hand a welfare check to the nuclear industry that would make Adam Smith roll over in his grave, in terms of the amount of the commitment that we continue to make. Thirty-six percent of the nonmilitary Department of Energy budget for next year will go to an energy source which provides 2.5 percent of the energy in this country. It is a very bad precedent for this country to set, creating the impression that we still have a commitment to nuclear technology when the marketplace already has killed it for all intents and purposes. It is in a comatose state, but yet, the other countries of the world still see us as setting the example. Therefore, they demand that they also have access to this technology.

I think immediately what we should do is take this opportunity to let the marketplace forces finally kill off nuclear power as an energy source in this country. When you consider Three Mile Island, the market forces I have described and the economics, and the Israeli strike, you see the Israeli strike as nothing more than the Three Mile Island of nuclear nonproliferation. We should allow this finally to die out in our country and not give it additional subsidies.

ADMINISTRATION SHOULD CALL AN INTERNATIONAL SUMMIT

In addition, I think President Reagan ought to call an international summit. He should ask Francois Mitterrand, who has a real commitment to limitation of nuclear technologies in this world, to meet not with the United States and the Soviet Union, but with all countries now engaged in the export of this technology to explain to them and to the world that every time a nuclear powerplant is placed in a country in the world, it is a potential bomb factory and can be diverted to that purpose very easily, so much more easily than people have any appreciation of at this point in time.

For the past 25 years, we have been deluded by the atoms for peace program into believing that there was such a thing as a peaceful atom. It just does not exist. It is absolutely and irreversibly tied to the war purpose atom. They cannot be divided.

Whether it be a nuclear powerplant that the French and West Germans were constructing in Iran which was 90 percent completed—and we should thank God that the Ayatollah now does not have access to uranium—or whether it be the Iraqis, the South Koreans,

the Filipinos, the Taiwanese, or whoever around the world to whom we have spread this technology, we cannot offer any assurances to future generations. We cannot offer any assurances to future generations 10 years from now, or 20, 30, or 50, of the form of their governments much less of the stability of the leaders who will be in those countries.

IAEA PROTECTOR OF NUCLEAR INDUSTRY

So, while we try to give assurances to the world that the IAEA for the short term will be able to provide guarantees that this "peaceful technology" will not be diverted, we cannot any longer allow the sad fact of the matter—and it would be a joke if it were not so sad—that the IAEA only serves as a protector of the nuclear industry in this world. The secrecy with which all of its information is held and the lack of forthcoming that the Government has in really trying to be as honest as it can about the danger of this technology, give us every reason to believe that at this time we should take this opportunity in our present Federal budget to begin to reverse the commitment that we have to this technology.

Senator BOSCHWITZ. Do I conclude from your statement that we already have gone so far in the proliferation of nuclear technology, whether through powerplants or otherwise, that we no longer can withhold or control the proliferation of nuclear weapons?

Representative MARKEY. We now have to begin to put an absolute limit on any further expansion of nuclear technology in the world. Then we must begin the process of rolling back the technological developments which are going on in the world, diverting these peaceful programs into weapons programs.

Again, the statement cannot be made frequently enough, whether it be low enriched uranium, high enriched uranium, or plutonium, all three can be used in bomb grade programs if very elemental technologies are provided to the countries. Low uranium, with a reprocessing capacity which is very easy for countries to develop, can be turned into a bomb program.

We engage in very deceptive arguments when we debate whether the Iraqis should accept low enriched or high enriched uranium. It makes no difference if they gain access to the reprocessing capacity, and it is a relatively easy technology to develop themselves, even if other countries are not willing to supply it to them.

We must recognize this as a reality of this technology and must begin immediately to have the worldwide discussion with other countries that I described for the long-term stability of our civilization.

50 NATIONS DO NOT SUBSCRIBE TO IAEA SAFEGUARDS

Senator BOSCHWITZ. Before I turn the questioning to my colleagues, I note that you state that almost 50 nations do not subscribe to the IAEA safeguards, and much has been made of the IAEA safeguards by the administration in its criticism of the Israeli attack. Does this administration or has this country subscribed to the IAEA safeguards?

Do we have inspections here?

Representative MARKEY. We do have inspections in this country.

We are so paranoid in this country about the diversion of nuclear materials that we have an organization which is called the Nuclear Emergency Search Team (NEST). It is funded to the tune of \$50 million a year. It was created in 1974, and was not made public until 1977 because of its mission and because of the fear of the impact that the knowledge of such an organization would have on the American public.

The sole function of this organization is to react immediately in case of a terrorist threat to an American city because of diversion of nuclear materials within our own country. This organization, with scientists, with military, FBI, and Department of Energy officials, has as its sole mission the working toward the prevention of diversion of nuclear materials within our own country.

Again, it is a part of the demystification of the nuclear industry in our country that has to go on to make this information public, so that our own country recognizes the virtual inevitability of the diversion of peaceful nuclear materials into weapons making programs that can be used against our own country domestically. This is apart from any threat which the Soviet Union poses to us.

Senator BOSCHWITZ. Thank you.

Senator PELL.

Senator PELL. Thank you, Mr. Chairman.

I particularly would like to welcome a very close and good friend to this committee, Congressman Tom Lantos. I knew him before he was a Congressman and have admired him very much. I am happy he is with us today.

I congratulate the Congressmen, all three of them, on their presentations.

I would like to raise one question.

ANY WAY TO AVOID PROLIFERATION?

Looking ahead to the long haul, is there any way we can get this nuclear genie back into the bottle except through some really vigorous international system that will involve a profound loss of sovereignty on our part? We all know now the distrust that some nations have of the United Nations. Israel would be a supreme distruster. I think the United States has shown by its unwillingness to let Vietnam be decided by the United Nations that it would be an example of another distruster.

Is there any way of avoiding this proliferation without having some form of international organization with the right to move in and search in violation of national sovereignty?

I would be interested in the views of Congressman Lantos and Congressman Markey in this regard.

Representative LANTOS. Well, Senator, short of that utopia, I think a far more effective and concerted effort on the part of the Western nations would go a long way toward dealing with this problem.

I think it is very significant that both the Pakistani and the Iraqi nuclear development is Western supported. It is Western technology, supplied by some of our NATO friends and allies, which is at the core of this development. To me, this is an index of the relatively low importance that American administrations have placed over the years in persuading our allies that this is unacceptable.

It is inconceivable to me that either Italy or France would view its relationship with Pakistan or with Iraq as more important than its relationship with the United States. This issue I think has just been on the back burner. Senator Biden touched on Mr. Reagan's comment during the campaign that nuclear proliferation is none of our business. I think this attitude has been fairly typical among many. This is the attitude which brought us to the Baghdad episode.

I agree with my colleague, Congressman Markey, that when the dust settles and the hypocrisy dissipates and the pontification comes to an end, we will be grateful for this action because it will have focused international attention on what should be the No. 1 international agenda item, namely, stopping nuclear proliferation.

HORIZONTAL PROLIFERATION PROBLEM OF THE 1980's

I also agree that it is horizontal proliferation which is the problem of the 1980's, not vertical proliferation.

Representative MARKEY. I would say that surrender of sovereignty is an absolutely indispensable fact of life for countries that want to participate in this nuclear "ponzi" game in which this generation of world citizens receives the benefits and the next generation takes the risks.

I think this is an essential contract which we have to make with the next generations.

The United States resists, and has resisted traditionally, inspections of its facilities by foreign countries, by an international organization. But it is my impression that the United States currently permits them.

We have had very tight security on these facilities in the past. But I think we lose credibility, and I think the Israelis do as do others, by not allowing for the full-scope safeguards and inspections to be made of their facilities, as they are of other countries that are expected to abide by nonproliferation provisions.

"PEACEFUL ATOM" MYTH

The problem here is that we all have operated under a mythology of the last 25 years, under the myth that there was such a thing as a "peaceful atom." All of us have been subject to the advertisements and assurances that have been given to us by the "experts." The experts assured us that we could be made safe.

That is not the case any longer. Until we begin to ask and extract from countries the assurances that the trade they have to make in order to have access to this technology is a relinquishing of national sovereignty in the area in which this nuclear technology is involved, then we will continue to see reactions such as had occurred between the Israelis and the Iraqis, such as occurred at the point at which the Indians exploded their bomb and the next day the Pakistani Government announced that if its people had to eat grass and leaves for a generation, they also would have the atomic bomb. We now see, or will within the next year, the result of that program. We will continue to see international tensions exacerbated because we have sacrificed the long-term nonproliferation goals of the world to short-term, bilateral, diplomatic or economic considerations.

We have done this consistently over the past 25 years because we did not really examine the real danger of nuclear power.

Here is the point that I think our country refuses really to accept. We are an economic and political giant in the world. When we speak, others listen. If we decided that we were going to take a tough, firm, hard stand on this issue, then we could gain the cooperation of other countries.

SOVIET EXPORT OF TECHNOLOGIES AND SPENT FUEL

In many of these areas the Russians and others have much better records in terms of their export of these technologies and the reclaiming of spent fuel. It is time for us to begin to assert that leadership role as well and not to allow the Westinghouses, the Bechtels, and the Combustion Engineerings and other companies in this country who basically have put this technology out on the sidewalk and hawked it for the last 25 years, to continue to dictate our foreign policy.

Nearly 17 percent of all direct loans by the Export-Import Bank over the last few years has been dedicated to the export of nuclear powerplants around the world. That's what we use the Export-Import Bank for, to spread this technology. It is about time for us to stop and examine the Federal programs which we have, from Clinch River, to reprocessing, to the Export-Import Bank, in terms of the impact, the long-term impact that it has upon our foreign policy. This is our responsibility.

If we do this domestically and then turn to other countries and ask them to begin to examine their policies and, with international cooperation, to relinquish sovereignty in the area in which nuclear power is concerned, I think we would have a lot more credibility and also a lot greater likelihood of being successful in creating that kind of cooperation.

PROMOTION OF NUCLEAR PLANTS BY EX-IM BANK

Senator PELL. Let me recall some of your statistics, Congressman Markey, I believe you said that 17 percent of the direct credit lending of the Export-Import Bank has been used for the promotion of nuclear plants. Over how many years was this?

Representative MARKEY. Over the last 15 or 20 years.

Senator PELL. I see. I believe you also said earlier that 40 percent of President Reagan's nonmilitary DOE energy program is being spent on a source which provides only 2.5 percent of our energy.

Representative MARKEY. That's correct.

Senator PELL. Those are rather startling figures.

I thank you both very much, indeed.

Thank you, Mr. Chairman.

Senator BOSCHWITZ. Senator Mathias?

Senator MATHIAS. Thank you, Mr. Chairman.

I would like to thank both Representatives for their testimony here today. I think the obvious concern that they feel and the sense of urgency that they feel will help to awaken the country to the kind of problem which we have and which, as Representative Lantos suggests, is the problem of mankind and not the problem of any one nation. It is the problem of all of us.

CONCEPT OF AMERICAN MONOPOLY

As Representative Markey suggested, it has become a more difficult problem as a result of the proliferation of nuclear technology in the world. There now are advanced nuclear technologies in many nations. The concept that there is an American monopoly which can be maintained, which will slow down this commerce, may have been valid at one time, but clearly is not valid any longer. So, we have a much more sophisticated kind of problem, just as there is a more sophisticated kind of technology.

Let me ask one question, which is the same question I asked Representative Bingham.

When you look at the chart that appears in "The Economist"—have you seen that?

Representative LANTOS. Yes; I have.

Senator MATHIAS. It is a very disturbing chart and that is why I thought it might be useful in this record.

Representative LANTOS. I agree.

Senator MATHIAS. It shows where in the Third World reactors are placed.

HYPOTHETICAL QUESTION

Representative Lantos mentioned Colonel Qaddafi. So let me put my hypothetical question to you. If the Tunisians become sincerely and actively concerned that the Libyan reactor is being used to manufacture a weapon which will be directed at them, what is their recourse in the present situation?

Representative LANTOS. Senator Mathias, I am one of those who believes in the old English song which says what shall we do with the drunken sailor. This is a rather intriguing question. I personally prefer asking why did he take to the bottle.

Rather than beginning the analysis with what the Tunisians should do as the Libyans develop nuclear capability, we should ask how did the Libyans get to the point where they are now. They got to that point with Western help. They got to that point with the eagerness of highly developed, Western, oil-consuming nations being willing to trade.

Senator MATHIAS. Do you know where the Libyan technology came from? I do not and am asking you as a matter of information.

Representative LANTOS. I believe the intelligence community, in general, feels that the bulk of these Third World capabilities originate in Western, developed nations. I think the Soviet Union, on the whole, has been far more reluctant to share nuclear technology than we have.

Senator MATHIAS. I certainly do not dispute your premise. I would agree with you that we have to be extremely careful about where the technology goes, to whom you sell the brains.

Representative LANTOS. Exactly.

Senator MATHIAS. But in the Libyan question this no longer is an issue because it already has been done. So, what do the Tunisians do? How do they react?

Representative LANTOS. Well, I am not sure whether it will be the Tunisians who will react first, or whether the Egyptians will react first.

Senator MATHIAS. Well, let's take first the hypothetical case of the Tunisians. Tunisia is a small nation, relatively weak.

Representative LANTOS. If they are incapable of acting as, in fact; the Israelis acted, then their only recourse is to ask us to handle the problem for them.

Senator MATHIAS. Should they follow the Israeli example if they are able to do it?

Representative LANTOS. It seems to me, Senator Mathias, that if it is the judgment of their leadership that the Libyan nuclear weapon is designed to be used against the major population centers of Tunisia, it would be utterly irresponsible on the part of that leadership not to take preemptive action. Yes.

Senator MATHIAS. Well, I am profoundly discouraged by your answer—

Representative LANTOS. So am I.

Senator MATHIAS [continuing]. Because it looks to a lawless world in which the only law that is available would be the law of the jungle.

INTERNATIONAL SECURITY MUST BE AVAILABLE

Representative LANTOS. Unless those who are capable of enforcing the law in fact enforce the law, then, in fact, vigilante tactics inevitably follow. I think it is not for the Tunisians or the Israelis of this world to create an international society of law and order, but it is for the major powers to do so. If they fail, then the small nations, threatened with devastating consequences, will have to take preemptive action.

Senator MATHIAS. I think you have played before us the prescription, that international law will have to develop to the point that security is available without vigilante tactics.

Representative LANTOS. Exactly.

Senator MATHIAS. It is a profound challenge.

Representative LANTOS. It is a profound challenge, Senator. But I think it also is important to bear in mind—and I think I am accurate in this—that as far as the IAEA is concerned, that agency's inspections in Iraq, even disregarding the fact that during a period the Iraqis did not allow inspection, were conducted, I believe, exclusively or overwhelmingly by nationals from the Eastern bloc.

Given the fact that Iraq, during this whole period, had the closest relationship with the Soviet Union and with the Eastern European satellites, it would be the ultimate naivete to assume that a Soviet citizen or a Czech citizen would blow the whistle on the Iraqi nuclear program.

Senator MATHIAS. I might say to you that this committee has requested from the Department of State and the Central Intelligence Agency a detailed report on the IAEA inspections in Iraq, to the extent that they are available.

Representative MARKEY. Might I respond for one brief moment?

Senator MATHIAS. Please.

LAWS UNENFORCED IS LIKE NO LAW AT ALL

Representative MARKEY. I would say that there is no law. Libya is a signator of the Non-Proliferation Treaty, as is Iraq. What you wind up with is the Israelis, the Tunisians, or others looking to the

world for protection by lawful means but being forced to resort to being forced to resort to vigilante methods in order to protect themselves in a lawless world.

A world with a law on the books that is unenforced is a world which as without law as if nothing ever had been passed. In fact, it is almost more dangerous because it gives the false veneer of protection. Israel has pierced it initially, but others will be forced to if the United States and other Western countries do not move to prevent this.

Senator MATHIAS [presiding]. I do not want to trespass on what surely by now is Senator Biden's time—

Senator BIDEN. Go ahead, Mac.

Senator MATHIAS [continuing]. But if he does not mind, I would respond with one short comment.

I am concerned that we denigrate the fabric of IAEA protections, such as they are, too much.

I don't know of anybody who is satisfied with them. I don't know of anybody who thinks they have reached the ultimate in providing a shield of safety to the world. But to say that they are worthless I think is unfortunate, too. In this committee we also are seeking the advice of Ambassador Gerard Smith, who has had a distinguished career in this field. I think Ambassador Smith feels that there is some real value to the IAEA procedures—not as good, perhaps as you or I would want them, but that there is some value to them.

I don't think we ought to slander the IAEA to the point that the world loses confidence in it entirely because, at the moment, it is all we have. It may not be perfect but it is all we have.

I think we need to preserve what is positive in the ISES program and build on it.

Senator Biden.

Senator BIDEN. Thank you, Mr. Chairman.

Gentlemen, I would like to pursue two separate areas.

Let me ask first if you can hear me clearly, as I have laryngitis?

Representative MARKEY. It's fine.

Representative LANTOS. [Nods affirmatively.]

PROPRIETY OR IMPROPRIETY OF ISRAELI STRIKE

Senator BIDEN. The first question is that of the Israeli strike, its propriety or impropriety. The second concerns the question which has, and should have, dominated this hearing, that is, what do we do from here with regard to proliferation?

Let me consider the first question now, that of the Israeli strike.

There have been a number of analogies made here today by my colleagues on this side of the bench between the potential destructive capacity of nuclear weapons in the hands of outlaw nations, individual terrorists, dictators, and so on, and the situation in Iraq.

I would suggest, and would ask you both to comment, that in the Tunisia example, though it is one worth raising and one worth addressing, I hope we are not left with the impression that it is similar to the situation Israel faced.

To the best of my knowledge, Qaddafi has not announced to the world that he wants to move Tunisia into the Mediterranean Sea. To the best of my knowledge, Qaddafi has not waged a holy war on

his Arab brothers in Tunisia and said so. To the best of my knowledge, there is not a present, on-going, significant line, area, or geographic region of confrontation. To the best of my knowledge, Tunisia is not without friends in the Arab world. There are neighbors which are friends.

However, in the case of Israel, this is a nation that was told, retold, and told again by the alleged possessor, or soon to be possessor of a nuclear weapon that its goal was the elimination of Israel as a nation-state.

It seems to me that this is a little bit like my walking up to you, Congressman Markey, and saying "you know, I don't like you very much, so some day I will beat you up outside the Capitol grounds," and my walking up to Congressman Lantos and saying "hey, I don't like you and I am about to punch you in the mouth right now."

Now I do not want to be parochial and pedestrian in my analogies, but I hope the American people understand what happened here. This is not Tunisia. This is not Pakistan or India. This is a flat-out declaration by a nation that had no rational reason, either as a consequence of its need for energy or for the size of its research reactor, to reflect the nuclear program that Iraq said it had, but never had, for peaceful means.

My question is, Would you both characterize for me what you believe the reaction of the rest of the Arab world was to the Israeli strike beyond the rhetoric. What do you think really is happening in the capitals of Jordan, Syria, and Saudi Arabia? Second, if you conclude, as I have, that the silence is somewhat deafening, would you characterize how the Arab nations feel, in a substantive sense, about the action the Israelis have taken as it relates to their security and safety?

Congressman Lantos, perhaps you could begin.

Representative LANTOS. I will be happy to start, Senator Biden.

First, let me express my full agreement with your comment about not being able to draw a parallel between the Tunisia situation and the Israel situation because I think you are absolutely correct.

Senator MATHIAS. If the Representative would yield for just a moment—

Representative LANTOS. I shall be pleased.

Senator MATHIAS [continuing]. Let me say that my question was a hypothetical question about Tunisia and it contemplated that the Tunisians be in that framework. That was my full assumption.

Senator BIDEN. Let me say that I do not want to appear to be oversolicitous to another Senator, as I think we Senators sometimes may appear, but I am sincere when I say that I understood that to be the intent of the Senator's question.

Senator MATHIAS. Therefore all of the circumstances which the Senator so eloquently has set forth would be contemplated in my hypothetical question.

Senator BIDEN. I am sure that it was. I just wanted to make it clear to those who may be taking notes and those who may be listening to this testimony that it is a quantum leap and we are talking about a hypothetical as opposed to a real situation. That's all.

Senator MATHIAS. I would challenge the Senator on that statement because I think Representative Lantos has given it to us in a more realistic way than that. He has said that this is a world problem.

This is a problem which is not just the problem of Israel fearing the Iraqis. It is not just the problem of one nation fearing another. It is the question of many nations who may fear many other nations. That is the kind of situation in which a sense of desperation, a sense of frustration, can arise. It is exactly what was predicted by Ambassador Thomas Watson in his speech at Harvard University several weeks ago, in which he said when one nation sees another making a quantitative surge in nuclear power or a technological breakthrough in nuclear power, it may be disposed to take some desperate response.

I believe Representative Lantos and I are on the same wavelength on this question.

Senator BIDEN. Rather than take the time of our colleagues in the House and debate this subject with my learned colleague from Maryland, with whom I seldom disagree, maybe we could refrain from that for the moment. I will not respond to your response until I hear Congressman Lantos' response to the question of what are the Arabs thinking and why.

Representative LANTOS. Well, Senator Biden, obviously the Arab reaction is a public reaction and it is a private reaction, and it differs from country to country.

RESPONSE OF ARAB WORLD

It is my considered judgment, as a long-time student of the Middle East, that at a public level, whatever condemnation of the Israeli action was forthcoming from the Arab world, it was obviously to be expected and gave no surprise. It is my considered judgment that at the private level Arab reaction ranges from delight to annoyance. Let me become specific.

The Syrian regime has been at bitter odds with the Iraqi regime. From the point of view of the Syrian regime, to have Iraq's nuclear capability destroyed is very good news, indeed. From the Saudi Arabian point of view, I think the reaction privately has to be precisely the same. Saudi Arabia has been profoundly concerned about Iraq's attempt to emerge as the leader in the Arab world.

Senator BIDEN. If I could interject, if you remember, back in the days when you were keeping me straight and advising me on these matters and we were fighting the F-15, one of the reasons we were told why we had to sell the F-15 to the Saudis was to protect them from the Iraqis.

Representative LANTOS. You are absolutely correct, Senator. One of the principal reasons that the Carter administration used in its proposed sale of the original F-15 package to the Saudis was because the Saudis needed to develop this capability vis-a-vis the Iraqis.

I have difficulty visualizing anything but joy in the palaces of Riyadh by virtue of Iraq's nuclear capability having been destroyed.

As far as Egypt is concerned, I think the issue is more complex. I am convinced that President Sadat is annoyed, and in my view properly so, at the Israelis for not having postponed the meeting between Prime Minister Begin and President Sadat which took place just a few days before this episode. I think this is an index of the well-known insensitivity of Prime Minister Begin to people around him at a personal and at a national level. I believe that Pres-

ident Sadat, at least I assume that he is annoyed, and properly so, that this meeting was not postponed.

At a more fundamental level, I have difficulty seeing the Egyptian reaction being anything but pleased that Iraq's military nuclear capability has been dealt a setback.

A HUMILIATING EPISODE

There is, of course, the emotional reaction that this was an Arab defeat. It was a humiliating episode. It was a particularly humiliating episode because it was executed with such brilliant surgical precision, without a single plane being lost, with only one loss of life on the ground, and with apparently the total destruction of the facility. In this sense, it clearly indicates a major Israeli military triumph which only can be viewed very negatively.

Senator BIDENT. I asked both witnesses the question, but have just been handed a note that my time is up.

Congressman Markey, I want to ask you a question on the other subject if I may.

I want to say that I am extremely impressed with your statement. I had heard of you and you are equally as articulate as I had heard you were. You really present the case well.

But I see a dilemma in the second portion of both your testimonies. I do not argue with the course or the end result that you both are predicting, though in slightly different terms, which is that we are in for real trouble.

I find after being on this committee for 6 or 7 years, after the "good old days," when I was chairman of the European Affairs Subcommittee, though now I am ranking member of the subcommittee, that I have had many occasions, to the chagrin of my constituency, to meet with all of the European leaders about whom we talk and to whom we make indirect reference.

FEELINGS OF EUROPEAN LEADERS

One of the things our European friends point out to us, and I think they are correct, is this. They say to me, you, the United States, with 400 years of coal, you the United States with more energy in the ground, oil energy, than any other nation in the world but for Saudi Arabi and maybe the Soviet Union, you, the United States, with your great technological capability and capacity and the vastness to expand, you can be awfully self-righteous about telling us that we should not develop extensively our nuclear capability. We don't have anywhere else to go quickly—I add the word "quickly"—and we are your competitors economically. Obviously it would make sense for you, if we were to forgo nuclear capability. And in turn, in order for us, as Europeans, to maintain the capability or to get the capability, we need currency, we need trade, we need money and we need oil.

Now, as they say in the southern part of my State, unless you all are willing to guarantee it to us and still be our competitors, it is kind of hypocritical.

I will make my second point and then would ask you to respond to both of them, if you would.

The second point is in my opinion it is one thing to say that we don't want certain nations to have nuclear capability. I, as you, believe you cannot have peaceful uses solely of nuclear reactor. I don't know how you do that unless you adopt Congressman Lantos' position, which I think is the only logical one, which is you can use it, but if it looks like you are going to go to bombs, then we are going to blow it up, and that is frightening, too.

It is one thing to tell those nations that have other access to energy, Third World nations that are developing, that we don't want you to and we are going to boycott, in effect, your having the technological access to develop the nuclear capability. But I think it is a very different thing to say this to nations that have no place else to go.

I do not see any great largesse on the part of this country—as a matter of fact, frankly, there is more of it on the part of the Europeans—to do much economically for the Third World in providing its energy needs or the things that allow those countries to sustain their economies that are produced by energy.

So, my question is twofold. First, is there any way we can do what you suggest, and I agree with you, without telling the American people that it will take significant sacrifice on the part of the United States, that it can't be done easily, that it will cost us dollars and cents? Second, is there any way that we can ask the Third World to forgo the nuclear option without committing to be part of providing them on a competitive basis the other energy sources?

Representative MARKEY. Domestically, we will be doing the American consumer a favor by eliminating the nuclear option for the production of electricity in our own country.

THREE MYTHS CREATED

There were three myths that were created in the late 1950's, when we left coal as a technology. Those were that we would head on to nuclear means for generating electricity, along with cheap, imported oil because they both were cleaner, safer, and inexpensive. Well, at least for imported oil we found that the temporary illusion was shattered at the point at which we become so dependent upon it.

With regard to nuclear, though, there were three myths. The first is that it was safe. Three Mile Island has pretty well put the lie to that contention, as well as the absolute inability of the Federal Government, in cooperation with the private sector, to find the answer to the nuclear waste question. It is not something which is going to be had very easily.

The second myth is that it was economical. We were told in the 1950's that nuclear power would be too cheap to meter. On the basis of that, many countries in the world made a psychological commitment to that technology, as did we. What has happened over the years, however, is that the cost of nuclear power has skyrocketed as the industry has been forced to build in safety protections into the powerplants, into resolving the nuclear waste question, into protecting the surrounding population in cases of emergency, to the point where a new coal-fired plant constructed today in America costs less than a nuclear-fired plant. This is the reason that all new

plants being ordered in this country are coal-fired rather than nuclear-fired. So we do not do a disservice to the American public.

The third myth is that it is needed. Nuclear power is not needed in this country. There has been a dramatic decline in the demand for electricity.

Senator BIDEN. Congressman, I do not argue with that. The sacrifice I was referring to I cannot imagine Mitterrand, Schmidt, or Thatcher saying yes, we will forgo unless somehow we say yes, we will help you in a way that provides other access to energy. That is the sacrifice part.

I fully agree with you about the myth of cheap nuclear energy for U.S. citizens. But that will not satisfy the Europeans, the fact that we will say we'll stop if you stop. They will say sure you can stop because you have coal and oil. But if we stop, we don't have either coal or oil to fall back on. So, obviously you are at a competitive advantage if we both stop, they will say.

NO SHORT-TERM SOLUTION

Representative MARKEY. There will not be a short-term solution, but one of the things we have to do in this country is make a dramatic commitment to renewable energy resources. Our country developed this technology and it was promoted in the 1950's and 1960's as the energy of the future. Other countries, accepting our technological leadership, shifted over to that as the means by which they were going to provide electricity for their people for the coming generations.

Unable to accept the facts, and because of the control that special interests in this country have over our energy budget, we have been unable to make significant investment in alternative energy resources.

Now you are pessimistic in terms of this Government's willingness to make the commitments to alternative energy resources. But passive, solar, wind, wood—all of these can provide substantial alternative energy sources for all these countries.

Let me give you an example.

Just 2 years ago, in New England, 6 percent of all of our energy came from renewable energy resources. We expect within the next 3 years that 13 percent of New England's energy resources—oil-poor New England's energy resources—will be renewables. That comes from wood, wind, and hydropower, and all those resources that have not been given the proper incentives that they historically have needed.

Senator BIDEN. I think that is a very good point.

NO OIL PRODUCING COUNTRY SHOULD RECEIVE NUCLEAR POWERPLANT

Representative MARKEY. In looking at Third World countries, no oil-producing country should receive a nuclear powerplant. There is absolutely no justification for it if we consider them to be Third World developing countries. There is no justification for it. Iran, Iraq, and Libya can build oil-fired generating plants on every oasis in their countries if they want to. There is absolutely no justification for selling them nuclear powerplants, other than blackmail for their energy resources. For France or the United States to send nuclear energy to those countries is an absolute disgrace.

In other Third World countries, less than 1.7 percent of their electricity comes from nuclear means at this point. Those are the other Third World countries. I repeat, 1.7 percent of their electricity, and this probably is one-half of one-half of one-half of 1 percent of all their energy.

If we made a real commitment to their development of passive solar, of active solar, at this point in time, at the point at which they now are taking off on their new programs, when these technologies, given the proper incentives to provide the energy which they need over the next 10 or 15 years, as they go through their transitions, then they very adequately could get by without nuclear powerplants.

Senator BIDEN. So you do agree that this should be a policy, that we have an obligation to do this?

Representative MARKEY. It has to be the policy. If that is not the policy then in 20 years we will come back and not ask the question of who has the atomic bomb, but who does not have it.

Senator BIDEN. I fully concur.

I wanted to make sure we were on the same wavelength on this. The American people have to understand as we deal with this incredibly complex problem that it is not going to be done without our having to extend the technology, extend the resources, extend the help to these nations. There is not much of a constituency in this country today for foreign aid of any kind. I think that is incredibly shortsighted.

I really have to go and I appreciate your testimony. I know that you have a longer way to go than we do.

Mr. Chairman, let me conclude by making three short statements.

The U.S.S.R. has been referred to repeatedly here as having the more rational policy. It does.

This is not to imply that my colleagues do not agree with what I am about to say, but I would suggest the reason the Soviet policy is rational is because its rationality diminishes in direct proportion to the distance from its shores. For example, the Libyan reactor is a Soviet reactor, whereas the Iraqi reactor was a Western reactor.

We in the United States kid ourselves by thinking that the reactor is "way over there" and that the "suitcase will not come in" because we don't think in terms of suitcases but rather think in terms of missiles.

HYPOCRISY FILLS THE AIR

My second point is I wonder what we would do in this country if the CIA came to us and said Congressmen, Senators, Mr. President, Cuba definitely has set on a pattern of developing nuclear weapons, we are quite certain of that. It will not be until 1988 that Cuba will be able to do it, but it definitely is set on a pattern. If, in fact, certain things take place in the near future, it could be sooner; and if, in fact, you are going to do anything about it, the time to do so would be now, if, in fact, you want to diminish the loss to the victim that is, Cuba. I wonder how many of our tough, conservative friends in this administration and the Congress would say you know what, let's look at IAEA and see what it thinks about this, and by the way, I think we should have a rational discussion with our Cuban friends?

I think that is the shade of hypocrisy about which I think Congressman Lantos was talking.

My last point is this: I am disturbed with Prime Minister Begin. I am not as disturbed with the action that was taken, but I was disturbed with the manner in which the action was taken. I forgive him slightly because I am assuming that he assumed that it made no sense to talk to this administration because of this administration's stated policy on proliferation, this administration's nonpolicy on arms control, this administration's policy with regard to the whole bevy of issues that relates to nuclear power, this administration's commitment to "international free enterprise," this administration's reluctance to take tough stands where it counts, this administration which takes away parking spaces and then sells grain to Russia. I don't forgive Begin, but I can understand why he did it.

It is not a good way, Congressman Lantos, to treat a good ally, and we are a good ally. So to that extent, I am disturbed with him, too.

Both you fellows are extremely good. I think your testimony has been incredibly useful for this committee and this situation.

Representative LANTOS. Might I just add a footnote, Senator Biden and Mr. Chairman?

I could not agree with you more strongly on your Cuban analogy. Would you allow me to read just one sentence. On June 10, on the floor of the House, this is what I said:

Today there is not a Member of Congress who would not support President Reagan were we confronted with hostile nuclear capabilities by Castro's Cuba. The American people would indeed rejoice if the U.S. Air Force, in a brilliant preemptive strike, destroyed Cuba's nuclear facilities. We would proudly and rightly call it an essential exercise of legitimate self-defense.

I agree with you totally, Senator, and think this sort of underscores the hypocrisy that fills the air.

Senator BIDEN. Yes.

I also want to underscore, though, what I believe borders on the irresponsible way in which Mr. Begin makes his decisions, the way in which he fails to consult, the way in which he tends to disregard the other aspects of relationships that are ongoing. I hope we are all chastened a bit by this, and I hope that you people, who have been out front on this for such a long time on this issue, such as you, Congressman Markey, are able better to get the attention of your colleagues in the House on what you have felt for a long time it should have been focused.

Proliferation will not become a problem with which we can deal, as the chairman will tell you better than any of us, until we have a President who says this is important, this is all important. If he does not do that, it will not happen anywhere else.

This is not just passing the buck.

Representative MARKEY. I agree with you.

Senator BIDEN. As our conservative friends say, it is just the real world.

Thank you, Mr. Chairman, and thank you, gentlemen.

Senator PELL [presiding]. Thank you very much, indeed, Congressman Markey and Congressman Lantos. Your testimony has been interesting, provocative, helpful, and stimulating. We are delighted that you were here.

This meeting is recessed until 2 p.m. this afternoon.

[Whereupon, at 12:15 p.m., the committee recessed, to reconvene at 2 p.m. the same day.]

AFTERNOON SESSION

[Whereupon, at 2:55 p.m., the committee reconvened, in room 4221, Dirksen Senate Office Building, Hon. Charles H. Percy, chairman of the committee, presiding.]

The CHAIRMAN. I am sorry that the vote on the floor has delayed our hearing. This afternoon, the committee will broaden its focus on the recent Israeli action by hearing from a panel of experts on the international legal implications.

Already there has been considerable public discussion over the question of whether Israel's action against Iraq should be viewed as a matter of legitimate self-defense under international law. If so, additional issues arise as to what factors would distinguish the Israeli action from other, illegal, uses of armed forces in international affairs.

To aid us in our consideration of these issues, the committee has invited two distinguished legal experts to testify. Prof. John Norton Moore, who holds the Walter L. Brown chair at the University of Virginia Law School, is a widely recognized authority in international law. Professor Moore also served as the U.S. Ambassador to the Law of the Sea Conference from 1973 to 1976.

Prof. William Thomas Mallison is the director of the international and comparative law program at George Washington University Law Center. Professor Mallison also is a widely respected figure in the field of international cooperation and humanitarian law.

Professor Mallison, the panel is apparently not fully assembled, but we are very happy to have you here. We would be pleased to have your testimony.

[Professor Mallison's biographical sketch follows:]

BIOGRAPHICAL SKETCH OF DR. WILLIAM THOMAS MALLISON

Dr. Mallison is Professor of Law and Director of the International and Comparative Law Program at George Washington University Law Center, Washington, D.C. and holds the J.S.D. degree from Yale University. He has also served on occasion as an international law consultant to law firms, organizations, and individuals.

DR. MALLISON'S EXPERIENCE

1942-46—Active duty in the U.S. Navy; served on the USS *Colorado* (BB45) through the Central Pacific and Philippine Islands campaigns. Placed on the Navy Retired List on 22 August 1946.

1948-49—Associated with Kerr, McCord & Greenleaf, Attorneys at Law, Seattle, Washington.

1949-50—Instructor, Ohio State University College of Law.

1950-51—Sterling Fellow, Yale University Law School.

1951-57—Assistant Professor and Associate Professor of Law, George Washington University.

1957-58—Chief, Asian-African Branch, U.S. Atomic Energy Commission. Principal United States negotiator of various "Atoms for Peace" Agreements with countries in the Western Pacific and the Middle East including the United States-Japan Comprehensive Atomic Energy Agreement.

1959 to present—Professor of Law, George Washington University.

1967 to present—Director, International & Comparative Law Program.

1960-61 and 1974-75—Charles H. Stockton Chair of International Law at the Naval War College, Newport, R.I. (Sabbatical Leave).

Spring 1968—Visiting Professor of Law at the Law Faculty and Center of Advanced International Studies, University of Tehran, Iran (Sabbatical Leave).

SELECTED PUBLICATIONS

"Change and Continuity in the Juridical Doctrines of Naval Blockade" (with Sally V. Mallison) in Richard von Doenhoff (ed.), "Versatile Guardian: Research in Naval History" (1979).

"The Control of State Terror Through the Application of the International Humanitarian Law of Armed Conflict" (with Sally V. Mallison) in M. H. Livingston (ed.), "International Terrorism in the Contemporary World" (1978).

"Studies in the International Humanitarian Law of Armed Conflict" (with Sally V. Mallison) (Preliminary Edition 1978).

"The Juridical Status of Irregular Combatants Under the International Humanitarian Law of Armed Conflict" (with Sally V. Mallison) 9 "Case-Western Reserve University Journal of International Law" 39 (1977).

"A Survey of the International Law of Naval Blockade" (with Sally V. Mallison) 102 "United States Naval Institute Proceedings" No. 2, p. 44 (February 1976).

"The Concept of Public Purpose Terror in International Law: Doctrines and Sanctions to Reduce the Destruction of Human and Material Values" (with Sally V. Mallison), International Institute of Higher Studies in Criminal Sciences, Syracuse, Italy (1973); also published in 18 "Howard University Law Journal" 12 (1974) and in M.C. Bassiouni (ed.) "International Terrorism and Political Crimes" (1975).

"The International Law Decision-Making Process in the Polar Regions" in Gerald W. Schatz (ed.), "Science, Technology, and Sovereignty in the Polar Regions" (1974).

"The Juridical Characteristics of Belligerent Occupation and the Resort to Resistance by the Civilian Population: Doctrinal Development and Continuity" (with R. A. Jabri) 42 "George Washington Law Review" 185 (1974).

"The Role of International Law in Achieving Justice and Peace in Palestine-Israel" (with Sally V. Mallison) 3 "Journal of Palestine Studies" 77 (Spring, 1974).

"Political Crimes in the International Law of War: Concepts and Consequences" (American Society of Criminology, 1972).

"The Balfour Declaration: An Appraisal in International Law" (Northwestern University Press, 1971).

"The Legal Problems Concerning the Juridical Status and Political Activities of the Zionist Organization/Jewish Agency: A Study in International and United States Law," 9 "William & Mary Law Review" 556 (1968). (Reprinted as a monograph, 1968.)

"Studies in the Law of Naval Warfare" (U.S. Naval War College, 1966).

"The Juridical Status of Privileged Combatants Under the Geneva Protocol of 1977 Concerning International Conflicts" (with Sally v. Mallison), 42 "Law & Contemp. Probs." 4 (Spring, 1978).

"The Jerusalem Problem in Public International Law: Juridical Status and a Start Towards Solution" (with Sally V. Mallison), prepared for the International Conference on the Legal Aspects of the Palestine Problem with Special Regard to the Question of Jerusalem, in Vienna, 5-7 November 1980, under the auspices of the International Progress Organisation.

STATEMENT OF WILLIAM THOMAS MALLISON, PROFESSOR OF LAW AND DIRECTOR, INTERNATIONAL AND COMPARATIVE LAW PROGRAM, GEORGE WASHINGTON UNIVERSITY LAW CENTER, WASHINGTON, D.C.

MR. MALLISON. Thank you, Mr. Chairman. I very much appreciate this opportunity to make an international law analysis of the Israeli aerial attack of June 7, 1981, to determine whether, under the criteria of international law, it is aggression or self-defense.

My statement is rather long, Mr. Chairman, and I ask that it be placed in the record. I will present an oral summary of my statement.

In addition to placing my statement in the record, Mr. Chairman, I would like to ask you also to place the most recent edition of the

"Israeli Mirror," a four-page newspaper, into the record. This is a publication which is published by a Jewish group in London. It contains translations from the Israeli press. This entire issue deals with the subject of the hearing this afternoon and contains a very significant article on the military aspects by my distinguished friend, retired Gen. Mattityahu Peled of the Israeli Army.

The CHAIRMAN. We would be very pleased to put that newspaper into the record following your prepared statement.

Mr. MALLISON. Thank you, sir.

The international law which sets forth the criteria for self-defense and distinguishes it from aggression, has been enunciated and developed by the community of states to protect the inclusive interest of all states in promoting peaceful settlement of international disputes and deterring acts of aggression.

The most clear occasion when self-defense is justified in law is in response to an armed attack. The legal criteria, however, do not limit self-defense to this one situation, but also permit reasonable and necessary anticipatory self-defense, although anticipatory self-defense is regarded as a highly unusual and exceptional matter.

The first requirement of self-defense in customary law is the use of peaceful procedures if they are available. The second is an actual necessity, as opposed to a sham or pretense. The third essential is proportionality in responding coercion.

The second and third requirements always have been applied with more rigor to a claim of anticipatory self-defense than to a claim of defense against an armed attack. Even if the requirement of actual necessity is met, a claim of self-defense must be rejected if the response is not proportional to the character of the initiating coercion.

These requirements of the customary law, to which I have referred, now have been codified in the United Nations Charter.

The CHAIRMAN. Professor Mallison, would you please pull the microphone a little closer to you. It is a very directional mike.

Mr. MALLISON. Is that better, Mr. Chairman?

The CHAIRMAN. Yes, far better. I can see the smiles on the faces in the audience as you do that.

Mr. MALLISON. The customary law requirement of peaceful procedures is enunciated in article 2 paragraph 3 of the charter and in paragraph 4 of the same article 2 we have the prohibition on aggression.

Article 51 incorporates the customary law of self-defense in the following words: "Nothing in the present charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs."

The English language text is not very well drafted, and it must be recognized that self-defense is not limited to an armed attack. The more carefully drafted, and equally authentic, French text of article 51 uses the term "aggression armée," and this broader conception is consistent with the negotiating history at the San Francisco Conference.

The provisions of the U.N. Charter which just have been mentioned establish a world public order system. The maintenance of public order is the most basic task of any legal system whether domestic or international. The responsibility of a domestic order system is to exercise effective community control over private violence. By analogy, the responsibility of the world legal order is to exercise effective community control of violence and coercion exercised by national states.

The world legal order protects the values of all states and of all peoples in promoting peaceful procedures and deterring aggression.

Among the legal precedents for anticipatory self-defense in international law, I will mention three of the leading ones briefly. The famous *Caroline* case, with which I am sure the committee is familiar, involved a U.S. vessel, the *Caroline*, being used to assist the rebels against the then-Canadian Government. That government protested to the U.S. Government but the U.S. Government was either unwilling or unable to stop this use of the steamer *Caroline*.

Thereafter, Canadian troops crossed into the territory of the United States, set the *Caroline* adrift, and it was wrecked on the Falls.

The *Caroline* case is best known for Secretary of State Webster's formulation of the requirements of self-defense as involving "a necessity of that self-defense which is instant, overwhelming, and leaving no choice of means, and no moment for deliberation."

It is clear, however, that this formulation was not applied in the resolution of the *Caroline* controversy, since Great Britain attempted peaceful procedures before it resorted to the use of force, and then it used proportional means.

The quoted wording, "no choice of means and no moment for deliberation," is particularly unfortunate since a state invoking anticipatory self-defense must go through a process of deliberation, resulting in the choice of lawful, that is, proportional, means.

A more recent leading example arose during the Second World War. Following the Vichy French Government's armistice with Germany in June 1940, many vessels of the French navy took refuge overseas, including in naval bases in Alexandria, Egypt; Oran, French North Africa; or Martinique, in the West Indies.

The British presented the French naval commander in each of these locations with proposals setting forth alternatives concerning the disposition of the French warships, any one of which was designed to prevent them from coming under German control. The first, and preferred, alternative was for the French vessels to join with the Royal Navy and continue the war against Germany. The second was complete demilitarization so that the French warships could be of no use to Germany. The third alternative, which the British emphasized they would only use as a last resort and if the first two were rejected, was that Great Britain would attack and sink the French naval vessels.

At Alexandria and Martinique the French naval commanders accepted the second alternative. At Oran, the first two alternatives were rejected and, after further fruitless negotiations, British naval and air forces attacked and sank the French warships.

May this be justified as anticipatory self defense?

Very little, other than British naval and air power stood between the victorious German armies and successful invasion of the United Kingdom. Acquisition of major elements of the French Navy probably would have made an invasion successful. The principles of international law did not require the British to defer action until after the French warships were incorporated into the German Navy. This British action in World War II has received wide assent as lawful anticipatory self defense.

Another recent example is provided by the Cuban missile crisis. Here there was compelling photographic evidence of the emplacement

of intercontinental ballistic missile sites in Cuba. It will be recalled that the photographs showing this were decisive in changing the climate of opinion in the Security Council when Ambassador Stevenson passed the photographs around the table.

Among the alternative actions which were recommended to President Kennedy was the proposal to bomb the missile sites. Some international lawyers felt that this would be justified because of the Soviet attempt to drastically upset the nuclear balance of power. President Kennedy, however, selected a limited naval blockade or quarantine interdiction. This method permitted the use of diplomatic means at the United Nations and elsewhere and ultimately resulted in the Kennedy-Khrushchev agreement which terminated the missile crisis. The United States, of course, was only entitled to invoke national self-defense.

It is highly significant from a legal standpoint that on October 23, the Organ of Consultation of the Organization of American States invoked collective self-defense on behalf of the inter-American community, thus adding a regional determination of lawfulness to the U.S. initial determination.

The severely limited military measures employed by the United States amounted to the least possible use of the military instrument of policy. The legal consequence of this use of military force by the United States is that the proportionality test in even its most rigorous and extreme form was easily met.

I now turn to application of the International Law Criteria to the Israeli attack.

It is widely recognized that the State of Israel is the military super power of the Middle East region. Its efficient conventional armed forces are supplied with the most modern equipment and munitions by the U.S. Government. In addition, Israel has a substantial nuclear program.

In the early part of President Eisenhower's atoms for peace program, the United States entered into a research reactor agreement with Israel, which involved a substantial money grant to Israel but the transfer of only very small quantities of enriched uranium.

During the summer and early fall of 1957, when I was serving on the U.S. Atomic Energy Commission, President Eisenhower and Chairman Strauss were eager to have Israel enter into a power reactor agreement which would involve the transfer of substantial quantities of enriched uranium and also would involve inspection to prevent diversion to military purposes.

The efforts of the United States to involve Israel in a controlled and inspected nuclear cooperation agreement were unsuccessful. The objective of the United States, with full realization that Israel was the state with the greatest nuclear weapons potential in the region, was to inhibit or delay as much as possible the introduction of nuclear weapons in the Middle East.

It is well known that Israel is not a party to the Non-Proliferation Treaty and that its nuclear facilities never have been subjected to any kind of international inspection. Iraq is a state party to the NPT and its facilities have been inspected from time to time.

Assuming for purposes of legal analysis that the Government of Israel perceived an imminent danger in the Iraqi nuclear program, as it claims it did, it is clear that it undertook at most very limited

peaceful or diplomatic measures to deal with the threat. Whatever inquiries or protests were made to the Government of France were not deemed by Israel to result in reassurance to it. This is surprising since the character of the French nuclear assistance to foreign countries changed drastically following the intense June 1967 hostilities in the Middle East. Since that time, French foreign nuclear assistance has emphasized peaceful development and excluded military uses.

The most effective use of peaceful or diplomatic means to resolve the stated threat which was presented to Israel was apparently not even considered by it. This would have been for the Government of Israel to take energetic and sincere steps to obtain peace with justice for all the peoples in the Middle East, including Palestinians and Israelis. It would have resolved the fundamental conflict situation as well as the alleged Iraqi threat.

The existence of a supposed technical state of war would be a very weak basis upon which to justify the Israeli aerial attack. In the same way and for the same reasons, it would be equally ineffective in providing legal justification for an Iraqi attack upon the Israeli nuclear installations at Dimona.

The concept of this technical state of war was considered by the U.S. Supreme Court and discarded as irrelevant as long ago as the *Prize* cases, which were decided during the Civil War. It is significant that the so-called technical state of war is not recognized in the U.N. Charter and, consequently, cannot prevail over the limitations of the charter.

The grounds advanced by the Government of Israel in claiming an actual necessity for anticipatory self-defense have been further weakened by some of the statements made by Prime Minister Begin, including his repeated references to a secret chamber "forty meters" below the Iraqi reactor, which were later changed to "four meters" as well as his reference to "Soviet technicians" at Osirak in lieu of the French technicians, who were well known to be there.

If Israel were in possession of accurate facts concerning an Iraqi nuclear weapons program, it seems probable that its chief executive officer could articulate the facts more convincingly.

In any event, the President of the French Atomic Energy Commission, Mr. Michel Pequer, has characterized Mr. Begin's statements as "falsifications." This was reported in the press yesterday.

In evaluating the Israeli claim of actual necessity, it is decisive that the community of states has rejected the Israeli claim. So far as is known, not one single state has accepted its validity. This precludes the establishment of the Israeli attack as a valid measure under international law.

This situation stands in striking contrast to the unanimous regional approval and the substantial community of states approval which the United States received concerning its perception of the grave threat posed by the Soviet missiles in Cuba.

Since the Israeli claim of actual necessity has not met the demanding criteria of international law and has been explicitly rejected by the community of states, it is not necessary to inquire as to the proportionality of the Israeli armed attack. But if we do look at the proportionality issue briefly, the lack of proportionality in the Israeli aerial attack is manifested by the fact that President Kennedy's last resort alternative in the Cuban missile crisis situation, that is,

aerial bombing, was the first resort and perhaps the only alternative considered by the Government of Israel.

The use of this aerial attack as a first alternative cannot be justified under the customary law, under the United Nations Charter or under the applicable legal precedents.

The Government of Israel has claimed that its national interests were at stake, and it is therefore appropriate to consider them.

A number of distinguished individuals whose commitment to Israel is unquestioned have raised fundamental questions concerning basic Israeli national interests. For example, former Prime Minister David Ben-Gurion strongly advocated giving up the occupied territories and making peace on the basis of the pre-June 1967 boundaries. Unfortunately, he did not do this until after he had retired from public office.

The only surviving founding father of the State of Israel is Dr. Nahum Goldmann, a close associate of Dr. Chaim Weizmann and a past president of the World Zionist Organization and the World Jewish Congress. Dr. Goldmann has become a critic of Israeli policy and has strongly recommended that Israel assume a neutral status. He wrote recently:

It is an irony of fate that now that the Arabs have expressed a willingness to discuss peace under certain conditions, the dominant tendency in Israel lacks the necessary flexibility to take advantage of this new situation. As a result, Israel is increasingly isolated politically and faces a growing danger of losing the support of world public opinion. The greatest threat to Israel today is not Arab arms and the lack of financial means but the slow erosion of world sympathy, particularly among the progressive nations that have always supported Israel.

It is well known that the late Moshe Sharett was the first Foreign Minister and the second Prime Minister of the State of Israel. Since his death, his carefully written and thoughtful diary, not intended for publication, has been published in Israel.

More recently, portions of it have become available in the United States. His diary states:

What shocks and worries me is the narrow-mindedness and short-sightedness of our military leaders. They seem to presume that the State of Israel may—or even must—behave in the realm of international relations according to the laws of the jungle.

The Sharett diary recounts numerous acts of Israeli military incursions which he states were misrepresented as acts of self-defense, and it contains the following summary of his views:

The phenomenon that has prevailed among us for years and years is that of insensitivity to acts of wrong . . . to moral corruption For us, an act of wrong is in itself nothing serious; we wake up to it only if the threat of a crisis or a grave result—the loss of a position, the loss of power or influence—is involved. We don't have a moral approach to moral problems but a pragmatic approach to moral problems.

Former Secretary of Commerce Philip M. Klutznick, who also has served as president of the World Jewish Congress, is known as a consistent and thoughtful supporter of the State of Israel. He has raised fundamental questions and reached disturbing conclusions in a recently published article in the *Christian Science Monitor*, which I quote in part:

Why did Israel act at this time and without consultations with the United States, thus endangering present regional peace while claiming to safeguard Israeli security in years ahead?

Having accepted an arms dependency relationship with the U.S., can Israel reasonably insist on taking actions unacceptable and unexplainable to many and which threaten American regional interests?

The greater fears that deeply concern me are the long-term implications for world order of Israel's action. . . . Tomorrow, Iraq or some other unfriendly nation can indulge in a "suicide mission" on Israel's Dimona reactor, or India can turn on Pakistan, the Soviet Union on China. Israel has totally avoided this discussion as if only Israel's interests are vital, only Israel's existence threatened. Yet, in effect, Israel has breached the long and worrisome efforts to secure a measure of restraint in the nuclear age, with Israel's unilateral act creating a sense of anarchy and permissiveness hitherto beyond acceptability.

The devil of preemptive attack has been loosed—all the worse for Israel having acted without clearly exhausting all opportunities for reaching a general peace in the region, which is surely the only way in the long term to safeguard Israel's security.

In concluding, Mr. Chairman, I refer to certain issues facing the U.S. Government.

The Israeli aerial attack on the Iraqi reactor is symptomatic of a much larger problem. This problem, in its simplest form, is whether or not Israel should be allowed to continue its course of unilateral decision in violation of the standards of international law and the world legal order. The United States as the chief financial and military backer of the State of Israel thus far has imposed no effective limitations upon the resources which it has provided to Israel. The political branches of our Government now have the opportunity to decide whether this situation is to be allowed to continue or, in the alternative, will Israel be required to meet the same legal standards which are applied to other states and to which the United States holds itself.

If our Government now decides to support legitimate Israeli national interests, including the pre-June 1967 boundaries specified in Security Council Resolution 242 of November 22, 1967, this will lead to long-term security for Israel and peace in the Middle East because the security of Israelis and Arabs is interdependent.

The policy of supplying unlimited financial and military support to the State of Israel has led to disastrous consequences for all the peoples of the Middle East and for the stated policy of the United States to build a durable and just peace in the area.

President Eisenhower made the essential point in early 1957, following the tripartite attack upon Egypt and the initial refusal of Israel to withdraw from the then-occupied territories:

If we agree that armed attack can properly achieve the purposes of the assailant, then I fear we will have turned back the clock of international order. We will, in effect, have countenanced the use of force as a means of settling international differences and through this gaining national advantages.

Mr. Chairman, that concludes the summary of my prepared statement.

Thank you.

[Professor Mallison's prepared statement and attachment follows:]

PREPARED STATEMENT OF PROF. WILLIAM THOMAS MALLISON

THE ISRAELI AERIAL ATTACK OF JUNE 7, 1981: AGGRESSION OR SELF-DEFENSE UNDER INTERNATIONAL LAW?

The applicable international law

The international law which sets forth the criteria for self-defense, and distinguishes it from aggression, has been enunciated and developed by the community of states over a considerable period of time. The objective of these legal principles is to protect the inclusive interest of all states in promoting peaceful settlement

of international disputes and deterring acts of aggression. The most clear occasion when self-defense is justified in law is in response to an armed attack. The legal criteria, however, do not limit self-defense to this one situation, but also permit reasonable and necessary anticipatory self-defense. Anticipatory self-defense is regarded as a highly unusual and exceptional matter which may only be employed when the evidence of a threat is compelling and the necessity to act is urgent. "Reasonable and necessary" does not mean arbitrariness in decision, but its exact opposite. A hasty and ill-considered claim of anticipatory self-defense should be rejected by the community of states.

The first requirement of self-defense in customary law is the use of peaceful procedures if they are available. The second is an actual necessity as opposed to a sham or a pretense. The third essential is proportionality in responding coercion.¹ The second and third requirements have always been applied with more rigor to a claim of anticipatory self-defense than to a claim of defense against an armed attack. Even if the requirement of actual necessity is met, a claim of self-defense must be rejected if the response is not proportional to the character of the initiating coercion. An example of the proportionality requirement is provided by the wide community rejection of the Nazi German claimed right of military response to alleged, but trivial, incidents on the Polish border. There is no juridical basis upon which the German claim of actual necessity could be justified but, assuming for purposes of analysis only that there was an actual necessity, the Nazi claim was rejected because of its lack of proportionality in responding coercion. There is no way in which the massive land, air, and sea assault upon Poland in September 1939 could be justified as proportional to the alleged Polish threat against Germany.

The requirements of the customary law have now been codified in the United Nations Charter. The customary law preference, and indeed requirement, of peaceful procedures is enunciated in Article 2(3) of the Charter which provides:

"All members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered."

The prohibition upon aggression is enunciated in paragraph 4 of the same article of the Charter:

"All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purposes of the United Nations."

Article 51 of the Charter incorporates the customary law of self-defense in the following words:

"Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs."

The English language text quoted is neither well-drafted nor consistent with the negotiating history at the San Francisco Conference, which reveals that reasonable and necessary anticipatory self-defense was retained and that self-defense is not limited to an "armed attack". The more carefully drafted and equally authentic French text uses the term "aggression armée" and this is completely consistent with the negotiating history. The words "inherent right" in the English text also include anticipatory self-defense since the term refers to the pre-existing customary law which is incorporated by reference.

The provisions of the U.N. Charter which have just been referred to establish a world public order system. The maintenance of public order is the most basic task of any legal system, whether domestic or international. The responsibility of a domestic order system is to exercise effective community control over private violence. By analogy, the responsibility of a world legal order is to exercise effective community control of violence and coercion exercised by national states. The world legal order protects the values of all states and of all peoples in promoting peaceful procedures and deterring aggression.

Legal precedents for anticipatory self-defense in international law

It is useful to examine some of the leading instances in which the legal principles of anticipatory self-defense have been applied. The famous *Caroline* case² involved a steamer of that name which was employed in 1837 to transport personnel and equipment from United States territory across the Niagara River to Canadian

¹ On the three requirements, see McDougal and Feliciano, "Law and Minimum World Public Order," ch. 3 (1961).

² Mallison, "Limited Naval Blockade or Quarantine-Interdiction: National and Collective Defense Claims Valid Under International Law," 31 "Geo. Wash. L. Rev." 335-98 at 347-48 (Dec. 1962).

rebels on Navy Island (in control of the rebels) and then to the mainland of Canada. The British Government (then the sovereign in Canada) attempted to have the United States stop this use of the ship but the latter was either unwilling or unable to do so and the *Caroline* remained as a threat to Canada. Thereafter, Canadian troops crossed the Niagara River into the territory of the United States and, after a conflict in which two United States nationals were killed, they set the *Caroline* adrift and it was wrecked on the Falls.

In the ensuing diplomatic controversy, Great Britain rested its case on the basis of reasonable and necessary anticipatory self-defense. The United States did not deny that circumstances might exist in which Great Britain lawfully could invoke such self-defense, but denied that they existed in this situation. The diplomatic controversy was terminated, nevertheless, following a routine British diplomatic apology but significantly without any British assumption of legal responsibility for the deaths of the two Americans, the wounding of others, and the destruction of the *Caroline*. The absence of further legal claim by the United States should be interpreted as tacit acquiescence in the lawfulness of the British action.

The *Caroline* case is best known for Secretary of State Webster's formulation of the requirements of self-defense as involving a "necessity of that self-defense [which] is instant, overwhelming, and leaving no choice of means, and no moment for deliberation." It is clear, however, that this formulation was not applied in the resolution of the *Caroline* controversy since Great Britain attempted peaceful procedures before it resorted to the use of force and then used proportional means. The quoted wording concerning "no choice of means, and no moment for deliberation" is particularly unfortunate since a state invoking anticipatory self-defense must go through a process of deliberation resulting in the choice of lawful, that is proportional, means.

A more recent example arose during the Second World War. Following the Vichy French Government's armistice with Germany in June 1940, many vessels of the French Navy took refuge in Alexandria, Egypt; Oran, French North Africa; or Martinique, in the West Indies.³ In early July, the British presented the French naval commander in each of these locations with proposals setting forth alternatives concerning the disposition of French naval vessels, any one of which was designed to prevent them from coming under German control. The first and preferred British proposal was that the French naval vessels join with the Royal Navy in continuing the war against Germany. The second alternative involved the complete demilitarization of the French vessels so that they would be of no use to Germany. The third alternative, which the British emphasized would only be used with great reluctance if the first two were rejected, was that Great Britain would attack and sink the French naval vessels. At Alexandria and Martinique the French naval commanders accepted the second alternative. At Oran the first two alternatives were rejected, and after further fruitless negotiations, British naval and air forces attacked and sank or severely damaged the French warships.

Was the British attack on the warships of its former ally and accompanying incursions into French territorial waters and airspace justified as anticipatory self-defense? An affirmative response is required if a realistic appraisal is made of the grim realities of the situation confronting Great Britain. Very little other than British naval and air power stood between the victorious German armies and successful invasion of the United Kingdom. Acquisition of major elements of the French Navy would probably have made an invasion successful. The applicable principles of international law did not require the British to defer action until after the French warships were incorporated into the German Navy. There is no record of disapproval of the British action except from Axis sources. Distinguished international lawyers have appraised the British action as lawful anticipatory self-defense.⁴

Another recent example is provided by the Cuban Missile Crisis of 1962.⁵ As in the two previous instances, the facts were crystal clear, but in this instance they were revealed by photographic evidence of intercontinental missile sites being emplaced in Cuba. It will be recalled that these photographs were decisive in changing the climate of opinion in the Security Council when Ambassador Stevenson made them available. The missiles and the launching sites were being emplaced in secret and in the face of Soviet diplomatic assurances that no offensive weapons would be placed in Cuba. There is no reason to believe that further

³ *Id.* at 349.

⁴ 1 Oppenheim-Lauterpacht, "International Law" 303 (8th ed. 1955).

⁵ *Supra* note 2, *passim*.

diplomatic negotiations with the Soviet Union would have changed its determination to place these weapons with nuclear potential and accompanying launching sites in Cuba. Among the alternative recommendations which were presented to President Kennedy was the proposal to bomb the missile sites. Some international lawyers thought that this would be fully justified in law because of the great danger to the entire Western Hemisphere caused by this Soviet attempt to drastically upset the nuclear balance of power. President Kennedy, however, selected a limited naval blockade or quarantine-interdiction as the method to prevent the introduction of further offensive weapons and to bring about the removal of those present. This method permitted the use of diplomatic means at the United Nations and elsewhere and ultimately resulted in the Kennedy-Khrushchev agreement which terminated the missile crisis and led to the withdrawal of the missiles then in Cuba.

The United States was entitled only to invoke national self-defense on its own behalf, and it did this on October 22nd.⁶ It is highly significant, in appraising each of the legal requirements which must be met in an invocation of anticipatory self-defense, that on October 23rd the Organ of Consultation of the Organization of American States invoked collective self-defense on behalf of the inter-American community. In summary, the regional decisionmakers dealt with the same fact situation that the United States had dealt with on the previous day and came to the same conclusion of the existence of an actual necessity for anticipatory self-defense. The Organ of Consultation also approved the specific measures undertaken by the United States, and by the time the limited naval blockade or quarantine-interdiction was ended, there were ships from a number of Latin-American navies participating in the enforcement of the blockade.

The severely limited military measures employed by the United States amounted to the least possible use of the military instrument of national policy. If it had not been successful, somewhat more coercive use of military power could be justified under international law. The legal consequence of the restricted use of military force by the United States is that the proportionality test in even its most rigorous and extreme form was easily met. In addition to the approval of the United States measures by the Organization of American States, the measures also met with wide approval within the United Nations.

Application of the international law criteria to the Israeli attack

It is widely recognized that the State of Israel is the military superpower of the Middle East region. Its efficient conventional armed forces are supplied with the most modern equipment and munitions by the United States Government. In addition, Israel has a substantial nuclear program. In the early part of President Eisenhower's Atoms for Peace program the United States entered into a research reactor agreement with Israel which involved a substantial money grant to Israel but the transfer of only very small quantities of enriched uranium. During the summer and early fall of 1957, President Eisenhower and Chairman Strauss of the U.S. Atomic Energy Commission were eager to have Israel enter into a power reactor agreement with the United States which would involve the transfer of substantial quantities of enriched uranium as well as inspection to prevent diversion to military purposes. At the outset, inspection was to be done by the United States and subsequently by the International Atomic Energy Agency (IAEA) when its inspection procedures became operative. At that time the Government of Israel had a nuclear energy agreement with the French Republic, which had been its ally in the tripartite attack upon Egypt in 1956. Insofar as the United States Government was aware, there were no requirements of peaceful uses or inspection of any kind involved in the then French-Israeli agreement. The objective of the United States, with full realization that Israel was the state with the greatest nuclear weapons potential in the region, was to inhibit or delay as much as possible the introduction of nuclear weapons in the Middle East. Israel is not a state party to the Non-Proliferation Treaty (NPT), nor have its nuclear facilities ever been subjected to any kind of international inspection. The efforts of the United States to involve Israel in a controlled and inspected nuclear cooperation agreement were unsuccessful.

Iraq is a state party to the NPT and has had its nuclear facilities inspected by the IAEA from time to time. The Osirak reactor is, according to the information available at this time, not ideally suited for a nuclear weapons program, but susceptible, like other similar reactors, to such use. In the event that it were

⁶ After the event, the Legal Advisor of the Department of State took the position that only regional enforcement action, and not self-defense, was involved. Chayes, "The Legal Care for U.S. Action on Cuba," 47 "U.S. Dept. State Bull." 763 (Nov. 19, 1962).

proved that Iraq was engaged in nuclear weapons development in violation of its obligations under the NPT, this would be a matter for the world community including the superpowers as well as the state parties to the NPT to deal with and not a matter of concern to any particular single state.

If the Israeli claim of lawful self-defense can be justified, it must be on the basis of reasonable and necessary anticipatory self-defense. Consequently, Israel must meet the stringent requirements of anticipatory self-defense rather than the less demanding requirements of self-defense in response to an actual armed attack.⁷

Assuming for purposes of legal analysis that the Government of Israel perceived an imminent danger in the Iraqi nuclear program as it claims it did, it is clear that it undertook at most very limited peaceful procedures or diplomatic measures to deal with the threat. There is no evidence of direct contacts with the Government of Iraq. Whatever inquiries or protests were made to the Government of France were not deemed by Israel to result in reassurance to it. This is surprising since the character of French nuclear assistance to foreign countries changed drastically following the intense June, 1967 hostilities in the Middle East. At that time France terminated all military assistance to Israel, as it stated it would do concerning any state which commenced hostilities. Since that time, French nuclear assistance has emphasized peaceful development and excluded military uses. In view of these circumstances it appears, in the view most favorable to Israel, to be doubtful that it has met the peaceful purposes requirement for anticipatory self-defense.

The most effective use of "peaceful means" as enunciated in the U.N. Charter was apparently not even considered as a method to meet the claimed Iraqi threat. It would have been for the Government of Israel to take energetic steps to obtain peace with justice for all peoples in the Middle East including Palestinians and Israelis.

The lack of clear-cut evidence of actual necessity at least roughly similar to the type that the United States obtained concerning the Soviet missile emplacements in Cuba presents a formidable obstacle to the Israeli claim. Thus far, there appears to be no convincing evidence that Iraq was engaged in nuclear weapons development. Even if it is assumed that Iraq was engaged in such development, this does not mean that Israel or any other state was legally entitled to make an attack upon the Iraqi reactor.

The existence of a supposed "technical state of war" would be a very weak basis upon which to justify the Israeli aerial attack. In the same way, and for the same reasons, it would be equally ineffective in providing legal justification for an Iraqi attack upon the Israeli reactors at Dimona. The concept of a "technical state of war" was considered by the United States Supreme Court and discarded as irrelevant as long ago as the Prize Cases⁸ which were decided during the Civil War. Even a de facto cease-fire of the kind that existed between Israel and Iraq prior to the Israeli attack of June 7 could have been used as a step toward a meaningful peace. The Israeli attack has ruled out this positive opportunity since it indicates that, regardless of the length of the de facto cease-fire, aerial attacks are still permitted. This places the peaceful methods requirement of the U.N. Charter, if it is considered at all, last instead of first. It is significant legally that the so-called "technical state of war" is not recognized in the U.N. Charter and, consequently, cannot prevail over the limitations of the Charter.

If there were convincing evidence of an Iraqi nuclear weapons program, the community of states which are parties to the NPT would have every right to take collective measures to enforce the treaty and, if peaceful procedures were exhausted, mandatory economic and military sanctions against Iraq would have been available under the provisions of the U.N. Charter. If Israel were itself a party to the NPT, this would tend to strengthen its stated concern about possible Iraqi violations. The requisite convincing evidence which would justify in law an Israeli claim of anticipatory self-defense must be of such a character that it would persuade other states of the merit of the Israeli claim. Otherwise, the community of states in appraising such a unilateral claim would be entitled to reject it.

The grounds advanced by the Government of Israel in claiming an actual necessity for anticipatory self-defense have been further weakened by some of the statements made by Prime Minister Begin including his repeated references

⁷ On "the rigid legal requirements" involved, see *supra* note at 303.

⁸ 2 Black (U.S. 1862).

to a secret chamber "forty meters" below the Iraqi reactor which were later changed to "four meters" as well as his reference to "Soviet technicians" at Osirak in lieu of the French technicians who were well known to be there. If Israel were in possession of accurate facts concerning an Iraqi nuclear weapons program, it seems probable that its chief executive officer could articulate the facts more convincingly.

While Israel may argue with some plausibility that it did not violate the prohibition in article 2(4) of the U.N. Charter concerning the "political independence" of Iraq, it is less plausible for it to maintain that it did not violate the "territorial integrity" of Iraq. It is clear that the Osirak reactor was on Iraqi territory and, in addition, the attack upon the reactor violated Iraqi airspace as well as Jordanian and Saudi Arabian airspace. Under the established criteria of self-defense, Iraq would have been legally justified in shooting down the Israeli aircraft. In the same way, Israel violated the last clause of article 2(4) by conducting an aerial attack "in any other manner inconsistent with the purposes of the United Nations". Among the stated purposes of the United Nations in article 1 of the Charter is the principle of maintaining "international peace and security" by "peaceful means and in conformity with the principles of justice and international law". The purposes also include "the principle of equal rights" which is a reference to the mutuality and reciprocity element in international law, or in colloquial wording, "what is sauce for the goose is sauce for the gander". Israel would not be bound by these provisions, only if it were able to meet all the requirements of anticipatory self-defense incorporated by reference in article 51 of the Charter.

In evaluating the Israeli claim of actual necessity, it is decisive that the community of states has rejected the Israeli claim. So far as is known, not one single state has accepted its validity. In addition, the United Nations Security Council condemned the premeditated Israeli air attack in a unanimous resolution adopted on June 19, 1981. This stands in striking contrast to the unanimous regional approval and the substantial community of states approval which the United States receive concerning its perception of the grave threat posed by the Soviet missiles in Cuba. The community of states could establish the Israeli perception of necessity as well as its aerial attack as lawful measures of self-defense by giving them approval. Since there has been no such approval and on the contrary near-unanimous condemnation, this results in the Israeli claim being rejected under the well-established customary international law process of decision.

Since the Israeli claim of actual necessity has not met the demanding criteria of international law and has been explicitly rejected by the community of states, it is not necessary to inquire as to the proportionality of the Israeli armed attack. It may, nevertheless, be useful to briefly consider the alternatives to the aerial attack, if it is assumed for purposes of analysis that Israel had met the requirements of actual necessity. At the outset, a genuine concern about the adequacy of IAEA inspection procedures could be addressed to the IAEA itself which has a strong interest in not only maintaining the integrity of its procedures, but in improving them whenever possible. In addition, the great powers and the parties to the NPT, as well as all of the states in the Middle East, including the State of Israel, have a legitimate national security interest in efficient IAEA inspection procedures.

It may be suggested on behalf of Israel that it did not use this type of response to an assumed actual necessity because it would have brought about no effective results in terms of improved inspection procedures or adherence to the terms of the NPT. If this were a problem, the Government of Israel could greatly enhance the prospects of success by becoming a party to the NPT and opening its own nuclear installations to IAEA inspection. It would have at least been difficult and probably impossible for Iraq to refuse additional international inspection had Israel agreed to the same inspection for itself. Of course, effective international inspection would not be consistent with the development of nuclear weapons by any state. In the Cuban Missile Crisis situation, President Kennedy wisely rejected the suggested use of aerial bombing and was apparently only willing to give it consideration as a last alternative if the quarantine-interdiction had been unsuccessful.⁹ The lack of proportionality in the Israeli aerial attack is manifested by the fact that President Kennedy's last resort alternative was the first resort and perhaps the only alternative considered by the Government of Israel. The use of this aerial attack as a first alternative cannot be justified under

⁹ See Allison, *Essence of Decision: Explaining the Cuban Missile Crisis 198, 206 and passim* (1971).

the customary law, under the U.N. Charter, or under the applicable legal precedents.

Legitimate Israeli national interests: Peace through adherence to international law

The Government of Israel has claimed that its national interests were at stake and it is appropriate to consider them. A number of distinguished individuals, whose commitment to Israel is unquestioned, have raised fundamental questions concerning basic Israeli national interests. For example, former Prime Minister David Ben-Gurion strongly advocated giving up the occupied territories and making peace on the basis of the pre-June 1967 boundaries. Unfortunately, he did not do this until after he had retired from public office.

The only surviving founding father of the State of Israel is Dr. Nahum Goldmann, a close associate of Dr. Chaim Weizmann, and a past president of the World Zionist Organization and the World Jewish Congress. Dr. Goldmann has become a critic of Israeli military policy and has strongly recommended that Israel assume a neutral status. In a widely-read statement, he wrote:

"It is an irony of fate that now that the Arabs have expressed a willingness to discuss peace under certain conditions, the dominant tendency in Israel lacks the necessary flexibility to take advantage of this new situation.

"As a result, Israel is increasingly isolated politically and faces a growing danger of losing the support of world public opinion. The greatest threat to Israel today is not Arab arms and the lack of financial means but the slow erosion of world sympathy, particularly among the progressive nations that have always supported Israel."¹⁰

It is well known that the late Moshe Sharett was the first foreign minister and the second prime minister of the State of Israel. Since his death, his carefully written and thoughtful diary, not intended for publication, has been published in Israel; more recently, portions of it have become available in the United States. His diary states:

"What shocks and worries me is the narrow-mindedness and the short-sightedness of our military leaders. They seem to presume that the State of Israel may—or even must—behave in the realm of international relations according to the laws of the jungle."¹¹

The diary recounts numerous acts of Israeli military incursions which he states were misrepresented as acts of self-defense and it contains the following summary of his views:

"The phenomenon that has prevailed among us for years and years is that of insensitivity to acts of wrong . . . to moral corruption. . . For us, an act of wrong is in itself nothing serious; we wake up to it only if the threat of a crisis or a grave result—the loss of a position, the loss of power or influence—is involved. We don't have a moral approach to moral problems but a pragmatic approach to moral problems."¹²

Former Secretary of Commerce Philip M. Klutznick, who has also served as president of the World Jewish Congress, is known as a consistent and thoughtful supporter of the State of Israel. He has raised fundamental questions and reached disturbing conclusions in a recently published article which is excerpted in part here:

"Why did Israel act at this time and without consultations with the United States, thus endangering present regional peace while claiming to safeguard Israeli security in years ahead?

"Having accepted an arms dependency relationship with the U.S., can Israel reasonably insist on taking actions unacceptable and unexplainable to many and which threaten American regional interests?

"The greater fears than deep concern me are the long-term implications for world order of Israel's action. . . Tomorrow, Iraq or some other unfriendly nation can indulge in a 'suicide mission' on Israel's Dimona reactor, or India can turn on Pakistan, the Soviet Union on China. Israel has totally avoided this discussion as if only Israel's interests are vital, only Israel's existence threatened. Yet, in effect, Israel has breached the long and worrisome efforts to secure a measure of restraint in the nuclear age, with Israel's unilateral act creating a sense of anarchy and permissiveness hitherto beyond acceptability.

¹⁰ "True Neutrality for Israel", "Foreign Policy," No. 37, Winter 1979-80, p. 133 at 140-41.

¹¹ Entry of 22 Dec. 1954 in Livia Rokach, "Israel's Sacred Terrorism" 21 *Assoc. of Arab-Amer. Univ. Grads.*, 1980).

¹² Entry of 11 Jan. 1961 in *id.* at 36.

"[T]he devil of preemptive attack has been loosed—all the worse for Israel having acted without clearly exhausting all opportunities for reaching a general peace in the region, which is surely the only way in the long term to safeguard Israel's security."¹³

The Israeli aerial attack on the Iraqi reactor is symptomatic of a much larger problem. The problem, in its simplest form, is whether or not Israel should be allowed to continue its course of unilateral decision in violation of the standards of international law and the world legal order system. The United States as the chief financial and military backer of the State of Israel has thus far imposed no effective limitations upon the resources which it has provided to Israel. The political branches of our government now have the opportunity to decide whether this situation is to be allowed to continue or, in the alternative, will Israel be required to meet the same legal standards that are applied to other states, and to which the United States holds itself. If our government now decides to support legitimate Israeli national interests, including the pre-June 1967 boundaries specified in Security Council Resolution 242 of 22 November 1967, this will lead to long-term security for Israel and peace in the Middle East because the security of Israelis and Arabs is interdependent. The policy of supplying unlimited financial and military support to the State of Israel has led to disastrous consequences for all the peoples of the Middle East and for the policy of the United States to build a durable and just peace in the area.¹⁴

President Eisenhower made the essential point in early 1957 following the tripartite attack upon Egypt and the initial refusal of Israel to withdraw from the then occupied territories:

"If we agree that armed attack can properly achieve the purposes of the assailant, then I fear we will have turned back the clock of international order. We will, in effect, have countenanced the use of force as a means of settling international differences and through this gaining national advantages."¹⁵

[From the Israeli Mirror (London) June 18, 1981]

WHAT ISRAELIS ARE SAYING ABOUT THEMSELVES AND THEIR GOVERNMENT

Not all Israelis are happy with the bombing of the "Osiris" reactor in Iraq. The following articles were written by Israeli experts in an attempt to explain to ordinary people the appalling consequences this act of war might still have—IM ed.

THE BAGHDAD ADVENTURE

Halaretz, June 11, 1981, by former general Mattityahu Peled—In three year's time, perhaps even earlier, Iraq will be operating a new nuclear reactor. This reactor will be protected so as to be unassailable from the air, because there can be no doubt that the Iraqis will have learned from last Sunday's Israeli attack. Something similar happened several years ago in Egypt: After the Israeli airforce had deeply humiliated Egypt by exploiting the ineffectiveness of her aerial defence system and by bombing targets inside Cairo, the Egyptians invited the Russians to organise their anti-aircraft defences for them. The result was that at the beginning of the Yom Kippur War our planes could not penetrate the Suez Canal zone at all, and the Egyptian forces crossed the canal almost unhindered.

The fact that the Iranian airforce could fly across Iraq without any difficulty and could bomb the Iraqi oil installations and even the nuclear reactor near Baghdad, not to speak of the capital itself, did not persuade the Iraqi government to improve its anti-aircraft defences. But the IDF's ostentatious attack, which was meant to humiliate the enemy (just like the Israeli attacks on Cairo did during the war of attrition), will bring about the result which the Iranian attacks failed to produce. In three or four years' time we will almost certainly be unable to penetrate Iraqi airspace, and we will not get another chance to smash an Iraqi reactor.

Then we will be facing again the very problem which the Begin government tried to solve. The basic issue is not that Iraq wants its scientists to learn more about nuclear physics so that they can produce a bomb (there are no Iraqi nuclear physicists at the moment), but that Israel is well known to have nuclear capacity, yet feels entitled to deny the right of her neighbours to develop the same capacity. Obviously, no Arab country can put up with this.

¹³ The Christian Science Monitor, June 19, 1981, p. 23, cols. 1-4.

¹⁴ See Tillman, "American Interests in the Middle East," passim (M.E. Inst. 1980).

¹⁵ 86 "U.S. Dept. State Bull." 387 at 389 (March 1, 1957).

In the past, Israel did not try to defuse the existing tension. Instead, it firmly refused to sign the nuclear non-proliferation treaty. This refusal could only mean that Israel wanted to preserve its nuclear option. This fact is understood all over the world, and is mentioned in political debates and academic discourses. Moreover, Israel actually encourages people to believe in her nuclear capacity. Since Israel has no dealings with the Atomic Energy Agency in Vienna and has never allowed any international body to visit her reactor in Dimona, the Arab leaders regularly announce that Israel has nuclear weapons and the long-range missiles required to carry them.

It is therefore impossible to avoid the impression that Israel is trying to keep the nuclear option to herself and will withhold it from the Arab countries. This arrogant stand contravenes established practices in international relations. As we know, the United States were far ahead in the nuclear race immediately after the Second World War, and could prevent the development of a similar capacity anywhere else in the world. However, the American leaders understood that any attempt to actually do so would destabilize international relations. Therefore the United States did not prevent the Soviet Union from developing nuclear capacity.

The Soviet nuclear capacity introduced a new factor into Superpower relations, but this has so far been successfully dealt with through negotiations. Talks have aimed at reducing the danger emanating from the mutual possession of nuclear weapons, because there is no other way of resolving this sensitive matter.

Today, there are too many ways of producing nuclear weapons, and the know-how surrounding their production is too wide-spread for there to be any other solution. In order to develop her nuclear capacity, Iraq got help from France, Portugal, Italy, Brazil and Pakistan. This shows that only international agreements can prevent nuclear weapons from being activated. The Israeli government finds it extremely difficult to grasp this basic fact, or it would long have signed the nuclear non-proliferation treaty and would have allowed the international monitoring committee to visit her nuclear installations.

Iraq, however, did not behave like Israel. Iraq signed the non-proliferation treaty, and the reactor she bought from France conforms to the design specifications set out by the treaty. It is no longer possible to buy reactors which contravene these rules, and France specifically promised to construct it in line with the treaty.

We may doubt the effectiveness of such rules, but the reactor issue was examined by a French committee headed by a known friend of Israel, Nobel Prize Physicist Alfred Koestler. The committee's conclusions, which appeared in the French press, were that the Israeli concern was unfounded. We have not heard any Israeli response to the report, and no information has been published in Israel to refute the conclusion. Moreover, the international monitoring committee visited the Iraqi reactor and found no breach of the non-proliferation treaty.

But even if we feel that in security matters we cannot rely on other nations, there is still another way that has not been tried: By signing the non-proliferation treaty, Israel could demand that both the Israeli and the Iraqi reactor should be put under identical international supervision. The monitoring commissions would have to be acceptable in their personal composition to both sides. Such a measure would greatly reduce the nuclear tension in the Middle East, and would remove the danger which Israel so fears.

Yet Israel acted differently. She preferred to destroy the Iraqi reactor. That reactor will be rebuilt, and perhaps this time without the help of responsible international bodies. As I said, we have no reason to believe that we can destroy it again, but even if we could Iraq could still get atom bombs from other sources, for example from Pakistan. It is therefore very unlikely that our government has removed the nuclear threat from us. All it did was to further complicate a situation which was quite messy enough before the Baghdad adventure.

THE ARMS RACE WILL NOT BE PREVENTED

Jerusalem Post, June 11, 1981 (editorial)—(After an introduction defending Israel's "moral right" to bomb the reactor.) By attacking a nuclear reactor, even though one owned by an enemy country, from the air, this country has violated an international taboo against such acts except in wartime. The right of a pre-emptive strike may still be grudgingly conceded to a state under an immediate threat, but Sunday's raid, justifiable as it was, will not readily be recognised as having been an exercise of any such right. On the other hand, the action is not likely to raise a host of rather unpleasant new possibilities: retaliation in kind, for example, not to speak of a nuclear arms race in the area.

The arms race will not be prevented, and the respite will not be made to last long, except by political means. This implies something beyond abstract appeals for peace, and involves coming to terms with a number of specific nuclear issues that used to be swept under the carpet: Israel's own reputed nuclear potential and its possible adherence to the nuclear non-proliferation treaty.

At the last UN General Assembly Israel floated a proposal for a nuclear-free Middle East. When asked about this at his press conference on Tuesday, Mr. Begin dismissed the idea as just "words, words". Had he forgotten that it was his own, or at least his own government's, idea? Was he suggesting that, with Osiris in ruins, he no longer needed it?

Whatever the case, if this was an illustration of the "thorough examination" that, as Mr. Begin has assured the nation, all aspects of the Sunday raid had been given, then there is ample room for concern.

ISRAEL NUCLEAR SCIENTISTS "APPALLED" AT BOMBING

AL-HAMISHMAR, June 12, 1981.—(Amnon Kapeliuk interviews Professor Daniel Amit, a physicist of international reputation attached to the Hebrew University in Jerusalem and a known "dove").

Question. Mr. Begin presented the issue as if the crucial fact was that the reactor would become operative on July 1st, but left himself a way out by adding that this might happen only in September. What do you think of this and of his apocalyptic views?

Answer. I have no spy network, all I know for certain is that the 1st of July is the day after the elections. I doubt Begin's statements. He did say, for example, that he knew from a reliable source that the French technicians were off on Sundays. This turned out to be untrue, they are off on Fridays. This is not a minor matter, but information relevant to the fate of hundreds of people. Begin also claimed that the government decided to reveal its attack, after radio Jordan had broadcast that "Israeli pilots yesterday bombed the Osiris reactor near Baghdad". It quickly emerged that there had never been any such Jordanian announcement.

I have no doubt that Mr. Begin was driven by electoral considerations, and if the elections had taken place, as scheduled, in November, he would undoubtedly have claimed that the reactor would be operative in October. We know that the Iraqis demanded that the reactor should be operative by July, but also that the scientists had explained to them that this was impossible before September. And to my knowledge, in nuclear matters the last word rests with the scientists and not with the politicians. In bombing raids the matter is different.

Question. Begin claimed that after the 1st of July the Israelis could expect extermination as a result of the bombs which were being produced by the operative reactor. Can this horror picture be substantiated?

Answer. The question is not when the reactor becomes operative, in scientific terms what matters is whether its purpose is changed. From the moment it has been adapted to a different purpose several years have to pass. The picture painted by Begin was purely an election stunt. There are various ways of changing the reactor's purpose to that of producing atomic bombs. One is to use the nuclear fuel that exists inside the reactor, part of which turns into plutonium, to then distil the plutonium and use it for bombs. This is easily discovered because the treaty signed by Iraq forces it to return the nuclear waste for examination by the International Atomic Energy Agency in Vienna. The Osiris reactor was sold to Iraq under stringent conditions, any contravention of which would show up immediately and would be followed by a stop in the supply of fuel.

It is also possible to produce plutonium by radiation, since the operating reactor exudes many neutrons. One puts ordinary uranium into it that can be bought on the open market, and through radiation it turns into plutonium. If one does this without changing the structure of the reactor, it will take over three years to produce about 15 kg of fuel, enough for one bomb. In order to obtain a bomb any faster, one must change the cooling system, and this is inevitably discovered by a routine check. We must not forget that the Iraqis depend on the French in everything surrounding the reactor. The new French government is not that keen on nuclear cooperation with Iraq, and it is hard to believe that it would have helped or closed its eyes to any change in the purpose of the reactor.

Question. Did the bombing put an end to Iraq's nuclear capacity for many years or, as Mr. Begin has claimed "for ever"?

Answer. Of course not. It is impossible to prevent the technological development of a country which is set upon it, as long as it has enough money and assistance. The attempt to delay nuclear developments by violent means, on whatever excuses, puts Israel beyond the pale in international relations. And the

Iraqis can, if they so wish, build another reactor in a more protected place, at accelerated speed. There is no end to it. The bombing was a shockingly irresponsible act. I dread to think what would happen if the Iraqis tried to hit the Israel reactor in Dimona which is, as we all know, operative.

Nuclear proliferation cannot be prevented by bombings, but only by agreements and by monitoring. We are approaching a stage at which it will be possible to make atomic bombs in small laboratories. According to a recent report, a Princeton student succeeded to find out how to do so simply by reading the relevant professional literature. Advanced industrial countries certainly could put this information into practice.

Begin is convinced that he eliminated the Iraqi nuclear option, but this is utter nonsense. What if the Iraqis get help from Pakistan. . . Is he going to bomb the reactor in Pakistan? Can Israel destroy installations all over the Arab world, just because the Prime Minister feels that they threaten Israel's security?

Question. I understand that you don't believe Mr. Begin's announcement about the "terrible danger to our children" from the Iraqi reactor?

Answer. I doubt them, they are election propaganda. I doubt them not only as a scientist, who must doubt everything until it is proven to him, but also because I know this government. Begin's hysterical announcements and the reality could not be further apart. We did not face annihilation either in July or in September. The crisis could have been resolved by political means. Instead, the government did the worst possible thing, it bombed the reactor. God knows what terrible consequences this is going to have.

WE WILL BE ALONE

Yediot Aharonot, June 12, 1981, by Amos Kenan—In the past, bad kings and false prophets led to our destruction and exile from this country more than once, because they were evil and did not understand where we lived. Our present Prime Minister is a mixture of both, and he is surrounded by a court of false witnesses and false prophets. Since our return to this land, things have never been worse. Begin's bombing of the reactor in Baghdad is a crime against the nation. It is a callous gamble with the fate of the people of Israel, it is a provocation to destiny, it isolates us and permits anyone to hunt us down. If Begin does not disappear from the political arena, we will all disappear. All of us, the miserable masses who applaud him in the market place, our farmers, our industry and our culture, and history will repeat itself, again.

The stature of Shimon Peres has risen in the last few days. He cannot compete with Begin in demagogy, and they don't love him in the market place. But the letter he sent to the Prime Minister had tragic pose and foresight. "We will remain alone, like a palm tree in the desert", said Peres in it. This letter turned Peres into a national leader, in my eyes at least. If we remember Ben Gurion, he did not always choose the right allies, but he learned from defeats. He knew that Eretz Israel was a small country and that small countries tend to come under pressure. Their leaders cannot remain alone against the whole world. Ben Gurion never went to war before exhausting all political alternatives, and without ensuring that he had at least one ally. This is why Israel was established in the days of Ben Gurion, and by him rather than by Begin. This is also why we were never alone, while Ben Gurion was alive. If Begin remains in power, we shall be like a palm tree in the desert, alone against the whole world . . . In order to win the elections, he is pushing us to the edge of a holocaust.

The CHAIRMAN. Thank you very much, Professor Mallison.

Mr. Moore, we welcome you. I understand that you had a traffic problem today.

Mr. MOORE. That's right, Mr. Chairman.

The CHAIRMAN. I have been caught in a few traffic jams myself and am sympathetic.

We are delighted to have you here today. I already have introduced you and stated your background. We would be pleased now to have your statement.

Professor Mallison, let me thank you again for an excellent and well researched statement.

Professor Moore.

[Professor Moore's biographical sketch follows:]

BIOGRAPHICAL SKETCH OF JOHN NORTON MOORE

EDUCATION

AB (Economics), Drew University, 1959; LLB, Duke Law School (with distinction), 1962; Fellow, University of California International Legal Studies Program, 1963; LLM University of Illinois, 1965; and Fellow, Yale Law School, 1965-66.

EMPLOYMENT

Director, Center for Oceans Law and Policy; Walter L. Brown Professor of Law; Director, Graduate Law Program; University of Virginia School of Law (1965-72; 1976-present). Academic duties include teaching courses and seminars on Law and National Security, International Law, Oceans Law and Policy, The Constitution and Foreign Relations Powers, and Legal Education (jurisprudence). In addition, Visiting Professor of Law at Georgetown Law Center (teaching Law and National Security, and Oceans Law and Policy); and consultant and lecturer at the National War College, the Naval War College, the Army War College, the Foreign Service Institute, and the Army Judge Advocate General's School. Also lectured widely on national security issue (including the Arab-Israeli Conflict), United States maritime policy, and resource and energy issues, particularly foreign policy aspects of the oil crisis. Frequent witness before Congressional committees on maritime policy, legal aspects of foreign policy decisions, war powers, treaty powers, and other issues concerning Legislative-Executive relations in the conduct of foreign affairs.

Fellow, Woodrow Wilson International Center for Scholars (1976).

Chairman, National Security Council Interagency Task Force on the Law of the Sea; and Deputy Special Representative of the President for the Third United Nations Conference on the Law of the Sea, with rank of Ambassador (1973-76). Duties involved extensive negotiation with the Soviet Union, United States allies, and developing countries; coordination with the Congress and the private sector; and shaping and implementing a unified Executive Branch position on oceans issues.

Counselor on International Law to the Department of State (1972-73). Among other duties: Drafted U.S.-sponsored treaty to prevent the spread of terrorism; worked extensively on constitutional issues concerning Legislative-Executive relations in the conduct of foreign affairs, including the War Powers Act and the Case Amendment (on international agreements); chaired 75-member U.S. Delegation to the United Nations Seabed Committee (March-April 1973); and supervised preparation and Congressional introduction of joint State-Justice Departments' sovereign immunity bill.

Member, U.S. Delegation to the United Nations General Assembly (1972-75).

Sesquicentennial Associate, Center for Advanced Studies, University of Virginia (1971-72).

PUBLICATIONS

Books: "Law and the Indo-China War." Princeton University Press, 1972. "The Arab-Israeli Conflict," Princeton University Press, 3 vols., 1974 (ed.). (One volume revised and abridged edition, 1977); "Law and Civil War in the Modern World," Johns Hopkins Press, 1974 (ed.); "Readings in International Law From the Naval War College Review," 2 vols., 1980 (eds. with Richard B. Lillich); "Cases and Materials on Law and National Security," (eds. with Robert F. Turner) (in preparation); and "Cases and Materials on Oceans Law and Policy," (eds. with Niels Seeburg-Elverfeldt) (in preparation).

Articles: Articles have appeared in Foreign Affairs, the American Journal of International Law, the New York Times, the Los Angeles Times, Marine Technology Society Journal, Yale Law Journal, Virginia Law Review, Virginia Journal of International Law, and numerous other publications.

PROFESSIONAL HONORS AND ASSOCIATIONS

Member, Order of the Coif and Phi Beta Kappa. Recipient of Phi Beta Kappa award for Law and the Indo-China War, and Drew University College Alumni Achievement Award in the Arts for 1976.

Member of the Bar of Florida (1962), Illinois (1963), Virginia (1969), District of Columbia (1974), United States Supreme Court (1973), United States Court of Claims (1980), and other courts.

Member of the Board of Editors, American Journal of International Law, and Marine Technology Society Journal. Vice Chairman of the Section of International Law of the American Bar Association. Member, State Department Advisory Committee on Law of the Sea, American Bar Association Standing Committee on Law and National Security, Consortium for the Study of Intelligence, Council on Foreign Relations, Board of Directors of the American Oceanic Organization, American Branch of the International Law Association, and American Law Institute.

Biographical profiles appear in "Who's Who in America, Who's Who in Government," and "Who's Who in American Law."

REFERENCES

Available upon request.

PERSONAL

Born: June 12, 1937, New York, New York; Club Memberships: Cosmos Club (Washington, D.C.), and New York Yacht Club; Office Address: Center for Oceans Law and Policy, University of Virginia School of Law, Charlottesville, Virginia 22901; Telephone: (804) 924-7441; Home Addresses: Route 10, Box 824, Charlottesville, Virginia 22901; Telephone: (804) 977-2749; Apt. 3-1618, 307 Yoakum Parkway, Alexandria, Virginia 22304; Telephone: (703) 751-7798.

SUMMARY

Director, Center for Oceans Law and Policy; and Professor of Law, University of Virginia.

Chairman, NSC Interagency Task Force on the Law of the Sea; and U.S. Ambassador to the Law of the Sea Conference (1973-76).

Counselor on International Law to the Department of State (1972-73).

Chairman, Advisory Committee on Oceans Policy, Republican National Committee.

Author of numerous books and articles on various aspects of foreign policy, maritime policy, and international and national security law.

STATEMENT OF JOHN NORTON MOORE, WALTER L. BROWN PROFESSOR OF LAW AND DIRECTOR, CENTER FOR LAW AND NATIONAL SECURITY, UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE, VA.

Mr. MOORE. Thank you Mr. Chairman. It is a particular honor and pleasure to appear before this committee and to have the opportunity to share a few thoughts on a matter of significant national importance.

With your permission, I would like to place my prepared remarks in the record and talk extemporaneously on some of the issues, if I might.

The CHAIRMAN. Your full statement will be incorporated into the record. We would appreciate your summary.

Mr. MOORE. Thank you, Mr. Chairman.

I would like to address each of four different issues. The first is the applicability of the Arms Export Control Act, the national law that is applicable in this particular case. The second is an appraisal, under international law, of the Israeli action. The third is an appraisal, a rather brief one, of the French and Iraqi actions under international law. Finally, I would like to say a word about U.S. policy and some issues of nuclear nonproliferation.

If we look first to the question of what national law is applicable here, the framework is the Arms Export Control Act of 1976, which governs all of our arms sales abroad. This act, very simply, has two necessary conditions for any kind of action to cut off aid.

The first of those is a determination of a violation of an agreement entered into pursuant to that act, or a violation of a provision of the act itself setting out the basic purposes of the act.

The second is required even if the first is present, and this is a specific determination by the President, pursuant to a written report to the Congress, or a determination by the Congress pursuant to a joint resolution that aid should somehow be terminated.

This is a very important second requirement. In short, there is no automatic cutoff of any kind and no requirement of Presidential or congressional action stemming from a violation of the first provisions of this act.

As you know, Mr. Chairman, that was a provision that I believe very wisely was changed in 1976 and is different from the old Military Sales Act, which had a provision that was viewed as virtually automatic though, in the real world, it never quite worked that way. It does seem to me that the present act reflects a realistic understanding that, rather than a rigid kind of normative test set out in the act, a cutoff is the kind of sensitive decision that would require a look at all of the circumstances, and particularly the prospective effect of any kind of cutoff of aid, rather than simply trying to undo past concerns with respect to such aid.

That is the first point that I want to make; that is, there is no such automatic requirement of any kind in current law as there was under the Military Sales Act.

The second point really is to set out the general framework for appraisal of the Israeli air attack on the Osirak reactor.

I think the basic framework can be stated very simply. It is that under the United Nations Charter it is illegal to have an attack that is against the territorial or political integrity of another state, and the other side of the equation, the complementary provision, is that defense is perfectly lawful.

Basically, the underlying principle there is a great shift from the old "just war" concept back in Augustinian days, or a period from about the 18th century down to the League of Nations in which international law had nothing at all to say about the use of force normatively as to whether it was permissible or impermissible.

But the charter took a new approach, as had the Kellogg-Briand Pact before it. It was basically that force should not be used as a modality of major change in international relations. The idea was that though ideal justice would be desirable in the world, to seek to achieve ideal justice through the use of force could result in enormous costs in the kind of world that we have today.

Therefore, the basic defensive use of force was the fundamental lawful use, that one would not seek to use force out as a modality of major change and take away territory from another state; but at the same time it is perfectly lawful to seek to defend oneself against a threatened serious attack against one's territorial integrity or political independence.

As part of that general framework, customary international law established a set of requirements of necessity and proportionality; that is, a high degree of imminence of the threat and an absence of effective alternatives for averting it and a proportional response limited in intensity and magnitude to what is reasonably necessary promptly to secure the permissible objectives of self defense.

Though there are many other complexities in this, Mr. Chairman, I think that is the basic framework, frankly, that any of us can apply to the particular facts as we see them in this case.

But before turning to that, I would like first to set aside several myths that seem to have recurred in the public debate on this issue. One is that somehow there is no right of anticipatory self-defense, that an armed attack must actually have occurred under the United Nations Charter before one lawfully can pursue defensive action.

Mr. Chairman, that simply is a myth in international law. It has been around for a long time. Most international lawyers have rejected it. I see that my colleague testifying today also would reject it.

Article 51 of the charter clearly was not intended to narrow customary international law, and the real issue is not who struck whom first, or the old saw, "It all started when he hit me back." The real question is, looking at the entire context, what is the intensity of the threat, as reasonably perceived, what are the opportunities to avoid the use of force, and what kind of response is taken in terms of the proportionality of the response?

A second myth is that somehow the situation could be entirely justified by reference to an Iraqi state of belligerency which is claimed against Israel. It is true that Iraq does claim such an ongoing State of belligerency against the State of Israel. Iraq has not accepted the right of Israel to exist as a state. It has not accepted Resolutions 242 and 338, which form the basic legal framework for settlement in the Middle East.

Nevertheless, I think that does not end the legal appraisal. We cannot look at this and say just because Iraq makes that claim, that the United States is bound by that or that it ends the inquiry.

It seems to me that it is very clear that the Iraqi claim is a classic violation of international law. It is inconsistent with a series of Security Council resolutions, and, indeed, it is inconsistent with the fundamental principle of the charter, that you simply do not maintain some long, continuing state of belligerency in a setting in which there is no reasonable threat against your own territorial or political integrity.

But in this kind of setting I do not believe that we, as fair appraisers, can look at it and say that this is something which by itself would justify the Israeli action—for a state of belligerency alone does not necessarily present the intensity of threat justifying a defensive response.

I do think, however, that Israel certainly is entitled to take that into account as one of a set of factors that certainly could be expected to create expectations in Israel that nuclear weapons in the hands of Iraq could be most serious in terms of their potential use against Israel.

A third kind of myth is what I would refer to as the "fallacy of the even-handed cop-out." This simply is the claim that we all have heard in this debate that if somehow Israel were able to lawfully have made this attack, then automatically Libyan attacks on Israeli nuclear reactors, or a Soviet preemptive strike against a Chinese nuclear program all would be lawful. Though the standard one would apply would have to be the same in all cases, the facts in each case are radically different in terms of the degree of threat and the alter-

natives available, and it does not necessarily follow from one that any of the others are lawful.

Now, if we seek to apply this basic framework to the facts without any of these myths that keep recurring in the debate, frankly, Mr. Chairman, I am not able to make a determination on the public record at this time that the Israeli action was either definitively lawful or unlawful. I say this despite the fact that the Security Council apparently had no difficulty in reaching a determination specifically of violation of the charter from the Israeli action.

For me, there would have to be a number of questions answered far more clearly than they have been to date if we were to seek to do justice to the contending parties in this case.

For example, was it the intention of Iraq to develop nuclear weapons and to use them against Israel in violation of the United Nations Charter? What was the immediacy of the threat of attack against Israel or the immediacy of the loss of the option to strike the reactor and mitigate the threat?

What diplomatic and other alternatives had been employed by Israel to end the threat, and what diplomatic and other actions, short of the air attack on the reactor, remained as possibly effective means of preventing the threat?

How effective were the IAEA safeguards and supplemental French controls in preventing the multiple threats from one diversion—which has been the threat that has been centered on primarily, creation of plutonium from uncontrolled source uranium-238, denunciation of the NPT Treaty by Iraq—as permitted, on 3 months' notice under article 10 of the NPT Treaty a threat that has not been as widely understood and training of Iraqi nationals in technology employable under a purely national program without IAEA safeguards?

How vulnerable is Israel to a nuclear first strike from a limited number of crude, but nevertheless horrible, weapons? Would it be economically, politically, or militarily feasible for Israel to develop a second strike deterrent? Would an effort to develop such a second strike deterrent be more or less stabilizing in the Middle East? Could such a deterrent be developed with adequate leadtime to be effective? Would there be other alternatives to develop politically reliable second strike guarantees not involving an Israeli second strike capability that would provide adequate deterrence?

Mr. Chairman, despite the fact that in the absence of some answers to at least most of those questions I find it not useful to seek to characterize the Israeli action as either lawful or unlawful, it does seem to me that one might make some points as to a series of features in the context on the one hand suggesting grave concern and, on the other hand, that seem to be strongly mitigating factors in Israel's favor.

First, if we were to look at the features suggesting grave concern, the Israeli attack was the first preemptive attack in history aimed at preventing nuclear capability. The release of the genie from that bottle can be profoundly destabilizing and hopefully it is one that can be put back into the bottle.

The Israeli attack was the first deliberate destruction of a nuclear reactor, even if the reactor had not yet gone critical. The world has a strong interest in preventing targeting of nuclear reactors because of the potential, highly destructive release of radiation affecting civilian

populations if breach of containment should occur after a period of intense radiation buildup from reactor operation. Even targeting of a reactor not yet in operation may loosen constraints on this important principle.

The Israeli attack may further complicate efforts at peaceful settlement of the Arab-Israeli dispute and contribute to weakening of U.S. influence in the region. It certainly was not a positive element in the Habib mission, it did not advance U.S. efforts to lessen Soviet influence in the Persian Gulf or to establish a more viable American presence there, and it also may have served somewhat to undercut the independence of Egyptian President Sadat from more radical pressures.

Moreover—and this is something that especially concerns me—it is not clear at this time that this action will not heighten pressures for further dubious nuclear programs by Iraq, Libya, or other extreme states in the region. Indeed, one of the consequences of the Security Council resolution seems to be to endorse the Iraqi program rather strongly, and in that respect, Mr. Chairman, I think the Security Council resolution is not evenhanded and is not undertaking the kind of responsibility in looking at the entire context and all of the circumstances that the Security Council should have undertaken.

Also, of course, the official position of the IAEA seems to be that safeguards were adequate and that Iraq was complying with them.

Now, if we shift to the series of factors that seem to be substantial mitigating factors in the Israeli case, first, the purpose of the Israeli attack was in support of strongly felt Israeli defense concerns, and it was not aimed at dismembering Iraqi territorial integrity or affecting Iraqi political independence. In popular terms, the Israeli intention was not aggressive. The attack was narrowly limited in time and effect and was planned to minimize loss of human life. The attack was executed prior to the reactor going critical; indeed, it is this important difference, with its potential great significance for avoidance of civilian casualties that seems to have driven the Israeli assessment of immediacy of the threat.

Iraq has not signed a peace agreement with Israel or accepted the key Security Council Resolutions 242 and 338. It has refused to recognize Israel's right to exist, and it has financed and encouraged continuing terrorism against Israel.

Israel has only limited political opportunity for use of United Nations or international political alternatives to protect its security needs. We sometimes forget that since about 1953, the Soviet veto has been applied regularly in support of extreme Arab views. In contrast, the United States seeks to maintain a position of balance and influence with all states in the region in order to be effective in genuinely promoting the peace process. Despite its strong commitment to the security of Israel, we do not merely take a pro-Israeli rubber-stamp stance in the Security Council and we never have done so. The Arab oil weapon has accelerated Israel's political and diplomatic isolation.

I might add that the recent Security Council resolution illustrates once again this principle in operation, in which a whole series of rather extreme views on the one hand arrayed against the Israeli position and not taking account of the mitigating factors in favor of that position, are virtually unopposed with the exception of the

Israeli statement. The United States, in a perfectly understandable and, I believe, legitimate effort to walk a middle road is not permitted to play a role that seeks, in fact, to bring about the kind of balance that I think ought to be reflected in these resolutions. In this case, I would be particularly critical of the failure to say anything whatsoever about the ambiguities surrounding the Iraqi nuclear program that seems to have been a serious precipitating part of the crisis.

The small size and economic base of Israel may make it particularly vulnerable to a nuclear first strike, even by a few crude weapons. And, as I have indicated, it is not clear that a second strike deterrent is politically, economically, or militarily feasible for Israel.

Israel has proposed talks to ban all nuclear weapons from the region. There seem to be substantial ambiguities surrounding the Iraqi nuclear program and suggestive evidence that its purpose is, at least in part, to acquire weapons technology at some time.

Issues for concern include reports of acquisition of large quantities of source U²³⁵, an unusually large research reactor and research program, an extensive program of nuclear peripherals, including an Italian-made hot cell for separation of plutonium 239, an apparent absence of interest in a genuine nuclear power program, ambiguities concerning the IAEA safeguards program, and ambiguities concerning Iraqi statements of intention with respect to nuclear weapons acquisition.

Finally, Iraq recently has demonstrated in the attack on Iran that it attaches little importance to the Charter proscription against use of force if it senses an opportunity for military strategies to achieve national objectives.

Now, turning to the third point, I would like to make is at least a beginning of an appraisal of Iraqi and French actions under international law.

The first point that I would like to make is it is very clear in my judgment that the Iraqi claimed existing state of belligerency against Israel is a violation of the Charter and is illegal under international law. It also seems to me that this illegality bears a substantial share of the responsibility for bringing about the climate which produced this strike.

Shifting to a different international legal point—

The CHAIRMAN. Professor Moore, I regret that I have only about 3 minutes to make the vote that currently is occurring on the Senate floor. We will have to recess the hearing briefly.

Also, I have been given a note by the leadership indicating that I am required to be on the floor to work out a compromise on the reconciliation bill. I am trying to locate another Senator to come here to relieve me until I can return. I hope to have that resolved in a few minutes. But we must finish the reconciliation bill.

We will recess this hearing until I am able to return or another Senator can preside.

[A brief recess was taken.]

The CHAIRMAN. We have a reprieve. I am not sure how long it will last. There may be another vote very quickly, but let's try to keep our hearing going and see how far we can get. I have not yet been able to find another Senator to come in and chair the hearing so that we can keep it going.

Professor Moore, please continue your statement.

Mr. MOORE. Thank you, Mr. Chairman. I understand your situation perfectly and will try to summarize very quickly so that we can get to questions.

I would like to make just two other kinds of points.

First, it seems to me that we also should appraise the actions of Iraq and France with respect to the Non-Proliferation Treaty requirements. Articles 1 and 2 of the Non-Proliferation Treaty are very clear and very broad. They categorically prohibit in any way assisting or encouraging a nonnuclear weapons state to acquire a nuclear weapons program, or seeking or receiving "any assistance in the manufacture of nuclear weapons."

If, then, Iraq did have a clandestine motivation in trying to obtain a nuclear weapons program, it clearly would be in violation of the NPT.

Second, it seems to me with respect to the French role, Mr. Chairman, that we ought to take a very restrictive interpretation of that article of the NPT. We should ask very hard questions in each case as to whether there is any surrounding evidence, what is the totality of the context in which the transfer is taking place, concerning an intent to acquire a weapons program. Given the range of substantial ambiguities and unanswered questions in the transfer to Iraq it does seem to me that at least there is a French violation of the spirit of the Non-Proliferation Treaty in articles 1 and 2, if not of the treaty itself.

Here I think one of the difficulties is we always point to the non-discrimination clause in the NPT treaty or the safeguards provision as though that answered everything and there was no further legal analysis that had to be made. France merely has set up an agreement that complies with IAEA safeguards. But there is a separate and overriding normative requirement in articles 1 and 2 of the NPT treaty, and it seems on a major purposes rationale that we should hold the French to a look at the whole context here, and if there is ambiguity, it seems to me there is no business in making a transfer.

Finally, Mr. Chairman, I would make just a brief point about U.S. policy.

I do not share the views that were expressed a little bit earlier, that somehow there has been some responsibility or that the United States should feel bad in some respect for its Middle Eastern policy. My own feeling is that over the years our country has played a balanced and constructive role in the Middle East, one, indeed, of which we have a great deal to be proud.

If we look specifically at this case, we made substantial efforts to prevent the destabilizing French nuclear transfer and it does seem to me that we have been consistently in a posture of a balanced approach and one seeking to encourage peace and security for all nations in the region.

If we were to look ahead for a moment to some possible things about which we might think, certainly everyone will have zeroed in on the need for strengthening the IAEA safeguards program. It does seem that there is room for improvement here. Though I would not endorse either a blanket attack on the NPT treaty or the IAEA approach or blanket support for them, it seems to me, given the alternatives, that they are a good starting point. But there really is no blinking away the occurrence of this incident as very stark and dramatic proof of the shortcomings of the system for confidence building in unstable regions.

I think one of our tasks is to work on efforts to strengthen that IAEA system. I always have wondered, for example, why there cannot be inspectors in the physical presence of the buildings, the facilities, at all times and why have just a periodic inspection program.

It also seems to me that we might look at the possibility of establishing an effective nuclear weapon free zone in the Middle East as has been done in Latin America. I note that Israel had made such a suggestion. Iran made the suggestion back in 1964. That was under a previous government, but it was seriously taken to the United Nations General Assembly and discussed. In addition to that, if you add the fact that Syria and Iraq are NPT signatories, it seems to me that there just might be some possibility, though obviously the same safeguards issue would be central as well as the sensitivities of a number of states in the region signing treaties with Israel. For example, Syria has a reservation to its NPT signature indicating that this would not mean recognition of the State of Israel. This, however, I believe was prior to a somewhat more flexible position on resolution 242 by Syria.

In any event, it does seem to me to be one thing at which we might have a look.

Thank you, Mr. Chairman.

[Professor Moore's prepared statement follows:]

PREPARED STATEMENT OF JOHN NORTON MOORE *

LEGAL DIMENSIONS OF THE AIR ATTACK BY ISRAEL AGAINST THE OSIRAK NUCLEAR REACTOR

Mr. Chairman: Thank you for this opportunity to share with the committee thoughts on the legal dimensions of the June 7, air attack by Israel against the Osirak nuclear reactor under construction in Iraq. I commend the committee on these hearings which demonstrate that it has not fallen prey to the persistent but mistaken notion that law is of little relevance for national security concerns. The United States has been a leader in seeking a stable and just world order and the efficacy of international normative rules and institutions must be of profound concern to the Nation. Moreover, law involves a national as well as an international dimension.¹

My testimony will first examine applicable national law requirements of the United States, second will appraise the Israeli actions under international law, then will turn to an appraisal of French and Iraqi actions under international law, and finally will focus on United States policy and lessons for the future in the non-proliferation area.

APPLICABLE NATIONAL LAW

The Arms Export Control Act of 1976² establishes the basic legal framework for arms exports, including arms sales to Israel. Pursuant to that Act, the President is required to promptly report to Congress: whenever he receives information that transferred defense articles may have been used in substantial violation (either in terms of quantities or in terms of the gravity of the consequences regardless of the quantities involved) of any agreement entered into pursuant to the Act and among other things for a purpose not authorized by the Act.³

*John Norton Moore is Walter L. Brown Professor of Law and Director of the Center for Law and National Security at the University of Virginia. Formerly he served as Counselor on International Law to the Department of State and as a United States Ambassador to the Third United Nations Conference on the Law of the Sea.

The views expressed are solely those of the author and do not necessarily reflect the views of any organization with which he is or has been affiliated.

¹ See generally Moore, "The Legal Tradition and the Management of National Security" in W. Reisman and E. Weston (eds.), "Toward World Order and Human Dignity" 321-64 (1976).

² 22 U.S.C. sections 2752-54 (1976).

³ 22 U.S.C. section 2753.

Although prompt reporting to the Congress is mandatory under the Act whenever a substantial violation "may have occurred," future ineligibility for credits or arms deliveries results only from a subsequent determination and report in writing to the Congress by the President or a Congressional determination by joint resolution. That is—and this is fundamental to the operation of the Act—there is no legal requirement of automatic cutoff or subsequent Presidential or Congressional action even if a clear violation of an arms transfer agreement does occur.

Unlike the mandatory cutoff of the earlier Foreign Military Sales Act, Congress in 1976 specifically changed the test to a procedural one requiring a subsequent Presidential or Congressional determination of ineligibility. Presumably this shift was to enable Congress and the President to assess an overall situation rather than relying on a rigid statutory test for ineligibility.

The applicable arms transfer agreement with Israel is the Mutual Defense Assistance Agreement that entered into force on July 23, 1952.⁴ Both that agreement and section 2754 of the Arms Export Control Act provide that the transferred defense articles are to be used for "legitimate self-defense." The general intent of this phrase and others associated with it seems to be to authorize uses which would be lawful under the Charter of the United Nations and particularly individual or collective defense.

For a nation to be deemed ineligible for further transfers under the cut-off provisions of the Act, then, its actions must have violated the basic use-of-force structure of international law and in addition the President or the Congress must affirmatively make a determination of ineligibility. Thus, an international law violation, if present, is a necessary but not a sufficient condition for ineligibility under the Act. The additional requirement of affirmative Presidential or Congressional action I believe wisely enables overall assessment of cut-off consequences that will inevitably operate prospectively rather than undo past actions.

If the President and Congress feel that ineligibility would be inappropriate under all of the circumstances of any particular action no further report or action is required from either branch under the act beyond the initial Presidential report to Congress "that a substantial violation may have occurred."

AN APPRAISAL OF ISRAELI ACTIONS UNDER INTERNATIONAL LAW

A. General framework for appraisal

The most important underpinning of the United Nations Charter is that "force against the territorial integrity or political independence of any state" is prohibited but that force may be used in individual or collective defense against such threats. In appraising lawful defense, customary international law, as incorporated in the Charter structure, requires a high degree of necessity (that is imminence of threat and absence of effective peaceful alternatives for averting it) and a proportional response "limited in intensity and magnitude to what is reasonably necessary promptly to secure the permissible objectives of self-defense."⁵

Although there are many second-stage complexities for international lawyers in this deceptively simple formulae it is the basic framework for appraisal of the Israeli attack on the Osirak nuclear reactor.⁶

B. Myths to avoid

Before proceeding to a factual analysis of the Israeli raid pursuant to the basic international law framework, it may be useful to set aside certain "myths" that seem to recur in the debate surrounding the raid.

First, some argue that the Charter, unlike customary international law, has barred anticipatory defense by the language of Article 51 reserving the right of defense "if an armed attack occurs." This view is not the majority view of international law scholars and quite apart from "scholar counting" is, I believe, quite mistaken. Article 51 of the Charter was not intended to narrow the customary law right of defense and was inserted at Latin insistence to accommodate regional security organizations.⁷ Anticipatory defense, of course, must meet the same high standard of necessity and proportionality as any defensive actions. It should be

⁴ 3 U.S.T. 4985 (1952).

⁵ M. McDougal and F. Feliciano, "Law and Minimum World Public Order" 242 (1961).

⁶ Law of war issues, for example those concerning the permissibility of targets during ongoing hostilities present one such additional complexity touched on elsewhere in this testimony.

⁷ See, e.g. M. McDougal and F. Feliciano, *supra* note 5, at 233-41; J. Stone, "Aggression and World Order" 91-98 (1958).

borne in mind that Israel struck first in the intensely threatened context of the 1967 War and this action was not condemned by the Security Council under the facts of that situation.

Second, although Iraq does seem to maintain a claim of continuing "belligerency" against Israel, states of continuing belligerency are illegal under the United Nations Charter in general and are also inconsistent in the Arab-Israeli context with fundamental Security Council resolutions. As such, any such claims should not be determinative in assessing the lawfulness of the Israeli actions. They may, however, be appropriately taken into account as one factor contributing to expectations by Israel of severe threat against it if Iraq were to acquire nuclear weapons. One would think that they might also morally estop Iraq from complaining of an Israeli attack against them.

Third, it is sometimes argued that if the Israeli actions were lawful then Libyan attacks on Israeli reactors or a Soviet preemptive strike on the Chinese nuclear program would be lawful. This is a classic case of what I tell my students is "the fallacy of the even-handed cop out." Of course each situation must be appraised by the same normative test but the factual settings—particularly the immediacy of threat and availability of alternative actions—vary greatly from one to another.

C. Applications to the facts

As an international lawyer concerned with fair appraisal of the Israeli actions I do not believe the public record is sufficiently complete at this stage of the debate to characterize the Israeli actions as either lawful or unlawful under international law. Questions of fundamental importance not satisfactorily answered by the public debate include the following.

—Was it the intention of Iraq to develop nuclear weapons and use them against Israel in violation of the United Nations Charter?

—What was the immediacy of the threat of attack against Israel or loss of the option to strike the reactor and mitigate this threat?

—What diplomatic and other alternatives had been employed by Israel to end the threat and what diplomatic or other actions short of the air attack on the reactor remained as possibly effective means of preventing the threat?

—How effective were the IAEA safeguards and supplemental French controls in preventing the multiple threats from diversion, creation of plutonium from uncontrolled source U²³⁵, denunciation of the NPT treaty by Iraq as permitted on three months notice under Article 10 of the NPT Treaty, and training of Iraqi nationals in technology employable under a purely national program without IAEA safeguards?

—How vulnerable is Israel to a nuclear first strike from a limited number of crude (but nevertheless horrible) weapons? Would it be economically, politically, and militarily feasible for Israel to develop a second strike deterrent? Would an effort to develop such a second strike deterrent be more or less stabilizing in the Middle East? Could such a deterrent be developed with adequate lead time to be effective? Would there be other alternatives to develop politically reliable second strike guarantees not involving an Israeli second-strike capability that would provide adequate deterrence?

The record is, however, sufficiently clear to enumerate features of the overall context that raise grave concern from the Israeli action and others that serve to mitigate any Israeli responsibility. These features, which are only in part relevant to the international law issues, include:

FEATURES SUGGESTING GRAVE CONCERN

—The Israeli attack was the first preemptive attack in history aimed at preventing nuclear capability. The release of this genie can be profoundly destabilizing;

—The Israeli attack was the first deliberate destruction of a nuclear reactor—even if the reactor had not yet gone critical. The World has a strong interest in preventing targeting of nuclear reactors because of the potential highly destructive release of radiation affecting civilian populations if breach of containment should occur after a period of intense radiation build-up from reactor operations.⁸ Even targeting of a reactor not yet in operation may loosen constraints on this important principal;

⁸ Article 56 of the new Protocol II to the 1949 Geneva Convention reflects this general policy in seeking to discourage attacks against "nuclear electrical generating" stations. The basic policy would seem to apply to research as well as electric generation facilities. The Protocol, however, is not yet in force, Israel has not accepted it, it does speak only of attacks against a "nuclear electrical generating station," and surprisingly it even permits attack if the station provides power in "regular, significant and direct support of military operations" and if such attack is the only feasible mode of terminating such support.

—The Israeli attack may further complicate efforts at peaceful settlement of the Arab-Israeli conflict and contribute to weakening of United States influence in the region. It certainly was not a positive element in the Habib mission and it did not advance United States efforts to lessen Soviet influence in the Persian Gulf or to establish a more visible American presence there. It also seems unlikely to further strengthen Egyptian independence from radical pressures. Moreover, it is not clear that this action will not heighten pressures for further dubious nuclear programs by Iraq, Libya or other extreme states in the region; and

—At least the official position of the IAEA seems to be that safeguards were adequate and Iraq was complying with them.

MITIGATING FACTORS

—The purpose of the Israeli attack was in support of strongly felt Israeli defense concerns and it was not aimed at dismembering Iraqi territorial integrity of affecting Iraqi political independence. In popular terms the Israeli intention was not "aggressive";

—The attack was narrowly limited in time and effect and was planned to minimize loss of human life;

—The attack was executed prior to the reactor going critical—indeed it is that important difference with its potential great significance for avoidance of civilian casualties that seems to have driven the Israeli assessment of immediacy of threat;

—Iraq has not signed a peace agreement with Israel or accepted the key Security Council Resolutions 242 and 338 establishing the legal basis for settlement of the Arab-Israeli Conflict. Iraq has maintained a continuing state of "belligerency" against Israel, has refused to recognize its right to exist, and has financed and encouraged continuing terrorism against Israel;

—Israel has only limited political opportunity for use of United Nations or international political alternatives to protect its security needs. Since about 1953 the Soviet veto has been regularly applied in support of extreme Arab views. In contrast, the United States seeks to maintain a position of balance and influence with all states in the region in order to be effective in genuinely promoting the peace process. Despite its strong commitment to the security of Israel, the United States does not merely take a pro-Israel stance as the recent Security Council resolution on the Israeli attack again illustrates. The Arab "oil weapon" has accelerated Israel's political and diplomatic isolation;

—The small size and economic base of Israel may make it particularly vulnerable to a nuclear first strike even by a few crude weapons—it is not clear that a second strike deterrent is politically, economically or militarily feasible for Israel;

—Israel has proposed talks to ban all nuclear weapons from the region;

—There seems to be substantial ambiguity surrounding the Iraqi nuclear program and suggestive evidence that its purpose is at least in part to acquire weapons technology at some time. Issues for concern include reports of large acquisition of quantities of "source" U²³⁵, an unusually large "research" reactor, "research" program and "research" budget, an extensive program of nuclear peripherals including an Italian made "hot cell" for separation out of plutonium 239, an apparent absence of interest in a genuine nuclear power program, ambiguities concerning the IAEA safeguard program and ambiguities concerning Iraqi statements of intention with respect to nuclear weapons acquisition; and

—Iraq has recently demonstrated, in the attack on Iran, that it attaches little importance to the Charter proscription against use of force if it senses an opportunity for military strategies to achieve national objectives.

It should also be pointed out that although I do not personally regard the available public evidence as adequate on which to base a sound legal judgment, substantial weight must be accorded the Security Council determination condemning the Israeli attack as "in clear violation of the United Nations Charter."

AN APPRAISAL OF IRAQI AND FRENCH ACTIONS UNDER INTERNATIONAL LAW

The Iraqi claim of a continuing state of belligerency against Israel is in violation of the United Nations Charter and resolutions 242 and 338 of the Security Council. Such a continuing state of "belligerency" absent a credible threat to territorial integrity or political independence is fundamentally at odds with the Charter prohibition against the use of force as a means of achieving political objectives. Similarly, Iraqi support for terrorist actions against Israel are in violation of international law. These unlawful actions contributed significantly to the Israeli concerns about Iraqi acquisition of nuclear weapons. As such, however we char-

acterize the Israeli air attack against Osirak, it would seem that Iraq shares, substantial responsibility for the overall climate that produced it.

Articles I and II of the Treaty on the Non-Proliferation of Nuclear Weapons categorically prohibit "in any way" assisting or encouraging a non-nuclear-weapons State to acquire nuclear weapons or seeking or receiving "any assistance" in the manufacture of nuclear weapons. It should not be enough under these provisions simply to publicly declare that there is not an intention to develop a weapons program or to declare that the recipient state has accepted IAEA safeguards as also required by the Treaty.

Rather, reasonable interpretation of the Treaty by major purpose suggests that a nation operating under the Treaty with secret intent to develop a weapons program would be in violation of the Treaty and that a nation transferring nuclear technology should be sensitive to total context and probable motivation. If Iraq is secretly planning a weapons program then it would be in clear violation of the agreement. And the French action in constructing Osirak in the face of substantial indicia that is at least ambiguous concerning Iraqi intentions seems at least violative of the spirit of the agreement. In this connection a secret French-Iraqi agreement on supplemental safeguards does little to build confidence in the region as is the whole purpose of NPT and IAEA safeguards. I believe the French decision in agreeing to build Osirak given the instability of the Middle East and the ambiguity surrounding Iraqi long term intentions was irresponsible in the extreme and shares substantial blame for the Osirak incident—and perhaps even it should be regarded as a violation of the NPT Treaty even if there is, as yet, no Iraqi nuclear weapon in existence. The "non-discrimination" standard in Article IV of NPT and the IAEA safeguards requirements of Article III are clearly qualified by the need initially to conform to Articles I and II—that is not to assist in any way in development of a nuclear weapons program (even indirectly from a civilian "research" program). If there is any significant ambiguity on this point nuclear facilities and technology should not be provided under the NPT Treaty regardless of the safeguards program.

UNITED STATES POLICY AND LESSONS FOR THE FUTURE

The United States has played a balanced and constructive role in the Middle East and has much to be proud of in its efforts. We have consistently sought to bring about a just settlement of the Arab-Israeli conflict fully protecting the security of Israel and the autonomy of the Palestinians.⁹ Moreover, with respect to the Osirak incident, in which American actions were not directly involved, we did seek repeatedly to discourage the French transfer of nuclear technology to Iraq that set the stage for Osirak. In my judgment the Administration has reacted with balance and with political realism after the incident in recognizing the necessity of maintaining a credible American neutrality if we are to effectively encourage peaceful resolution of the many facets of the Middle East problem. We must, of course, also maintain our traditional strong support for the right of Israel to exist securely within recognized boundaries and I believe any American Congress or Administration will do so.

Looking to the lessons of the future for American policy, any conclusions at this early date must necessarily be tentative. In that spirit, however, I would suggest the following:

—Certainly we should work to strengthen the NPT and IAEA safeguards which—given the alternatives—already have a great deal to commend them. We should reject extreme positions either that IAEA safeguards are of little use or that they need little improvement. The Osirak incident dramatically demonstrates the shortcomings of the system for confidence building in unstable regions;

—We should concentrate non-proliferation efforts on preventing risky transfers in unstable regions that have only marginally acceptable (or unacceptable) technological and inspection safeguards. That is, general efforts to prevent transfers may be less effective than highly targeted efforts aimed at high risk technology, countries and regions. The high-risk Iraqi program is a paradigm example of a transfer that should never have occurred as structured; and

—We should give careful thought to the possibility of establishing an effective nuclear weapon free zone in the Middle East as has been done in Latin America. Absent effective stabilization of the nuclear equation in the Middle East, Osirak might be only a small taste of repeated nuclear crises to come in that region. It

⁹ See generally J. Moore (ed). "The Arab-Israeli Conflict" (1977).

might also be noted that both Israel and Iran are on record as favoring such an approach.

Thank you.

The CHAIRMAN. Thank you very much, Professor Moore. Your statement is scholarly and excellent and gives us the benefit of a great deal of research, as does Professor Mallison's statement.

INTERPRETATION OF ARMS EXPORT CONTROL ACT

Professor Mallison, perhaps I could begin with Professor Moore's statement and ask if you concur with him with respect to the interpretation of the Arms Export Control Act of 1976.

He says there is no legal requirement of automatic cutoff or subsequent presidential or congressional action, even if a clear violation of an arms transfer agreement does occur.

Do you concur with that?

Mr. MALLISON. Mr. Chairman, I have not studied U.S. statutory law in preparation for this hearing. I am generally familiar with it, but I have not given it the careful attention that I have given to international law.

The CHAIRMAN. I wonder if you would mind taking a look at that statement. We will keep the record open so that you could respond for the record.

Mr. MALLISON. I would be glad to comment on it after study. I will send in a comment to the committee, if I may.

The CHAIRMAN. A written reply would be helpful.

Mr. MALLISON. I would be glad to provide a written reply.

[The information referred to follows:]

DEAR MR. CHAIRMAN: I write in response to your question as to whether or not I agree with Professor Moore's analysis of the requirements of the Arms Export Control Act for a foreign government to be deemed ineligible for further transfers under the Act.

I agree with his analysis that an international law violation committed with the use of arms and equipment provided by the United States is a necessary condition but the Act also requires the Congress or the President to make an express determination of ineligibility. This analysis is accurate as far as it goes but it is incomplete. As a practical matter, there must be at least a temporary halt in the shipment of arms and equipment until such a determination can be made or the purpose of the Act would be completely frustrated.

It is necessary to consider the effects of a failure by the Congress or the President to make a determination of ineligibility following the use of U.S. supplied arms in a clear violation of international law. The first operative paragraph of the unanimous Security Council Resolution 487 of June 19, 1981 provides that the Security Council:

Strongly condemns the military attack by Israel in clear violation of the Charter of the United Nations and the norms of international conduct.

Unless the Congress or the President determines that a law-breaking state is ineligible for further arms transfers, the United States is in the position of providing such a state with practical military support. A policy of inaction by the political branches would be inconsistent with the stated objective of the United States Government to promote peace and stability in the Middle East. In addition, it would threaten the long-term security of the State of Israel by sending a message to its government that it may continue to violate international law with impunity as far as the United States is concerned. One of the most unfortunate aspects of United States policy and practice in the Middle East, thus far, is that it has provided no encouragement at all to those patriotic and enlightened Israelis who see legitimate national security interests sacrificed in favor of almost exclusive reliance upon military methods. The peace, which is the most urgent need of Israelis, has been substantially delayed by the aerial attack of June 7, 1981. In the event that neither the Congress nor the President

acts to determine Israeli ineligibility for further arms transfers for a substantial period of time, further international law violations will be encouraged and peace will be postponed indefinitely. This would frustrate the most important interest of Israelis and all other Middle Eastern peoples, and indeed of the world community.

A very important matter which must be considered by the Congress and the President is the fact that the judgment of the International Military Tribunal at Nuremberg held unequivocally that government officials are criminally responsible for acts committed in violation of international law. If United States officials condone and provide the means by which the illegal acts of another government are carried out, they may well be held so liable.

Sincerely yours,

W. T. MALLISON,
*Professor of Law and Director,
 International & Comparative Law Program,
 George Washington University.*

FRANCE'S SALE OF OSIRAK REACTOR

The CHAIRMAN. Dr. Moore, in your prepared statement you criticize France's sale of the Osirak reactor as "irresponsible in the extreme." Yet according to testimony that we have had previously, France refused to sell Iraq another type of reactor with much greater nuclear weapon production potential, and concluded an agreement assuring, as we now have learned, that French technicians would be onsite through 1989.

Do these considerations mitigate your overall conclusion at all?

Mr. MOORE. They do not cause me to change it, Mr. Chairman. But I believe they are both mitigating factors for the French position.

Let me elaborate for a moment.

I think the French did make an effort to have some control over the transfer. I don't think they simply acquiesced in anything that the Iraqis wanted. I understand, among other things, that the Iraqis wanted a 250-megawatt reactor, which they did not get.

It does seem to me that the kind of technological transfer that took place here—they did not hold out, for example, for the caramel fuel, which would have been another step down—and given the Iraqi failure to accept resolution 242, given the instability of the region, that kind of technology, all taken together in this context, it does seem to me that the transfer was irresponsible in the extreme. Moreover, a secret safeguards agreement with France does nothing for confidence building in the area—which after all is a key purpose of a safeguards program.

Mr. Chairman, I continue to believe that France shares a greater portion of the responsibility for this than it has yet generally received in the overall public assessment.

The CHAIRMAN. We may have time for one more question before I must leave again. I see that I have 6 minutes remaining to vote.

NO CONVINCING EVIDENCE

Professor Mallison, in your written statement you say that there appears to be no convincing evidence that Iraq was engaged in nuclear weapons development.

Last Friday, this committee heard from a panel of nuclear physics experts, one of whom, Mr. Roger Richter, argued that quite the opposite conclusion from yours was, in fact, the case. Those who believe that there was clear evidence of an incipient Iraqi nuclear

weapons program point to such indicators as the Iraqi purchase of large quantities of yellowcake uranium, Iraq's interest in the Italian hot cells, the absence of supporting efforts to develop a nuclear power infrastructure, and recent statements by the Iraqi President that the Arab world needs an atomic bomb.

Would you explain why you regard these indicators as benignly as you evidently do?

Mr. MALLISON. On a comparative basis, Mr. Chairman, there has been considerable interest in the Iraqi program and there have been some doubts raised about it. But, nevertheless, Iraq has been subject to international inspections from time to time.

The Government of Israel is not a party to the Non-Proliferation Treaty and there has never been international inspection there.

Perhaps the reason there is so much interest about the Iraqi nuclear program is there is very little ambiguity about the military character of the Israeli program.

SOME DOUBTS EXIST

I am not a nuclear scientist. Although I did spend 2 years in the U.S. Atomic Energy Commission, I was primarily there as an international lawyer. I am just not convinced that the evidence, including the evidence that was reported in the press which I believe was given to this committee last Friday, is that convincing. It still seems to me to have some doubt in it.

For example, it was reported in the media yesterday that the chairman of the French Atomic Energy Commission said there was no doubt but that the statements about this secret chamber were simply fabrications and that everything that was being done by the Iraqis, in particular the type of research that had been referred to in some of the Israeli allegations, was well known to the French technicians on the spot and that there was nothing secret about it, and that they knew it was used for peaceful purposes.

This is why I say that I do have doubts about the military character of the Iraqi program, while I have none whatsoever about the military characteristics of the Israeli program.

The CHAIRMAN. Thank you, Professor Mallison. I must leave again, and I should return in about 5 minutes. We have only a few more questions. If you have an urgency about departing, you may leave and I will send you written questions for your response for the record. But, if you can wait for just a few moments, I would appreciate it.

[A brief recess was taken.]

LEGALITY OF ISRAELI ACTION

The CHAIRMAN. Professor Moore, if the burden of evidence were to support a conclusion that Iraq in fact had no imminent prospect for acquiring a national nuclear weapons capability, would you be willing to venture an opinion as to the legality of the Israeli action?

Mr. MOORE. Yes, Mr. Chairman, under those facts there would be a strong preservation of illegality. But I think we would have to indicate also that in order to make a clear case of illegality, the effort to strike the reactor before it went critical must also not be an important part of the equation. That is, if it were still 2 years away or 5

years away before there would be a functioning bomb to be dropped on Israel and one still made out a case that this was the last effective opportunity—I am not saying such is supported, but if one were to make out such a case—and that there were no other effective international or diplomatic nonuse of force options available to Israel in this period, under such a case, then I think the actions might well be legal.

The CHAIRMAN. Thank you.

PLAUSIBLE FOR ISRAEL TO DEAL WITH IRAQ?

Professor Mallison, you criticized Israel for not having exhausted peaceful diplomatic means of redress before resorting to the military option. Do you believe it would have been plausible for Israel to deal with Iraq directly, given Iraq's refusal to concede even the existence of Israel?

Mr. MALLISON. Well, one of the problems that Iraq has in dealing with Israel, Mr. Chairman, is the same problem that other Arab states have. What Israel are they supposed to recognize? Are they supposed to recognize the one within the pre-June 1967 boundaries, or including Gaza, Golan Heights and the West Bank? It seems to me if we could define Israel as a state with precise limitations, rather than continuing expansion, it would make it much, much easier for Iraq and other states to recognize it.

Assuming that this could happen, I think we would be dealing with fundamentals. In other words, if we should go to a situation of peace with justice in the Middle East for all peoples, then there would be security for Israelis along with others and the problem of the possible military nuclear program, of Iraq and also the nuclear program which certainly is a very military one of Israel, would be resolved. There is no way to avoid dealing with the fundamental problem, and that is why we have these minor and peripheral problems. The central problem of bringing about peace with justice has not been addressed, Mr. Chairman.

ENTREATIES TO FRANCE

The CHAIRMAN. What entreaties to France do you believe Israel should have made that it did not?

Mr. MALLISON. I did not hear that question. Would you please repeat it, sir.

The CHAIRMAN. What representations to France, or what entreaties to France do you believe Israel should have made that it did not make?

Mr. MALLISON. I am not fully informed as to the representations that it made to France. But I understand that the new French President, Mr. Mitterrand, has been very sympathetic to the Government of Israel. There have been implications in the press that if the French Government had been approached on a more thorough basis, it could have provided completely accurate information and reassured the Government of Israel.

Now these are press reports and I do not know how accurate they are. But it does seem to me from the information now available that the Government of Israel went ahead on this preemptive attack

which has been so thoroughly rejected by the world community on the basis of inadequate information.

NO TIME FOR DIPLOMATIC OVERTURES

The CHAIRMAN. How do you assess Israel's contention that there was no time left for diplomatic overtures since the reactor was scheduled to go hot in July or September?

Mr. MALLISON. I assess that as an unjustifiable ground for the action. There is testimony by the French specialists among others to the contrary. Israel has gotten the facts thoroughly garbled up in statements made by Prime Minister Begin. There is simply no reason on the present record to believe that Israel actually knew what was going on in terms of the Iraqi reactor. Then, even if we assume that Iraq, like Israel, has a military weapons program, this, without more, would not justify an Israeli attack upon Iraq, or vice versa, an Iraqi attack.

The CHAIRMAN. Thank you.

Perhaps I could ask you both for comments on the comment that was made by Dr. Mallison in his written statement.

CONVINCING EVIDENCE OF IRAQI NUCLEAR WEAPONS PROGRAM

Dr. Mallison, you said were there convincing evidence of an Iraqi nuclear weapons program, the community of states could, in concert with Israel, take collective measures, including the possibility of economic or military sanctions under the U.N. Charter.

Taking fully into account the fact that Israel would have to look somewhat askance at the United Nations taking any action, the community of states banning together, or the likelihood of it, and imposing sanctions on an Arab state, and the possibility of a Soviet veto of any such U.N. resolution; is this really a plausible idea?

Professor Moore, perhaps you could comment first.

Mr. MOORE. Under those circumstances, Mr. Chairman, I am rather sympathetic with the Israeli feeling that if Iraq were suddenly one day to announce to the world that it had three nuclear weapons or a number of nuclear weapons, it is unlikely there would be any international sanctions taken. I think it is particularly unlikely in the context of the Security Council which, frankly, since about 1953, as I have indicated, has had a Soviet veto available to essentially the view reflected by the Iraqi position.

I think one of the kinds of unfortunate isolations that causes Israel to react in terms of a hair-trigger sense of protecting its own defense is this isolation of Israel by the international community. Frankly, I regard it as something that has happened again in this resolution. I do not believe if you were really sitting back as an observer and saying how should the Security Council of the United Nations look at the overall context of what has just occurred—this certainly might include a variety of concerns about the Israeli action. I have those concerns. I think we all have them. On the other hand, it seems to me that it ought also to include some concerns about the Iraqi nuclear program. There were absolutely none whatsoever expressed in the resolution.

So, I think the Israeli sense is rather realistic on that, unfortunately so.

The CHAIRMAN. Do you have any further comment, Professor Mallison?

Mr. MALLISON. Yes, Mr. Chairman. I am sure we would all be disappointed if Professor Moore and I, who are good personal friends, agreed in our professional evaluations.

INALIENABLE RIGHT TO ESTABLISH PROGRAMS

First of all, I like very much the fourth provision in last Friday's Security Council resolution, fully recognizing the inalienable right of Iraq and all other states, especially the developing countries, to establish programs of technological and nuclear development. This is consistent entirely with article 4 of the NPT, in which the United States had a major drafting role. If the Security Council had not put that paragraph 4 in, it would not have honored the obligations of the member states under the NPT.

We are concerned with possible enforcement action by the world community in the event that Iraq should be using its reactor to develop a military capacity. Such development would be a clear violation of the provisions of the NPT which prohibit non-nuclear-weapon state parties from producing or acquiring nuclear weapons. In this respect Iraq and other non-nuclear-weapon state parties to the treaty are in a different legal position from the nonstate parties which are developing a nuclear weapons capability. The enforcement of this treaty, like others, is the responsibility of the community of states.

So far as the isolation of Israel is concerned and its lack of sympathetic consideration in the United Nations, I tend to agree with some of the Israeli critics who have pointed out that the chief threat to the security of Israel is not the Arab States but is the intransigent policy of the Government of Israel, including the continuing policy of territorial expansion and the placing of settlements, civilian settlements, in occupied territories in violation of article 49, paragraph 6 of the Geneva Civilian Convention.

If Israel could clean up its own act and if Israel could come into the world community as a state which is committed to adhere to international law, it would be in a far better position than it is now to ask other states to meet the criteria of international law.

The CHAIRMAN. Gentlemen, I want to thank you very much, indeed. You have been most thoughtful to help the committee in this way. We are most grateful to you.

Thank you very much.

Mr. MALLISON. Thank you, Mr. Chairman.

Mr. MOORE. It has been our pleasure, Mr. Chairman.

The CHAIRMAN. The committee is pleased to welcome its second panel of the afternoon. I would ask its members to please come up to the witness table.

The panel member are Mr. James Akins, former Ambassador to Saudi Arabia; Dr. Joseph J. Malone, president of Middle East Research Associates, Inc.; Dr. Ben Martin of the University of Missouri; and Dr. Daniel Pipes of the University of Chicago.

It is not only a great pleasure to have a friend of some considerable standing before me, but Ambassador Akins has been a tremendous help to me in understanding the problems of the Middle East. Also, I

see Dr. Pipes who is from my own university, on whose board I think I have spent 31 years, following 4 years on the campus.

Gentlemen, we are delighted to have you here today.

Again, I am terribly sorry to advise you that I may be called back to the floor so we can finish up the reconciliation bill, which apparently must be finished tonight.

We will move along as rapidly as we can. We are still trying to find another Senator who can come here to replace me if I am called to the floor.

Let me ask you if you have written statements? I have not had a chance to go over them yet.

I see that some of you do have prepared statements.

Let me suggest that we begin with you, Ambassador Akins. Just give us whatever comments you want to make. If you can summarize your thoughts and comments, we can move more quickly to our questions. Of course, we do want to give you the opportunity to say what you have on your mind.

STATEMENT OF HON. JAMES AKINS, FORMER U.S. AMBASSADOR TO SAUDI ARABIA

Ambassador AKINS. I do not have a written statement, Senator, but would like to make a few remarks about Iraq.

Iraq is an important country for the Middle East and for us. It probably has the second largest oil reserves in the world.

Iraq was allied to the United States until 1958, when the monarchy was overthrown by Abd al-Karim Qassim.

Qassim maintained very close relationships with the Russians and with the Communists inside Iraq. He was overthrown in 1963 by a group of Ba'athis—the party currently in control in Iraq. I should add that I was in Iraq from 1961 to 1965 and was there for that particular revolution and during a couple of subsequent ones.

The Ba'ath Party; that is, the Arab Renaissance Party, came to power briefly in 1963, it was then overthrown but came back into power again in 1968. In the initial days of the current government, it was quite ruthless in consolidating its power. A number of political opponents were killed at that time. But, unlike most dictatorships, there has been a subsequent dramatic amelioration. The only ones killed in the last few years, apart from dissident Ba'ath Party members themselves, have been Communists or supporters of Iran's Khomeini.

It is illegal to be a Communist in the Iraqi armed forces. In fact, the punishment is death; and as far as I know the Communists were convicted of organizing cells in the army.

The Iraqis have taken a strong neutralist position in world politics. Iraq buys arms from the Soviet Union—for many years its only supplier—and therefore the Soviet Union is important to it. Iraq also is important to the Soviet Union for the same reason; Iraq pays in cash for these arms. But to say, therefore, that Iraq is a Communist country would be a total misreading of the situation.

When the Russians moved into North Yemen from South Yemen through their agent the state of South Yemen, we panicked and Saudi Arabia panicked. The Iraqis sent a very stern warning both to Aden and to Moscow that they would be facing Iraqi soldiers and Iraqi pilots if they moved into the country. To emphasize the impor-

tance of this message, the Iraqis took 21 Communists out of prison who already had been sentenced to death, and hanged them. That would be a bizarre move for a Communist state to take.

The Iraqis took one of the strongest positions of any country in the world when the Russians moved into Afghanistan. President Saddam Hussein said this was an intolerable act which must be opposed by all Muslims, by all Arabs, and by all people outside the Communist bloc. Clearly, he said, it was wrong, immoral, and criminal.

The Ba'ath Party newspaper in March 1976, carried a series of articles called, "We must eliminate this cancer from the Arab world"; that cancer was communism.

Iraq has done very well economically since the present government has been in charge. I have been to Iraq four times in the last 4 years and am amazed to see the amount of land that has been brought under cultivation, land which has lain fallow since the Mongol invasions. About 5 million acres have been distributed to the peasants. Although Iraq is nominally a socialist country, about nine-tenths of the agricultural land is in private hands and about one-tenth in cooperative farms.

The war between Iraq and Iran started when Iraq attacked Iran. But that is not the whole story, of course. There was a long background to this hostility. Iraq's relations with the Shah had been reasonably good; Iraq signed a treaty with him in 1975. After he was overthrown, it tried to work out peaceful and friendly relations with the new government in Iran, but that proved to be impossible, not only for Iraq but for the other countries of the area. The new Government of Iran proclaimed itself "The Islamic Republic," not the Iranian Islamic Republic, just "The Islamic Republic," which included Kuwait and all the rest of the eastern half of the Arabian Peninsula. But the heart of this Islamic Republic had to be Iraq because the holy cities of Shi'ite Islam are all in Iraq.

The call, directed from Tehran, Abadan, and Qom to Baghdad and to the other cities of southern Iraq, was that soldiers should kill their officers. Khomeini said it was a religious duty to kill Iraqi President Saddam Hussein; he was anti-Muslim, a secular leader, who must be removed.

The Iraqis, in retrospect, should have taken these taunts without doing anything. But they launched an attack, obviously calculating on a quick collapse of the Iranian regime.

My personal opinion is that a revolution, in Iran against the Mullahs is absolutely inevitable. Unfortunately, the Iraqi attack did not accelerate this revolution, but perhaps delayed it somewhat.

Saddam Hussein is an interesting man. He does not have a very good reputation in this country, but he does have a good reputation inside his own country for the stability and economic wealth that he has brought to it. His is a secular regime. There are Sunnis, Shi'ites, and Christians inside the government. But religion is a personal matter. All that counts, says Saddam Hussein, is to be Arab.

This, of course, puts him into precise opposition to the government in Iran which says that nationality is not important; all that is important is to be Muslim, and by that Khomeini means only Shi'ite Muslims, his version of Islam.

Saddam Hussein also has taken an almost unique—at least unique for Arab revolutionary leaders—interest in the culture of his country.

He is reconstructing Babylon. He has devoted more to archaeological efforts than any other leader Iraq has ever had. He is expanding and building new universities. Iraq has an anti-illiteracy campaign aimed at eliminating illiteracy within 5 years. Every illiterate adult under the age of 45 is now forced to go to school.

President Saddam Hussein is interested in a wide variety of other intellectual activities. The nuclear installation that recently was destroyed was his pride and joy. What he had in mind ultimately for it is not possible for me to say, or for anyone to say. What exists in the hearts of other men is known only to God.

But we do know that Iraq signed a Non-Proliferation Treaty and we do know that the Iraqis allowed inspection of their facilities, which is not true of the country that attacked them.

Thank you.

The CHAIRMAN. Thank you very kindly, Ambassador Akins.

Your long service in the Middle East, serving in both Iraq and Saudi Arabia, as well as other countries, has qualified you as an expert witness.

Our second expert witness is Dr. Joseph Malone, President of Middle East Research Associates, Inc. Dr. Malone is a recognized expert on the Middle East. He has numerous publications to his credit and has taught Middle Eastern courses at the American University of Beirut, Kansas State University, and the University of Pittsburgh. Doctor, I believe you also just recently have visited Iraq.

Dr. Malone, I see that you have a lengthy testimony. Your complete statement will be incorporated in the record in full. We would appreciate very much your summarizing it now.

STATEMENT OF JOSEPH J. MALONE, PRESIDENT, MIDDLE EAST RESEARCH ASSOCIATES, INC., WASHINGTON, D.C.

Mr. MALONE. Thank you very much, Mr. Chairman. I am pleased to be able to summarize my remarks.

Iraq historically was a recurring debit in the accounts of the Ottoman Empire. Its undoubted strategic importance assured that it would not be neglected in European chanceries and by military planners of Imperial Russia, Imperial Germany, of British India and by Napoleonic France as it was by its Turkish masters.

Too late did the Turks realize that the home territories of fractious Kurds and Arabs, assumed to be ungovernable, demonstrably unproductive of revenue and army recruits, contained oil fields of unimaginable potential. Britain, exhausted by lavish expenditure of blood and treasure in World War I, was sustained a while longer by the oil of Iraq and Iran. For Turks, British, and Iraqis alike, this is one of modern history's more profound ironies.

The British mandate imported Hashemite rule and, in political terms, at least, left the descendants of Sharif Hussain of Mecca fairly well entrenched when independence was conferred in 1932. Neither the tribal rebellion of 1920 nor the "Golden Square" interlude of World War II were understood to be more than anti-British, anticolonial manifestations.

Hashemite rule was itself considered as an alien implantation.

In a sense, the revolution of 1958 established home rule and initiated a decade of strife, coup, and counter-coup to sort out who would rule at home.

It is an oversimplification to state that the supreme governing institution, the Revolutionary Command Council, is the instrumentality of the ruling Ba'ath Party, whose pan-Arab and socialist credentials antedate by many years the current regime, and whose antecedents are in an unloved neighbor to westward—Syria.

The new National Assembly, inaugurated in 1980, hardly is a locus of power. Yet it is more than window dressing, more than a safety valve. Membership is recognition, and is not despised.

The Ba'ath Party has been reshaped by Saddam Hussein al-Tekriti, who has dropped "al-Tekriti" in order to obscure, at least to the younger generation, the fact that a small band of militants from Tekrit, north of Baghdad, has, since 1968, been the shaping influence in the political life of Iraq. The Ba'ath Party therefore is the preferred mechanism for the increasingly personal rule of Saddam Hussein.

And personal rule it is. When the Ba'ath Party emerged victorious in 1968, after a decade of violence and chaos, there was a collegial aspect to the central command structure which ceased to be apparent several years before Saddam became President of Iraq in mid-1979. But it has been obvious since his installation that the Ba'ath Party has ceased to be the source of legitimacy for the ruling institution. Rather, it is a vehicle for the President's authority—a means of transmitting and achieving his vision of a modern, unified Iraqi state.

It was Saddam's perception of the threat to the stability of the Iraqi regime inherent in the Iranian revolution which convinced him that the ailing Hassan al-Bakr should turn over the presidency to him. A badly planned coup attempt by senior Ba'athists happened very conveniently for Saddam. It was a superb opportunity to consolidate his authority, which was greatly increased by purges of the party structure and armed forces.

Dispensing largesse and pushing modernization, agricultural development, and literacy projects make abundant sense in a country whose Persian, Ottoman, British, Hashemite, and "revolutionary" regimes have been hard pressed to maintain control over a restless population. The Kurds, who comprise about 20 percent of Iraq's population and who also inhabit contiguous mountain areas in Turkey and Iran, were largely beyond government control until 1975, when Iranian and covert United States and Israeli assistance to Iraq's Kurds was ended by agreement between Saddam Hussein and Mohammed Reza Shah.

More recently, the granting of fairly comprehensive political autonomy, the death of the unbending, charismatic Kurdish nationalist, Mulla Mustafa Barzani, and lavish expenditure on development have curbed separatist enthusiasm.

Approximately 55 percent of Iraq's population, inhabiting alluvial plain and marshland areas south of Baghdad, are Shi'ites. Politically, they always have been outsiders. The central government has been dominated by the Sunni Arabs of Baghdad and the north, when it has not been grasped by foreigners, from the Abbasid Caliphate to the present. The Shi'ites look to their ayatollahs, whether in Kerbela or Qom, for spiritual guidance, while Qom and Tehran

look to, and covet, Shi'ism's holiest shrines, Kerbela and Najaf, on the lower Euphrates.

The Baghdad regime labors diligently to give the Shi'ites a meaningful stake in Iraqi society, while maintaining vigilance and meting out exemplary punishment to real or imagined wrongdoers.

Political chaos in Iran is regarded as Iraq's best defense against Iran's Shi'ite militancy. The corollary, of course, is that the emergence of a strong mullah-dominated regime in Iran, free of significant domestic challenges to its authority, would soon lead to trouble in Iraq's Shi'ite areas.

In such circumstances, a mailed fist, decorously concealed in a velvet glove, makes a certain amount of sense.

I would like to summarize this with a few more words, if I may, Senator.

I think that historians of the 1980's, like those who have essayed to interpret any era of the past, will focus upon the roles and personalities of national leaders. Like it or not, charisma or the lack of it continues to shape the destinies of nations. Saddam Hussein has placed his personal imprint on Iraq as has no one else since King Faisal I, not excepting Nuri al-Said. While Faisal's role was to lead Iraq out of a nightmare era of Ottoman domination and to prepare for the end of the British mandate, Saddam's legacy will be even more significant. He is a man in a hurry, and his methods are single-minded and ruthless to an extent that causes concern in Iraq and in the international community. Yet his goals have great merit.

He seeks a unified, literate—indeed, advanced—Iraqi society. He actively promotes the role of women in the achievement of those goals. He aspires to spread the benefits of education, health care systems, and an awareness of Iraq's very significant cultural contributions throughout the country.

As have so many other Iraqi leaders, he wants Iraq to take a leading role in Arab affairs. Hegemonic ambitions aside, because they are of doubtful achievability, the natural, indeed predetermined, course of action involves him in seeking justice for the dispossessed Palestinian peoples and the containment of Israel.

Saddam Hussein has a term of office. We have no idea of its length or how that length will be decided. But his remarkable legacy will be a continuum in social, economic, and political terms, which gives him an importance transcending a term of office, or span of life.

Saddam Hussein's Iraq is rich in natural and human resources. It is a potential trading partner of enormous value to the United States. Actions which would tend to discourage efforts to achieve an opening to the West, and which could push Iraq back toward the embrace of the waiting Soviet bear, are not in the national interest of the United States.

I thank you very much, Mr. Chairman.

[Mr. Malone's prepared statement follows:]

PREPARED STATEMENT OF JOSEPH J. MALONE

IRAQ UNDER SADDAM HUSSAIN

The background

Iraq was a backwater, a recurring debit in the accounts of the Ottoman Empire. Its undoubted strategic importance (as old as time, conferred upon it by the two rivers, Tigris and Euphrates) assured that Iraq would not be as neglected in

European chanceries and by military planners of Imperial Russia, Imperial Germany, of British India and by Napoleonic France as it was by its Turkish masters.

Too late did the Turks realize that home territories of fractious Kurds and Arabs, assumed to be ungovernable, demonstrably unproductive of revenue and army recruits, contained oil fields of unimaginable potential. Britain, exhausted by lavish expenditure of blood and treasure in World War One, crippled by failure to discern that its reputation as Workshop of the World had become more myth than substance, was sustained a while longer by the oil of Iraq and Iran. For Turks, British and Iraqis alike, this is one of modern history's more profound ironies.

The British mandate imported Hashemite rule, and—in political terms at least—left the descendants of Sharif Hussein of Mecca fairly well entrenched when independence was conferred in 1932. Neither the tribal rebellion of 1920 nor the "Golden Square" interlude of World War Two were understood to be more than anti-British, anti-colonial manifestations. Hashemite rule was itself considered as an alien implantation. In a sense the revolution of 1958 established home rule, and initiated a decade of strife, coup and counter-coup to sort out who will rule at home.

The Ba'athists and Saddam Hussain

It is an oversimplification to state that the supreme governing institution, the Revolutionary Command Council, is the instrumentality of the ruling Ba'ath (Renaissance) Party, whose pan-Arab and socialist credentials antedate by many years the current regime and whose antecedents are in an unloved neighbor to westward—Syria. The new National Assembly, inaugurated in 1980, is hardly a locus of power. Yet it is more than window dressing, more than a safety valve. Membership is recognition, and is not despised.

The Ba'ath Party has been reshaped by Saddam Hussain al-Tekriti, who has dropped "al-Tekriti" in order to obscure—at least for the younger generation—the fact that a small band of militants from Tekrit, north of Baghdad, have since 1968 been the shaping influence in the political life of Iraq. The Ba'ath Party, therefore, is the preferred mechanism for the increasingly personal rule of 43-year old Saddam Hussain.

For personal rule it is. When the Ba'ath Party emerged victorious in 1968 after a decade of violence and chaos, there was a collegial aspect to the central command structure which ceased to be apparent several years before Saddam became President of Iraq in mid-1979. But it has been obvious since his installation that the Ba'ath Party has ceased to be the source of legitimacy for the ruling institution. Rather, it is a vehicle for the President's authority—a means of transmitting and achieving his vision of a modern, unified Iraqi state.

It was Saddam's perception of the threat to the stability of the Iraqi regime inherent in the Iranian revolution which convinced him that the ailing Hassan al-Bakr should turn over the presidency to him. A badly planned coup attempt by senior Ba'athists happened very conveniently for Saddam. It was a superb opportunity to consolidate his authority, which was greatly increased by purges of the party structure and armed forces.

From the fall of Nuri Said and the Hashemites in 1958, Iraq's "republican" regimes have been influenced by perceptions of isolation in the Middle East, of hostile neighbors, and external pressures. The effect upon domestic—and especially internal security—policy has been profound. Fear of penetration of the armed forces by hostile elements, or of another "man on horseback" such as Brigadier Abd'al Karim Qasim, the scourge of the Hashemites, has produced a carrot-and-stick policy. The armed forces are well paid, well housed and well equipped, but are subjected to unremitting surveillance. A well-developed Ba'athist organization within the military is the present regime's best guarantee that the soldiers and airmen will stay out of politics.

The policy has worked for the past decade. Moreover, since Saddam Hussain moved last year from being the power behind the presidency, his formula for controlling the armed forces has been extended to the entire nation. Dissent will be crushed, and even suspicion of dissent, or of the most latent manifestations of opposition are dealt with harshly. But the new president balances a draconian security policy with a highly visible, carefully orchestrated *paterfamilias* role, roaming the country to win hearts and minds.

Dispensing largesse and pushing modernization, agricultural development and literacy projects make abundant sense in a country whose Persian, Ottoman, British, Hashemite and "revolutionary" regimes have been hard pressed to maintain control over a restless population. The Kurds, who comprise about

20 percent of Iraq's population, and who also inhabit contiguous mountain areas in Turkey and Iran, were largely beyond government control until 1975, when Iranian (and covert U.S. and Israeli) assistance to Iraq's Kurds ended by agreement between Saddam Hussain and Muhammad Reza Shah. More recently, the granting of fairly comprehensive political autonomy, the death of the unbending, charismatic Kurdish nationalist, Mulla Mustafa Barazani, and lavish expenditure on development have curbed separatist enthusiasm.

Approximately 55 percent of Iraq's population, inhabiting alluvial plain and marshland areas south of Baghdad, are Shi'ites. Politically, they have always been outsiders. Central government has been dominated by the Sunni Arabs of Baghdad and the north, when it has not been grasped by foreigners, from the Abbasid Caliphate to the present. The Shi'ites look to their ayatollahs, whether in Kerbela or Qom, for spiritual guidance, while Qom and Tehran look to—and covert—Shi'ism's holiest shrines, Kerbela and Najaf, on the lower Euphrates. The Baghdad regime labors diligently to give the Shi'ites a meaningful stake in Iraqi society, while maintaining vigilance and meting out exemplary punishment to real or imagined wrongdoers. Political chaos in Iran is regarded as Iraq's best defense against Shi'ite militancy. The corollary, of course, is that the emergence of a strong, millah-dominated regime in Iran, free of significant domestic challenges to its authority, would soon lead to trouble in Iraq's Shi'ite areas.

In such circumstances, a mailed fist, decorously concealed in a velvet glove, makes a certain amount of sense.

Iraq's rulers have always aspired to a larger role in intra-Arab affairs than its position and resources made possible. Now Saddam Hussain and his supporters consider that that role is within reach. The means are at hand to procure Western military and industrial technology. The Iraqis were disappointed with the result of the 1975 friendship treaty with the Soviets long before relations turned sour with the invasion of Afghanistan. A fairly high standard of Soviet military hardware was not enough to compensate for shoddy industrial goods and a luster performance in developing production facilities in the Rumallah field—a project recently transferred to American direction.

Hence, the regime's hope is that the opening to the French and "re-opening" to the British will be followed by accessibility to a wide variety of American technology. The mystique persists, against mounting odds.

Iraq's leadership of the opposition to the Camp David process and its vanguard role in drumming Egypt out of the Arab corps places such hopes in some jeopardy. So, until the Israeli raid on Iraq's nuclear reactor, did Iraq's effort to gain membership in the nuclear club, facilitated by Italian technical assistance and the French sale of enriched nuclear fuel. Ratification of the non-proliferation treaty could hardly have been expected to mollify American critics, especially in the Congress, but the Iraqi authorities considered that an increased American share in the Iraqi market would result in the flag (over a reopened American embassy) following trade. The Iraqis, despite commitment to an ideology which has fostered an all but impenetrable maze of State companies on the East European pattern, have concluded that achievement of their major goal—economic self-sufficiency—depends on a strong link to Western technology.

Economic self-sufficiency translates as regional power, and no Middle Eastern nation has achieved one or the other. Saddam Hussain is determined that Iraq will be the first. This means that major emphasis will be placed on railroad and airline development, river navigation (Tigris and Shatt al-Arab), and the super-highway links with Kuwait, Syria and Jordan. Commercial cooperation with Jordan has developed at an especially remarkable rate (\$42.5 million in Jordanian exports to Iraq in 1979, up 269 percent from 1978), with inevitable political consequences.

The railway network, as planned, will not only make Baghdad the railway "hub" of the Fertile Crescent, but will link Iraq with Kuwait, Saudi Arabia, Qatar and the United Arab Emirates.

There is a short-term political rationale to such planning, as well as longer-term economic strategic objectives to be achieved. The deterioration of Iraqi-Iranian relations included Iranian-sponsored assassination squads in Baghdad, border skirmishes, expulsion of Iranian Shi'ites from the shrine cities and other provocations. This raised the political temperature, and eventually led to war. Iraq recruits Arab support by demanding Iranian recognition that the inhabitants of Iranian Khuzistan (or, in the Iraqi term, Arabistan) are Arabs. Saddam Hussain also demands an end to the Iranian occupation of Abu Musa and the Greater and Lesser Tunb, islands near the Straits of Hormuz. It is the Iraqi contention that Abu Musa should revert to Sharjah, and the Tunbs to Ras al-Khaimah, a position which has strengthened Iraq's relations with the Arab states of the Gulf region.

Bad blood between Damascus and Baghdad has been a constant in Fertile Crescent history since the fall of the Ummayyad Caliphate and the transfer of power to Abbasid Baghdad. The present difficulties of the Assad regime in Syria are assessed in Baghdad, as such difficulties are always assessed, in terms of possible advantages for Iraq. Saddam Hussain would favor using Iraq's oil wealth to foster economic dependency in Syria—as it is developing in the Iraq-Jordan relationship. But until that can be achieved, Iraq has worked diligently to escape from dependence upon the oil pipeline across Syria to the Mediterranean. The Damascus authorities blocked it in 1956, and in 1966-67, and unilaterally doubled the transit fee in 1973.

Since 1977, the trans-Turkey pipeline to the Mediterranean has been on stream. Now an internal north-south pipeline (with a daily capacity of 1 million barrels) and new terminal facilities for the Gulf route are available. Oil can be piped north for transmission to Mediterranean terminals, or south to the Gulf, depending upon requirements. The flexibility thereby achieved relates directly to Iraq's quest for regional power and influence.

Economic development

However sclerotic the system of State companies may be, overall direction of the economy is sound and disciplined. The budget is in three sections—ordinary (administrative); development plan; and, allocations for public sector organizations.

The ordinary budget encompasses revenues and expenditures of ministries, and totals \$12.52 billion. The defense budget was increased by 25 percent over 1979 to \$3.02 billion, a slower rate of growth than in the 1978-79 period. With 225,000 men under arms, inventories of over 300 fighter/interceptor/ground attack aircraft, 2,000 tanks, and major orders placed for new generations of aircraft, fast patrol boats, torpedo boats and other sophisticated forms of hardware, the Iraqi military is a significant factor in the country's development. The demands placed upon skilled manpower, the education system and general infrastructure can be translated into opportunities for Iraq's trading partners in the West.

The development plan is funded at \$17.98 billion, and the 255 public sector organizations receive \$15.71 billion. The deficits recorded by State companies may be more serious than published accounts indicate, for hidden subsidies confound the analytical process. Unsatisfactory performance has resulted in efforts at consolidation and bureaucratic streamlining.

The commitment to industrial projects in the development plan stands at a record \$3.43 billion. The fast-paced expansion of the oil, gas and petrochemical sectors has been mentioned above. In transport and communications, the major 1,200 kilometer highway from Syria to Kuwait has yet to be completed. An integrated passenger and freight rail system is being developed for which practically everything—track, rolling stock, etc.—must be imported, and mass transport is being planned for Baghdad. New international airports are to be constructed in Baghdad and Basra. Port capacity at Basra and Umm Qasr is to be expanded, requiring berths, warehouses, rail links, etc. (Port congestion is currently slowing the Iraqi development program.) The telephone system is to be modernized and enlarged, possibly switching to an electronic exchange system.

The Housing and Reconstruction Ministry's budget for 1980 was increased by almost 50 percent (\$2.9 billion), of which \$1.2 billion has been allocated to the State Organization for Roads and Bridges. There are a number of major housing projects, including plans for a new town in the south which will accommodate a population of 30,000.

\$918 million has been appropriated for improving and expanding the hospital system, and there is a major program for the construction of schools—over 200 secondary schools in Baghdad alone. The State Organization for Construction and Contracting has 145 projects this year, valued at almost \$3 billion.

The Irrigation Ministry's budget has been increased by 30 percent to \$677 million. Projects include three major dams, land reclamation, irrigation and drainage. Agriculture has not received comparable increases. If government is to achieve its goal of self-sufficiency in food by the mid-80s, much will have to be done in such fields as livestock production.

In industry, import substitution has been the main objective, but the creation of exportable surpluses is also a goal. The State Organization for Industrial Design and Consultancy is responsible for studying and initiating new industrial projects, and its 1980 budget totalled \$1.2 billion. A substantial number of light industries have already been set up, some manufacturing under license or with foreign technical expertise. The building materials industry has found it difficult

to keep pace with the demands of the development program; the shortage of cement, in particular, has become a major problem. In the field of consumer goods there were very few import allocations in 1989 (this, of course, excludes foodstuffs), even though the government is trying to improve living standards, especially in rural areas.

The U.S. share of this activity is slowly expanding. For some time, the Iraq government has been investing surplus petrodollars in the Eurodollar market, and more recently a preference for U.S. Treasury notes has developed. It is estimated that from \$7 to \$10 billion are invested in the former, and as much as \$5 billion in the latter. American agricultural equipment, oil field goods, petrochemical and oil refinery expertise are penetrating the Iraqi market, and there is room for much more.

Iraq's import budget for 1980 was \$13.5 billion (40 percent for capital goods; 17 percent for consumer goods; the balance nearly all for raw materials), and overall expenditure is being increased almost 50 percent—to \$47.5 billion. As a market for goods and services, Iraq is second only to Saudi Arabia in the Middle East.

Every sector of the economy will benefit from increased government spending. "Import emphasis" will continue to be on capital goods, and on contracting and consultancy services. While development in the oil, gas and petrochemical sectors is an ongoing process—\$1.3 billion in contracts were committed in 1979—future emphasis will be upon the general infrastructure.

From 1967 to 1976 Iraq's GNP grew from \$2.5 billion to \$16 billion. No official statistics have been available since, but rapid growth is clearly indicated. The pace might have been swifter still had not a slower rate of infrastructure development been responsible for obstacles. Inflation—the educated guesses suggest that the rate is 12 percent—has not had the impact on Iraq that has been felt in the countries of the Arabian Peninsula, or in Iran. Under-achievement, in the sense of actual expenditures falling as much as 50 percent below planned outlays, acted to prevent overheating of the economy, a feature of development which plagued Iran, Saudi Arabia and the United Arab Emirates before 1979. But under-achievement also spells lost momentum—hence the "catch up" character of later budgets.

The cumbersome administrative apparatus which must be held accountable for under-achievement of development goals has been an inevitable consequence of the "nationalization fever." Since it was contracted in 1964, it has progressed until the State has come to dominate the economy. There will be no turning back—the private sector accounts for under 10 percent of imports and an even less impressive share of industrial investment—but 1980 marked the beginning of serious efforts to cure the bureaucratic sclerosis which has had such a deleterious effect upon economic growth.

After chaos spread through Iranian Khuzestan in 1979, Iraq became the second largest oil exporter in the Middle East. The war with Iran changed all that.

The capacity for sustained economic growth exists. A population of 12.5 million—50 percent under thirty years of age—is large enough to form a significant domestic market, and satisfies a major requirement for economic diversity. The effort to achieve a diverse, broadly-based economy is helped by a significant agricultural potential, and the existence of valuable mineral resources other than oil. Phosphates and sulphur are exploited commercially. Discovered, but awaiting development are copper, lead, iron ore, glass sand and gypsum.

Foreign exchange reserves are equivalent to the cost of two years of imports—a very favorable contrast with the international norm of 3.4 months.

A further impetus to getting on with the job is the public scrutiny Iraq will come under when Saddam Hussein assumes the presidency of the Non-Aligned Bloc of Nations this year.

English is the second language of Iraq, which serves American as well as British interests. Both countries will be hard pressed to diminish the Japanese, West German and French market shares by increasing theirs. The Americans have the additional disadvantage of a break in diplomatic relations, although an interests section, attached to the Belgian embassy, has done yeoman service in Baghdad.

Some details of trade and trading relationships with Iraq should place U.S. opportunities in perspective. They are provided in the following tables:

TABLE I.—TRADE PATTERNS
[Dollar amounts in millions of U.S. dollars ¹]

	1973		1977	
	Amount	Percent	Amount	Percent
Foodstuffs.....	180.5	20.2	320.0	10.3
Raw materials.....	93.6	10.5	288.8	9.3
Consumer goods.....	86.9	9.8	302.0	9.7
Capital goods.....	426.5	47.7	1,936.9	62.6
Miscellaneous.....	106.1	11.8	247.5	8.1

¹ 1 Iraqi dinar=\$3.386.

TABLE II.—OECD EXPORTS TO IRAQ

	Percent share		
	1977	1978	1979
Japan.....	23	22	22
Federal Republic of Germany.....	21	18	16
France.....	9	10	11
United Kingdom.....	9	10	6
Italy.....	6	7	9
United States.....	6	7	7

TABLE III.—GROWTH RATES DURING 1975-80 IRAQI DEVELOPMENT PLAN ¹

	Percent
Gross domestic product.....	16.6
Per capita income.....	13.3
Oil sector.....	15.5
Agriculture.....	7.1
Industry.....	32.9
Distribution.....	17.1
Services.....	10.4

¹ Annual average increase at constant prices.

TABLE IV.—1979 OECD EXPORTS TO THE MIDDLE EAST BY COUNTRY
[Dollar amounts in millions of U.S. dollars]

	Exports	Percentage of total exports
Saudi Arabia.....	\$19,500	27
Algeria.....	6,900	9
Iraq.....	16,700	9
Egypt.....	6,100	8
Libya.....	6,000	8
Iran.....	5,900	8

¹ The percentage of total OECD exports to the Middle East, estimated at \$75,900,000,000 in 1979.

TABLE V.—TOTAL OECD EXPORTS TO IRAQ

	U.S. dollars (millions)
1974.....	2,000
1975.....	4,000
1976.....	3,800
1977.....	3,700
1978.....	4,300
1979 (estimated).....	6,800
1980 (projected).....	9,500

TABLE VI.—OIL PRODUCTION VERSUS OIL REVENUES

[Production in millions of barrels per day]

	1978	1979 (estimated)	1980 (projected)	1978	1979 (estimated)	1980 (estimated)
Saudi Arabia.....	8.3	9.5	9.5	35.8	54	88
Iraq.....	2.6	3.4	3.5	9.8	20	32
Iran.....	5.2	2.0	1.2	20.5	12	13
Kuwait.....	2.1	2.5	2.0	9.2	14	16
Libya.....	2.0	2.1	1.75	8.6	15	18

Petrodollars have been transformed into a boom-town environment and high-pressure development in most OPEC member-states. Iraq is no exception. What is extraordinary is that development has not been slowed by protracted involvement in conflict with Iran. The petrodollar reserve, estimated at \$24 billion at the outset of the war in the autumn of 1980, has been significantly reduced. Moreover, Iranian air strikes at oil production facilities cut exports drastically. The daily average has yet to regain the one million barrel mark, which would be less than one-third of the prewar rate of export.

Nonetheless, Iraq's financial position is sound. Oil in the ground is as good, if not better than petrodollars in the bank. And evidence is mounting that Iraq has reserves more ample than indicated before 1981. Were this not enough to insure the country's line of credit, a reputation for hegemonic ambitions and the exportation of violence stimulate a certain solicitousness in Iraq's neighbors. It is a concern which might be more reluctantly expressed if Iraq's enemy did not possess a similar potential for troublemaking in the Arab states of the Gulf region.

The overthrow of the Phalavi regime was both a setback and an opportunity for Saddam Hussain. It came at a time when the diameter of the ruling circle in Iraq was being drastically reduced. The 1957 Iran-Iraq agreement had ended an acrimonious and occasionally violent phase of relations between the two countries. Saddam was able to concentrate on consolidation of his authority within the Revolutionary Command Council, and, on accelerated development programs, throughout the country. Nonetheless he maintained the fiction of collegial RCC rule, under the chairmanship of President Ahmad Hassan al-Bakr, while edging slowly and carefully toward center stage. There were official journeys abroad, and more frequent public appearances and statements at home.

The period 1975-1979 can be considered as another preparatory phase in Saddam's steady progress toward absolute rule over Iraq. It ended with the resignation of Ahmad Hassan al-Bakr from the presidency on the grounds of ill health. This occurred early in 1979, as did agreement with Saudi Arabia to partition the neutral zone between the two countries and to settle other outstanding disputes. Finally, Saddam initiated a bloody purge of Ba'athi Party stalwarts in mid-1979.

The three events were not unrelated. A deteriorating situation in Iran was clearly considered by Saddam to have grave implications for Iraq. He was now ready to assume full control of the armed forces, for the time purchased by the 1975 Shatt al-Arab agreement was running out. Much of his southern and western flanks was secured by agreement with Saudi Arabia. A year earlier, a measure of rapprochement was achieved with Syria, but the alleged implication of the Damascus regime in an ill-defined anti-Saddam plot once more restored Iraqi-Syrian relations to their usual level of acrimony. Saddam may have implicated Syria because alleged association would make it easier to dispense with potential rivals among his comrades-in-arms. This is still not clear.

Saddam's predecessors had ranked petrodollar courtship of the armed forces above expenditure on balanced development. He had another cure for restiveness among the military. Violent abrogation of the Shatt al-Arab agreement became a part of his planning from the moment that the Shi'ite population of southern Iraq became Ayatollah Khomeini's primary external target.

There is evidence that Saddam was forced to play his hand before he was fully prepared to strike. To be sure, to the campaign of verbal and written incitement originating in Qom and Tehran was added a seemingly uncoordinated series of penetrations into Iraqi territory by revolutionary guards. But the trigger was in the Iraqi army, in the persons of officers who sought aggrandizement by "protecting the revolution." Instead, they went to war. Saddam will have to be exceptionally victorious to prevent their return to peace-time pursuits.

Support of the Iraqi war effort by Arab states of the Gulf might have been less forthcoming, given Iraq's intrusive policies of recent years, had not revolutionary Iran's irredentism with regard to the Gulf's western shore been so extraordinary, and so violently stated. Yet a more valuable role might nonetheless have been played by Iraq's neighbors to the south except for miscalculation. Peacemakers, however, must comprehend that war was about to erupt. The Gulf Arabs, like almost everyone else beyond Saddam's small circle of confidantes, had become so accustomed to exchanges of abuse, gunfire and an occasional bomb that full-scale conflict was not anticipated.

The war which drew the Arab states of the Gulf together deepened divisions in the Fertile Crescent and Maghreb. It has proved to be an economic boon to Jordan, but at the cost of further exacerbation of the soured relationship between Amman and Damascus. Syria, predictably, has thrown its support to Iran, to the extent of providing air cover for transport planes carrying supplies to Iran over the mountainous regions of Kurdistan. Ironically, this represents another drain on revenues earned from the pipeline carrying Iraqi oil, in much reduced quantities, across Syria to the Mediterranean.

The Iraq-Iran war is also being fought, along with all the other wars, on Lebanese soil. It has created, if possible, further divisions in the PLO. Libya, with its customary perversity, has placed in abeyance its supercharged Arabism to rally to the various banners of Khomeini, Bani-Sadr, Beheshti, and Muhammad Rajai. Algeria also supports Iran, with much less enthusiasm although the U.S. memory lapse about its intermediary role could alter that situation. Conservative Morocco supports radical Iraq less out of fraternal Arab feeling than because Algeria and Libya are on the other side.

Saddam and his spokesman insist that the war plan had three principal objectives. These were to invalidate the 1975 Shatt al-Arab agreement and return to status quo ante, to end oppression of and discrimination against the ethnic Arab population of Khuzestan, and to facilitate the overthrow of Khomeini, and thereby prevent the dismemberment of Iran. There is little reason to doubt that these were legitimate objectives. It did not necessarily follow that either the Khuzestan policy or the dispatch of Khomeini into the outer darkness would prevent dismemberment. But obviously Iraq's security interests are best served by a stable, peaceable and relatively cohesive Iranian neighbor. The most likely result of dismemberment was to find the Soviet Union in much greater proximity to the oil fields.

None of Saddam's objectives have been achieved, and indiscriminate shelling and bombing have cooled any ardor which the inhabitants of Khuzestan may have had for their Iraqi benefactors. Failure to follow up on early advantages may be ascribed to a reluctance to accept the casualty list that a Blitzkrieg victory would have produced. In the Iraqi and Iranian media, soldiers are not killed—rather, they achieve martyrdom. Too many martyrs are not good politics if it is assumed that they are dying for Saddam Hussain instead of for God and Islam.

Yet even a face-saving formula to bring about a cessation of hostilities could be even worse politics. Saddam Hussain faces an important deadline, imposed by the convening of the non-aligned states in Baghdad in the early autumn of 1982. A vast work force, building the sprawling convention complex, also faces that deadline. It is a piquant species of irony that Iraq, which has aspired and always failed to play a dominant role in Arab politics, could gain that eminence through the election of Saddam to the chairmanship of the non-aligned bloc. But the honor will be stripped of its meaning if the war lingers on, inviting the entire Third World to choose between the anti-Americanism of Iran and the pragmatism of the Iraqi regime.

Protracted war will also jeopardize Saddam's other campaign. Investment in rapid development in all parts of the country has undoubtedly broadened the base of Saddam's support. It has accomplished more for him in the Shi'ite south than could any campaign in Iranian Khuzestan. But expectations have been raised. If they are disappointed, how might the result be exploited by an army seeking to justify its return from the field, neither victorious nor on its shield?

The implications of this complex and confusing situation for America, its allies and OPEC are all but unfathomable. As, indeed, they are for the Arab world in general, and for Iraq's neighbors—Turkey, Syria, the Gulf States—in particular. Nor is there any real understanding of what effect a decisive Iraqi victory would have upon these various countries and groupings. Return to the status quo ante bellum may be ruled out. Iraq's burgeoning wealth, and Saddam's success in embarking upon comprehensive infrastructural modernization and

development, while simultaneously implementing an assertive foreign policy, set the pattern for future Iraqi policy, whether Saddam survives or not.

In other words, Iraq has arrived as a major factor in the politics of the Arab world, and therefore of policy formulation much further afield. Attempts to achieve such influence have in the past stimulated negative responses, not unlike the decision to invade Iran in the autumn of 1980. These earlier initiatives, however, resulted in the isolation of Iraq in the Arab world. Nuri Said's proposals for an Arab League in which Egypt would not have a shaping influence in fact produced an Egypt-dominated Arab League. Association with Turkey, Iran and Pakistan in an American-sponsored treaty organization aimed at institutionalizing the policy of containing the USSR's ambitions to expand toward the Mediterranean, the head of the Gulf, and the Arabian Sea in effect turned the Baghdad Pact on its head, making it appear to be an intrusive factor in Arab politics. Gamal Abdul Nasser's Revolutionary Command Council gained a *raison d'être* in intra-Arab politics therefrom, as important as the legitimization in internal policy which derived from the corruption and incompetence of the Farouk regime.

Moreover, acceptance of an Anglo-American vision of a Middle Eastern future in which anti-Soviet vigilance and the acceptance of Western perceptions of threat became the standards by which countries were judged, sealed the fate of Nuri Said and Hashemite rule in Iraq. Then, as now, Israel was the real and present danger for most Arabs. Iraq was considered as a defector from the Arab world's most important cause, and an advanced base for Western re-entry into the Fertile Crescent.

Negative reaction to Saddam's policy will, by contrast, be a transient phenomenon, should his Iranian intervention ultimately succeed. Victory is the most effective recruiting agency. The Iraqi capacity to project power and influence will be unprecedented in the country's modern history.

Given the essential bankruptcy of American policy in the Arab world before 1976, it almost seems as if Divine Providence has intervened to keep Iraq from achieving the unhappy status of a Soviet colony. Closer examination shows that Soviet ineffectualness and arrogance, and the strong will of Saddam Hussain kept Iraq from being blinded by the "red sandstorm" which has engulfed Afghanistan, the People's Democratic Republic of Yemen and Ethiopia.

Iraq's escape from such a sorry fate was not easy. The drift toward rapprochement with the USSR began with the overthrow of Nuri Said in the revolution led by Abdul Karim Qasim in 1958. It culminated with the 1972 treaty of friendship and cooperation. It will be left to historians to debate whether or not President Nixon's granting of a *carte blanche* to Muhammad Reza Shah on the acquisition of arms, also in 1972, was a cause or effect of the treaty.

In any event, the USSR could not deliver in the key area of economic development. The list of failures was lengthy but most determinative was shoddy Soviet performance in oil exploration and development. Current American activities in precisely the same areas are providing a start, and therefore welcome contrast. New oil can lubricate the machinery of diplomacy. Provision of military technology can count heavily in maintaining a relationship, as is illustrated by the current state of Saudi-American relations. But without *Aramco*, the special relationship might never have evolved. The legacy of Iraqi-U.S. mistrust and enmity is too strong to permit a fully cordial and cooperative association to develop in the near term. But American technological superiority has made a beginning at narrowing the gap, in an area where Soviet performance was dismal.

No less important was the growing Iraqi conviction that the Iraqi Communist Party was primarily a particularly dangerous executive agent for Moscow. By 1978 conviction had been transformed into fear. Within Iraq, clashes between Ba'ath Party cadres and the communists led to the cycle of executions, demonstrating the essential fiction of claims to Iraqi-USSR "solidarity." Beyond Iraq's frontiers, the Soviet Union's intervention in Afghanistan suggested to Saddam and his conferees a possible Soviet "solution" to the problem of deteriorating relations with Iraq. The opening to the West which had begun with agreements to acquire arms and nuclear technology from France now took on a much broader significance.

Growing American participation in the Iraqi marketplace (a dramatic symbol of which was the long-delayed authorization of the sale of Boeing aircraft by the Reagan administration in April, 1981) should provide the basis for eventual resumption of full diplomatic relations. Further opportunities will be presented when Iraq (and, indeed, Iran) can turn to the repair of their war-devastated oil production and transportation facilities.

The capital requirements of postwar Iraq and Iran suggest an extended phase of accelerated production, once facilities come back on stream. If in the meanwhile,

Saudi Arabia succeeds in achieving a disciplined approach to pricing within OPEC, the Saudi production could be reduced—a possibility with important ramifications for the Kingdom's domestic policies.

Should such a situation evolve concurrently with significant economic recovery within OECD, an atmosphere could be created in which constructive dialogue between oil producers and consumers would be within reach. Much depends upon Iraqi-Iranian disengagement and a resumption of truce in a conflict which is half as old as time. Then would be the time for American initiatives, coordinated with Western Europe, in Baghdad and Tehran.

Such initiatives must be based upon more than economic interchange. Reference was earlier made to the bankruptcy of America's Arab policies before 1976. This should not suggest that a remarkable change occurred with the Carter administration. An attempt was nonetheless made to break with the past. However flawed, the Camp David process is at a minimum acknowledged throughout the Arab world as a recognition that Arabs have been the victims of Western attempts to save their consciences over the fate of European Jewry in the Hitler era. Carter saw clearly that the Palestinians had been denied freedom and justice. If the response was less than adequate, at least it was a response.

Since that time, the Begin government has undertaken measures which have made life even more difficult in the Occupied Territories. Then came the Israeli raid on Baghdad. There has been no American reaction of any consequence.

Historians of the 1980's, like those who have essayed to interpret any era of the past, will focus upon the roles and personalities of national leaders. Like it or not, charisma or the lack of it continue to shape the destinies of nations. Saddam Hussain has placed his personal imprint on Iraq as has no one else since King Faisal I, not excepting Nuri al-Said. While Faisal's role was to lead Iraq out of a nightmare era of Ottoman domination and to prepare for the end of the British mandate, Saddam's legacy will be even more significant. He is a man in a hurry, and his methods are single-minded and ruthless to an extent that causes concern in Iraq and in the international community. Yet his goals have great merit. He seeks a unified, literate—indeed, advanced—Iraqi society.

He actively promotes the role of women in the achievement of those goals. Saddam aspires to spread the benefits of education, health care systems and an awareness of Iraq's very significant cultural contributions throughout the country. As have so many other Iraqi leaders, he wants Iraq to take a leading role in Arab affairs. Hegemonic ambitions aside, because they are of doubtful achievability, the natural, indeed pre-determined course of action involves him in seeking justice for the dispossessed Palestinian peoples and the containment of Israel.

Saddam Hussain has a term of office. We have no idea of its length, or how that length will be decided. But his remarkable legacy will be a continuum, in social, economic and political terms which gives him an importance transcending a term of office, or span of life.

Saddam Hussain's Iraq is rich in natural and human resources. It is a potential trading partner of enormous value to the United States. Actions which would tend to discourage efforts to achieve an opening to the West, and which could push Iraq back toward the embrace of the waiting Soviet bear, are not in the national interest of the United States.

[From Meed, June 19, 1981]

A WASHINGTON PERSPECTIVE

(By Joe Malone)

When the Begin regime announced the taking-out of the Iraqi nuclear reactor, I was watching an F-16 doing tight turns, rolls and vertical climbs above Le Bourget. My wife entered an Israeli exhibition at the Paris air show, accompanying a Palestinian girl who sought an idea of the variety and sophistication of the military hardware being made where her family once lived. Her searching questions made the attendants and security staff nervous. So did her very presence.

Obviously she was a threat. Had her reluctant hosts known of her plan to return to her Ivy League university and write a term paper on Israeli military technology, they might have ordered an air strike against her. As a purely defensive measure, the use of some F-16s against her would not have been a violation of the law.

The Israelis were happier with the following day's visitors. These were the designers, purveyors and users of hardware. There were no abstruse questions

to exasperate the exhibitors. The queries were about delivery systems, target designators and in-flight refuelling. All very professional.

As professional, one could add, as the raid itself. Preparation extended to probing for and measuring the gaps in the Saudi Arabian network, accomplished long before the Saudi request to buy the airborne warning and control system (AWACS) aircraft became public knowledge. Now we understand the stridency and virulence of Begin's objections to the inclusion of these passive monsters in the Saudi early warning system. To the architect of a policy which espouses naked aggression as the most acceptable defensive measure, the AWACS poses a problem.

Had it been in the Saudi inventory at the beginning of the Iran/Iraq war, the chances are AWACS would have detected the Israeli photo-reconnaissance mission, disguised as Iranian bomb runs on the Baghdad reactor site. And probably would have been shot down as a reward for such presumptuousness. In the event, it was not available, and the first phase of the plan to eliminate Iraq's nuclear capacity was successfully completed.

After the Baghdad raid, I measured the air mileage from Etzion air base to the reactor site, and drew a circle to establish what other possibilities were open. The Ankara government had better be polite to Begin. Libya was a bit too far—that would be a job for the Israeli navy. But Wadi Halfa, well beyond Aswan, was within range. So was Jeddah.

The aerial blitzkrieg on Baghdad poses many questions. One of the most important is—did Camp David make the raid inevitable? Leaving aside all the cant and sophistry on the objectives of the Iraqi nuclear programme, let the facts be faced. Camp David was a famous victory for Israel. It destroyed—by removing Egypt from the equation—the military potential to push Israel towards the negotiating table. In accomplishing this, Camp David's participants provided the sense of urgency characterised by the Iraqi nuclear programme.

Saddam Hussain's aspiration to play a leading role in Arab affairs is unremarkable. So is his decision that the nuclear programme was a means of establishing some sort of comparability with Israel's capacity to project power. Almost as unremarkable would be his understanding of the inevitability of an Israeli attack on the nuclear facility. Could he have concluded otherwise?

The sabotage in France of reactor equipment bound for Baghdad, and the assassination of an Egyptian specialist employed on the project were events in a not-so-secret war. It is a war with a long history. Saddam Hussain was around when Kissinger recruited Israeli military "advisers" for duty in Iraqi Kurdistan. He witnessed the aplomb with which the Israelis have ignored the persecution of Iranian Jews in order to carry on a flourishing weapons trade with Khomeini's Iran. Saddam Hussain could have had no doubt that the photo-reconnaissance mission of last year came out of the West.

What could Saddam Hussain possibly reap from what Begin has sown? He has achieved the status for Iraq which assures in the Arab and third worlds from being a target of Israeli aggression. Certainly he has the material for some rousing speeches when Baghdad hosts the non-aligned conference next year. His nuclear programme has produced the explosive which has blown up the Reagan/Haig policy of somehow aligning Egypt, Israel and Saudi Arabia in an anti-Soviet coalition. It has even vindicated Ahmad Zaki Yamani for his New York speech identifying Israel rather than the Soviet Union as the primary threat to the kingdom.

In a week in which the Israelis assail Reagan for holding up the transfer of four F-16's while the American envoy to the U.N. attempts to appease her Israeli colleague, the major U.S. victory has been the exclusion of the Palestine Liberation Organisation (PLO) from official observer status at World Bank meetings. If Saddam Hussain derives some grim satisfaction from all this, it is understandable.

But at what appalling cost. The myth of non-proliferation safeguards has combined with the reality of Camp David to bring the Middle East yet again to the edge of the abyss.

The CHAIRMAN. Thank you very much, Dr. Malone.

Our third panelist is Dr. Ben L. Martin of the University of Missouri. Dr. Martin has published widely and expressed considerable concern about Iraq's nuclear weapons potential.

In a rather prophetic article last winter in the "Middle East Review," Dr. Martin observed that, "sabotaging the Iraq nuclear

weapons program is the most imperative arms control measure facing the world today."

With that introduction, Dr. Martin, what do you forecast now for the future?

**STATEMENT OF BEN L. MARTIN, UNIVERSITY OF MISSOURI,
COLUMBIA, MO.**

Mr. MARTIN. Well, I am not sure I always will have quite so much luck.

Mr. Chairman, I would like to thank the committee for the opportunity to appear to discuss with you briefly the political character of the regime in Iraq.

Saddam Hussein has been the central figure in that Government for more than a decade, though he only assumed the Presidency formally just 2 years ago.

Saddam Hussein made his reputation as a revolutionary very early, when he was still in his early twenties, by trying to assassinate the then-President of Iraq. He rose in the years thereafter by natural selection in the environment of conspiracy, intrigue, and murder that has marked Iraqi politics especially since the bloody overthrow of the monarchy in 1958.

Hussein is an authoritarian, Socialist, Sunni Arab Iraqi from Takrit, and he runs the state machine that controls these three former provinces of the Ottoman Empire now called Iraq through a faction of men like himself, who share those qualities. His clique, led by Takritis in the Revolutionary Command Council atop the Government, and the Regional Command Council, atop the party, including his brother and a cousin, rules a population that is a polyglot, social conglomeration that is driven by ethnic, linguistic, and religious conflict.

Shi'ite Arabs represent over half the population of Iraq and Kurds make up nearly a fifth. Sunni Arabs consist of a little more than a quarter and are concentrated just north of Baghdad. Sustaining his Sunni rule, therefore, has required steady resort to coercion and repression in a political environment of chronic latent instability, cliques, conspiracies, coups, and rebellions.

As in most countries of this sort, revolving military juntas have ruled Iraq since the fall of the first post-colonial government. Hussein's success in infiltrating, manipulating and purging the officer corps has rested upon his willingness to use violence and his adeptness in using the organizational weapon. He himself controls internal security and intelligence operations as head of the party's National Security Bureau. When he finally assumed the Presidency in 1979, he quickly consolidated his control with a purge of his rivals and his critics. Dozens of people were arrested and imprisoned. More than a score were executed for plotting against the state.

Hundreds of Ba'ath party members from across the country were required to participate in the killings. Members of the ruling RCC were required to watch.

Amnesty International estimates that Hussein has ordered the execution of more than 350 people since 1978, and torture of prisoners is reported to be routine.

In addition to naked coercion, Hussein has relied upon extensive state subsidies to a large segment of the population to sustain the Ba'athist dictatorship. But those subsidies themselves are the results of the use of force in having exerted control over Western oil facilities. Hussein seized the British-owned Iraq Petroleum Co. in 1972, only after having concluded a treaty of friendship and cooperation with the Soviet Union 2 months earlier. That helped the Iraqi regime dispose of its expropriated oil and deterred Britain from recovering its property.

The Baghdad regime would be collecting oil payments at the rate of about \$30 billion per year if the war with Iran were not disrupting production, and the enormous treasure that has been wrested from the West has allowed Hussein to retain up to a third of the economically active population as state employees and allowed him to subsidize food, housing, medical care, and education.

The regime has extended control over agriculture as well as industry, insuring the political impotence of a private sector that is atomized and confined to small enterprise.

This is what Hussein calls the model experiment, the fruit of his revolution, which he has promoted tirelessly throughout the Middle East through subversion, terrorism, and the light of his example.

His thought and action are a mix of Marxist modes, realpolitik, militarism, pan-Arabism, revolutionary activism and organizational techniques, and the symbolism of Islam.

He samples Marxism for a pseudoscientific, phases-and-stages social analysis that establishes a driving certainty of progressive change and a driving optimism, and establishes a strong sense of his own rectitude and ultimate success.

His party and the revolution of 1963 are the vanguard of the people and of the Arab struggle, he says. Hussein's hostility to "imperialism, reaction, and the monopolies" is expressed in a militaristic idiom. There is constant talk of war and struggle, of battle with the enemy, steps in the march, strategy, and tactics. Yet Marxist analysis and a revolutionary activism are combined in Hussein's view, with an intense commitment to pan-Arabism. It is the Arab struggle, the Arab revolution, and the Arab nation that he strives to lead.

Saddam Hussein foresees in the remainder of this century the emergence of several new centers of power in international politics to rival the present Soviet and American centers of polarization, as he calls them. China, Europe, and Japan will emerge as these centers. He suggests that for Japan to be a center of polarization, this can happen only "once it decides seriously to enter the field of strategic weapons production on an international level." China, Europe, Japan and the "Arab homeland" will all emerge as centers of influence and polarization, replacing bipolarity.

Pan-Arabism allows Hussein to leap over the narrow constituency of Sunnis, just north of Baghdad, and widen his legitimacy by extending its bounds to the whole of the "Arab nation."

He takes no more seriously than does Qaddafi of Libya the legal boundaries of Arab regimes. He criticizes what he calls regionalism, which artificially divides the Arab people, and he aspires to spread his revolution throughout the Arab nation. Iraqi forces are pledged to defend the sovereignty of the entire Arab homeland.

The CHAIRMAN. Dr. Martin, I am going to have to ask us to recess for what I hope is a very short period. I am called to the floor and this apparently is the only time we can deal with our amendment. It has to be done now because the clock is running on it. I will return just as quickly as I can.

Meanwhile, we will try to find another Senator to preside in my absence.

Before I leave, however, I would have one further comment.

At an earlier hearing on the Israeli raid on the Iraqi nuclear reactor, I included in the record the views of the American-Israeli Public Affairs Committee. This afternoon, I would like to include in the record the views of the National Association of Arab Americans, which I would ask be inserted at this point.

[The information referred to follows:]

VIEWS OF THE NATIONAL ASSOCIATION OF ARAB AMERICANS

The Israeli attack on the Iraqi nuclear research facility near Baghdad on June 7, 1981, using U.S.-built weapons, was a substantial violation of both international law and U.S. laws and cannot be considered legitimate self-defense. The attack was an unprecedented act which marked the first time one nation has attacked a nuclear installation of another sovereign nation. If accepted by the United States or the world community as a precedent in international law, such an act would allow all nations to "justify" pre-emptive strikes on nuclear and other facilities as "self-defense." Since Israel itself has nuclear facilities and nuclear weapons, according to reliable sources including the CIA, acceptance of the Israeli strike would invite reprisal attacks on Israeli nuclear facilities, a contingency that would be equally unacceptable. The United States cannot condone an Israeli policy of using pre-emptive strikes with U.S.-built weapons as a means of limiting the spread of peaceful nuclear technology. Such a policy would contribute to world instability and insecurity and would greatly increase the likelihood of a nuclear holocaust.

The use of U.S.-built weapons by Israel in the attack violated both the 1952 Mutual Defense Assistance Agreement between Israel and the United States and the U.S. Arms Export Control Act. The Mutual Defense Assistance Agreement stipulates that Israel may not use U.S.-built weapons outside its borders except in cases of legitimate self-defense or in United Nations collective security arrangements. Since the Israeli raid on Iraq fits neither of these categories it is therefore in contravention of the Mutual Defense Assistance Agreement. The use of U.S.-built weapons in the attack thus constitutes a substantial violation of the Arms Export Control Act. The State Department informed Congress on June 10 that a substantial violation of the Arms Export Control Act "may have occurred."

The Israeli strike also violated Article 2 Paragraph 4 of the United Nations Charter, which states: "All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state or in any other manner inconsistent with the purposes of the United Nations." The United States joined the other members of the U.N. Security Council on June 19, 1981, in a resolution that "strongly condemned" Israel for the attack.

Israeli assertions that the attack was an act of "self-defense" are unacceptable. The Israeli attack was carried out merely on the suspicion that Iraq was using or intending to use the nuclear research facility for military purposes. However the Iraqi facility was in fact to be used only for peaceful nuclear research under international safeguards. Iraq has signed the Nuclear Non-Proliferation Treaty and has allowed the reactor to be inspected by the International Atomic Energy Agency before the attack, while Israel, which has its own nuclear facilities and nuclear weapons, has not done either. Had Iraq attempted to produce nuclear weapons, the nuclear research facility would have had to have been modified in such a way that international inspection would have uncovered the attempt.

A series of Israeli allegations that Iraq had threatened to use the nuclear research facility against Israel have been proven to be fabrications with no basis in fact. Israel itself has admitted that an alleged quotation by Iraqi President Saddam Hussein to this effect had not been made at all. In addition, Israeli assertions that Iraq had a secret chamber beneath the reactor for making bombs

have been contradicted not only by the International Atomic Energy Agency, which inspected the reactor in January 1981, but also by France, which supplied and built it.

In addition to the attack being on its face unjustifiable as an act of "self-defense", its timing raises additional questions. Israel chose to carry out the attack in the heat of an election campaign. It failed to exhaust diplomatic avenues to allay its fears of Iraqi intentions. Israeli assertions that the attack had to be undertaken immediately have been misleading and incorrect. Contrary to Israeli claims, the Iraqi reactor was not scheduled to become 'hot' until much later in the year.

Iraqi reaction to the Israeli attack has been moderate and restrained. Rather than resorting to retaliation after the attack, Iraq has chosen to avail itself of the existing international framework for resolution of international disputes through peaceful means. Iraq has consistently stated that its nuclear program was for peaceful purposes. However, in a statement on June 23, 1981, Iraqi President Saddam Hussein expressed his fears that Israel would continue to intimidate Arab nations through its possession of nuclear weapons. He indicated that the world community should help the Arabs to obtain a nuclear capability as a deterrent to the Israeli nuclear threat, not as weapons to be used to resolve Middle East disputes.

The fact that Israel carried out the raid on Iraq without informing the United States in advance is more than an embarrassment to our government—it indicates that Israel feels it can pursue any policy it chooses, no matter how reckless, with impunity and without accountability to the United States or the world. Israeli military actions taken as a result of this perception have been contrary to U.S. fundamental national interests and have had profound negative repercussions on U.S. foreign policy. The attack on the Iraqi nuclear research facility has undermined U.S. efforts to find a comprehensive solution to the problems confronting Israel and its Arab neighbors. It has brought peace negotiations undertaken by U.S. Special Envoy Philip Habib to end the conflict in Lebanon to the brink of failure. It has weakened U.S. relations with its allies in the Arab World, such as Saudi Arabia and Egypt. It has jeopardized the improvement of relations with Arab states, such as Iraq, which have had poor relations with the U.S. in the past. It has enhanced Soviet prestige in the Middle East by giving the Soviet Union a propaganda issue with which to attack the United States and by creating the opportunity to increase Soviet influence in the Arab World. And it has undermined U.S. efforts to convince Arab nations that the Soviet Union is the greatest threat to peace in the Middle East.

The Israeli attack on the Iraqi nuclear research installation was an unparalleled act of state terrorism and national irresponsibility and a flagrant transgression of international law and relevant U.S. laws. The United States must instruct Israel that it cannot continue to break U.S. laws with impunity. In view of this the NAAA strongly urges the U.S. Congress to:

1. Obtain ironclad assurances from Israel that its U.S.-built equipment will not be used outside of Israeli borders except in cases of legitimate self-defense, such as hot pursuit.

2. Stop each and every scheduled shipment of U.S. arms to Israel until these ironclad assurances are obtained from Israel.

3. Demand U.S. inspection of Israel's secret nuclear facilities and insist that Israel sign and adhere to the Nuclear Non-Proliferation Treaty. If nuclear weapons are discovered at these facilities, the U.S. Government must apply the full weight of its diplomatic and economic leverage to ensure their dismantlement and to eliminate Israel's nuclear weapons capability.

4. Demand that Israel begin earnestly to address the underlying problems in the Middle East through peaceful negotiation rather than the use of military force, the continuation of which is a danger and threat to international peace and security.

5. Reduce promised U.S. aid to Israel by a sum commensurate with the damages inflicted on the Iraqi nuclear research facility if Israel fails to honor the U.N. Security Council call for "appropriate redress" for the destruction of the reactor.

Rather than exacerbating the tensions in the Middle East by attacking its neighbors at will, Israel should be seeking ways of reconciling with them. Repeated violations of their sovereignty is not in the national interests of the United States or ultimately, of Israel. The U.S. can show its truest friendship for Israel by convincing it of the need for self-restraint and by dealing firmly with it when it transgresses the boundaries of legitimate self-defense as in this particular case.

A genuine peace in the Middle East will only be achieved when the spiral of violence and resentment is broken.

The CHAIRMAN. I will try to return as soon as I can, or perhaps another Senator will arrive first.

[A brief recess was taken.]

Senator BOSCHWITZ [presiding]. The hearing will reconvene.

Dr. Martin, I understand that you were in the middle of your statement, were you not?

Mr. MARTIN. Yes, sir.

Senator BOSCHWITZ. Fine. With your indulgence, so that I might at least be whole with respect to your statement, would you take a few moments to summarize your first few pages. Then please feel free at any time to leave if you have to catch a plane, as I am told you must.

Mr. MARTIN. Thank you, Senator. I will apologize in advance for an early departure.

Senator BOSCHWITZ. I think you should leave no later than 5:30 this afternoon because of the traffic.

Mr. MARTIN. Thank you. I will rely on your advice.

I began by summarizing the artificiality of the Iraqi state as a social conglomeration of very unlike peoples, ethnically, religiously, and linguistically, and the necessity therefore for Saddam Hussein to rely upon rather steady coercion and repression to sit atop that polyglot, and his reliance upon a personal clique of men very like himself in six or seven important ways. I spoke of the nature of the Ba'athist Party and the relevance of his personal background as a revolutionary, and his rise in this natural environment of conspiracy and coups to his present position of eminence. He has relied essentially upon a narrow constituency north of Baghdad of fellow Sunni Arabs.

Hussein's vision consists of a world, a multipolar world of many centers of power, replacing the present Soviet and American centers of power. These centers would feature Europe, China, Japan—he notes that Japan would be eligible only once it seriously decides to enter the field of strategic weapons production on an international level: then Japan could be a center of power—and, he says, the “Arab homeland”. These all would emerge as centers of influence and polarization. That is his vision of international politics.

He does not take any more seriously than does Qaddafi of Libya the boundaries, present and legal boundaries of Arab regimes. He criticizes what he calls regionalism, which artificially divides the Arab people, and he hopes to spread his revolution throughout the Arab nation.

Iraqi forces are pledged to defend the sovereignty of the entire Arab homeland and the war with Iran is set in those terms. Saddam Hussein has contested the PLO claim to represent the Palestinian people exclusively. He argues that all Arabs have an interest in the struggle of any and, therefore, he should have a say in the outcome.

He cites the development of Arabs' military power, their readiness to fight, and their use of oil as a political weapon as the underlying reasons for the victories of the Arabs struggle in the last decade. He says that he is determined to loosen the “grip” of the United States on Western Europe, destroy NATO and hasten the emergence of that polycentric world in which the Arab nation will be a co-equal.

After 1958, Moscow supplied nearly all of Iraq's military equipment, and it was Iraq's leading nonmilitary supplier as well. Early in Hussein's ascendance in the early 1970's, he identified the West as his main enemy. In 1974, he told reporters that, "We stand with the Soviet Union in the main political currents, namely anti-imperialism, the call for peace and support for the peoples struggling for freedom and socialism."

Even then, though, the Baghdad regime was not a Soviet puppet. Collaboration followed a perceived congruence of interests on both sides. The Ba'athists were careful to check the Iraq Communist Party, members of which sometimes met untimely deaths on the streets of Baghdad, despite the formal cooperation of the two parties in a national front.

By the mid-1970's, when it became clear that the West would not stop the unprecedented transfer of wealth then underway to OPEC regimes, the Iraqi rulers found that they needed the Soviet Union less. Their preference for the superior quality of Western European and Japanese goods particularly rankled the Soviet Union. Moscow fell to 14th among Iraq's nonmilitary suppliers, while its share of Iraq's military purchases dropped to two-thirds.

As the Soviet Union has become more assertive recently, Hussein has refused to change his sweeping vision of pan-Arab interests. Iraq criticized Soviet moves in the Horn of Africa, where Moscow backed the Ethiopian junta against Arabic-speaking Somalia and Eritrea. Moscow was seriously disturbed as well by the thoroughness of the purge of Iraqi Communists that followed the discovery of a secret Communist cell in the Iraqi army in 1978.

The Baghdad regime stopped honoring the practice of the Soviet-Iraqi treaty, no longer consulting Moscow on major political matters. Iraq condemned the Soviet invasion of Afghanistan. But before Hussein ordered the invasion of Iran, he did send an envoy to Moscow to explain his aims. At the same time that Saddam Hussein has felt increasingly free to assert his independence from Moscow, the Soviet Union has been moving in the opposite direction, toward greater control of friends and less toleration of deviance among its clients. Saddam Hussein has refused to fit that new mold that the Soviet leaders require. As he told an interviewer in 1977: "We regard the Soviets, the Americans, and the French all as aliens."

I think if Saddam Hussein had nuclear weapons, he would be likely to use them for two directly important purposes. In the first place, weapons like that would allow him to deter an American attempt to seize control of oil facilities in the Persian Gulf by threatening nuclear sabotage of those facilities. The United States has not needed much deterring so far, but the option of an oil seizure has remained, nevertheless. With nuclear weapons, Saddam Hussein could threaten sabotage much more effectively than gulf rulers have been able to threaten in the past, and an American option thereby would be degraded.

Second, I think Saddam Hussein would use nuclear weapons in the most directly offensive way, to try to destroy Israel by a surprise attack.

Breaking the 35-year moratorium on the use of nuclear weapons would require some special qualities. It would require boldness, ruthlessness, a contempt for the moral conventions of Western inter-

state relations. It would require an unhesitating willingness to use violence. It would require fanaticism, iron determination, and enormous ambition and self-confidence. Those are qualities that Saddam Hussein has displayed in abundance in his political career.

As I have said, he began his career as an attempted assassin in the early 1960's. He has prevailed in Iraq's political environment through bloody purges and repression. An intelligence report has described him as "merciless, arrogant, and feared by close associates; does not inspire affection; is pragmatic, clear-sighted, and shrewd."

Outside Iraq, he has promoted revolution and subversion. Baghdad has offered a base for the most extreme Palestinian factions. Iraq has fomented sedition throughout the Middle East and pursued conflict with all of its neighbors, except Turkey, at one time or another.

For Hussein, the American imperialist creation, Israel, by its very existence mounts a continuous assault upon the Arab homeland, upon the Arab revolution, and upon Arab honor.

For Saddam Hussein, the very existence of Israel, the American creation, is a continuous affront to Arab honor and an assault upon the Arab homeland. There is no peace. There is no possibility even of a truce between the Arabs and the Zionist entity.

For Hussein, as he said:

This is the central point of our policy for the confrontation with the Zionist enemy and the prevailing international circumstances, that is, preparation for war, simultaneously with resort to some form of political action. We must wage war when we find this necessary and correct.

The intricacies of deterrence theory that are drawn from the implicit codes of Soviet-American conduct have very little meaning in the Middle East. The omnipresence of overt hostilities and actual warfare since 1948 make the situation there much more like conditions of World War II, when atomic bombs were developed for use against the enemy. All four Arab-Israeli wars have featured surprise attacks and decisive breakthroughs to quick victory. Iraqi forces were committed in all four wars, more or less, with the Israelis, and a formal state of war exists between Iraq and the Zionist entity.

Boldly attacking and grievously damaging or destroying Israel would catapult Saddam Hussein instantly to leadership in the Arab world and guarantee him heroism in the annals of Islam. He would have accomplished at a stroke thereby what massed Arab armies had been unable to achieve in 20 years of assault and defeat.

Muslims saw their defeat in 1967 as divine punishment and they saw their subsequent wringing of the West and the Yom Kippur "victory" and the oil embargo as divine providence.

Hussein's weapons would become the avenging sword of Islam and Hussein would be the savior of the Arab masses.

Hussein intends to be the new Gamel Nasser for the Arab world. He intends to be the new Marshal Tito for the nonaligned world. He is prototypically "nonaligned," fundamentally hostile to the United States, but also opposed to Soviet machinations when they threaten his rule or his ambitions.

The new Soviet assertiveness in Africa and the Middle East so contrasts with the easy submissiveness of the West for a decade that Hussein now feels he has more to fear from the Soviet Union than from the United States. So far the moment he has turned for support to the Jordanian and Saudi monarchies which share that

fear of the Soviet Union, and he has left his various rivals, Assad, Arafat, and Qaddafi, to hazard an embrace closer to the Russians.

All of their positions on the Iraq-Iran war follow from those calculations. This means that Hussein already has made himself the linchpin for regional alignments, the beginning of leadership.

Hussein wants both the Soviet Union and the United States out of his extensive neighborhood, the gulf area. In February 1980, he offered a pan-Arab charter that opposed all foreign troops in the gulf area and pledged nonaggression among Arabs, which had the effect of reassuring tiny, wealthy Kuwait whom Iraq had threatened in the early 1960's, when the British first withdrew, and he offered common front against "aggressors," such as Persia.

He has tried to prevent American bases in Oman and he has tried to remove Soviet bases in Communist South Yemen, threatening subversion in both.

He stands temporarily with sheikly governments. Hussein therefore has taken the most extreme edge off his normal line on regional issues. The Western press has responded by dubbing him leader of a new "moderate" Arab bloc.

But the fact that Saddam Hussein is not a Soviet puppet does not make him a friend of the West, nor any less threat to Israel. His ambitions are sweeping. His determination is impressive. His primal hostility toward Israel is unshaken.

I believe the Iraqis when they say they will try to buy a new reactor. I also believe the Israelis when they promise to try to destroy that one as well.

Thank you very much.

Senator BOSCHWITZ. Thank you very much. Dr. Martin.

Let me ask you a question, Dr. Martin, before Dr. Pipes testifies so that you may leave to catch your plane if you need to.

IRAQI REACTOR DESIGNED TO BE USED AGAINST ISRAEL

Do you therefore feel that the reactor that the Iraqis put in was primarily designed to produce a weapon to be used against Israel?

Mr. MARTIN. Yes, sir.

Senator BOSCHWITZ. How do you fit into that the signing of the Nuclear Non-Proliferation Treaty and the IAEA inspections?

Mr. MARTIN. I think that the Iraqis regard treaties and agreements as pieces of paper, important only so long as they continue to be convenient and necessary, or as long as they are enforced by superior strength from outside.

The mandates of struggle of the Arab people against the Zionist entity, the requirements of divinity itself, far outweigh any niceties of Western international law, contract law, or anything of the sort. The NPT itself of course could be abrogated with just 3 months notice. So even if the Iraqis did not want to offend any more than necessary, the NPT would not be a great obstacle.

HISTORY OF ABIDING BY TREATIES

Senator BOSCHWITZ. What is Iraq's history of abiding by its treaties?

Mr. MARTIN. Together with all other OPEC members, Iraq steadily has broken contracts with Western oil companies throughout the

seventies, whenever an opportunity presented itself to raise oil prices. We have the example in the latest war, of course, of Iraq attacking when it found an opportunity to undo the effects of the 1975 agreement with the Shah.

Senator BOSCHWITZ. Dr. Martin, we very much appreciate your coming here today. Let me ask you one final question.

Do you believe, then, that if the Iraqis obtained a nuclear weapon, they would primarily direct it against the Israelis?

Mr. MARTIN. That would be a very important use. I think that would be first on their list.

WIPE OUT "BLOT ON ARAB HONOR"

In the meantime, of course, it would symbolize the rise of Iraq in the world, the leadership of Saddam Hussein in the "Arab nation" and his position in the Persian Gulf. The string of advantages goes on and on. But I think the primary purpose would be to wipe this "blot on Arab honor" out.

Senator BOSCHWITZ. I read an article which you had written; I forget the journal in which it appeared, but I remember many of the points of its organization, and these seem to be similar to your testimony.

Do you feel that the Iraqis would have no hesitation about using such a bomb against their neighbors, their Arab neighbors?

Mr. MARTIN. That would take some more special circumstances. I don't think they would hesitate to use it against Israel.

I am not sure which of their neighbors they would count on using it against first, since they have been in conflict with all of them at one time or another and have tried to overthrow the governments of all of them, except for Turkey.

Senator BOSCHWITZ. We thank you very much for coming. If you want to catch a 6 o'clock plane, you had better leave promptly. Of course, if you want to stay and have an opportunity to stay, we would be very pleased.

Mr. MARTIN. I appreciate your understanding, Senator.

Senator BOSCHWITZ. Dr. Pipes, you are our final witness today. We are very pleased to have you with us. Would you please proceed with your testimony. Certainly you may read it if you wish. It is not necessary to summarize it. It seems now that we do have additional time.

Mr. PIPES. I did try to make it short.

Senator BOSCHWITZ. I can see that and you succeeded.

I know that you are related to the other Dr. Pipes, and I recall his testimony at the time of the SALT II agreement. It, too, was particularly short. Apparently it runs in the family. [General laughter.]

Please proceed.

STATEMENT OF DANIEL PIPES, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

Mr. PIPES. Iraq's military thinking is closed to outsiders, but its nuclear plans lose their mystery when the nature and goals of the Government are taken into account.

Everything we know about the Ba'ath regime of Saddam Hussein indicates that it has the means, the will, and the incentive to acquire atomic weapons and possibly to use them.

I should like to argue two points. The first is that Iraqi hostility to Israel stems from its domestic political problems; and, second, that acquisition of a nuclear bomb would bring the Government of Iraq numerous benefits, both internationally and within that country.

Many observers have remarked on the persistent aggressiveness of Iraqi foreign policy since the monarchy was overthrown in 1958. It bickers with Syria, skirmishes with Iran, threatens Kuwait, competes with Saudi Arabia, denounces the United States, and proclaims undying hostility against Israel. There is a reason for Iraq's bad relations with the outside world. It reflects the instability of all Iraqi governments since 1958.

To understand this, one must realize that Iraq has three main communities within that country, only one of which participates in the public life, that is to say, the political and military life of the country. Those are the Sunni Arabs, who have controlled the country since the 16th century. Although making up only one-quarter of Iraq's population, Sunnis fill almost all of its important political, administrative, and military positions.

Shi'ite Arabs, who constitute about half the population, and Kurds, who are about one-fifth, have little say in the affairs of state.

Iraqi domestic problems are compounded by the fact that each of these groups has external brethren with whom they feel more bonds than with their fellow Iraqis. Shi'ite Arabs look to Shi'ites in Iran for encouragement and aid against the Sunni Arabs. Iraqi Kurds have extensive military and cultural relations with Kurds in Turkey, Iran, and Syria. The Sunni Arabs see their future connected to the other Arab States in the Middle East and North Africa, for virtually all the other Arab States are dominated by Sunni Arabs. No other Middle East state has quite such a diversity as does Iraq, with one or two exceptions.

In short, the Republic of Iraq commands only tentative allegiance from its citizens.

I might just point out that this is very different from a country like Egypt, which has a homogeneous citizenship. It is much more analogous to a country in sub-Saharan Africa, which has three, four, or five major tribes, all of whom have brethren outside the country. It is not a real country. It is a brand new 20th century invention, and nobody really feels much allegiance to that state.

With each of these three communities facing a different direction, the central government needs an ideology to draw them all in and to strengthen the predominance of the Sunni Arabs. It has found this in pan-Arabism, a political movement which aims to bring all Arabic-speaking peoples under a single rule and into a single government.

Making pan-Arabism the official state ideology has obvious advantages for the Sunnis. It ties Iraq to other Sunni Arab States, while discrediting Shi'ite and Kurdish goals.

For over two decades, Iraqi governments have consistently numbered among the most fervent and doctrinaire adherents of pan-Arabism, much of which Dr. Martin already has explained in greater detail.

But what does pan-Arabism mean in practice? Little more than implacable anti-Zionism. The fact that 200 miles separate Iraq from Israel does not diminish Iraqi antagonism. If anything, it has increased as a result, becoming more abstracted and hysterical. By espousing unilateral, unreciprocated animosity against Israel, Iraq joins the community of Sunni Arab States and moves away from such countries as Iran and the Kurdish people. This also helps to consolidate Sunni Arab rule within Iraq.

Anti-Zionism justifies military rule in Iraq, economic deprivations, tight security, and a highly centralized government from Baghdad.

Iraqi policies toward Israel are not just due to the whim of a disagreeable strongman, such as President Saddam Hussein, or the eccentricities of the Ba'ath Party; they reflect the internal tensions within Iraq and relations of Iraq toward Israel probably will remain violently hostile so long as the Sunnis prevent Shi'ites and Kurds from participating in the government.

In brief, I would like to say that the hostility that the Iraqi Government feels toward Israel is systemic, it is structural, and is not just the whim of one man. It follows from the domestic policies.

Iraqi rulers do more than talk pan-Arabism. They have devoted many of the military resources for use against Israel.

In 1973, they sent 20,000 soldiers, 320 tanks, and a goodly number of Mig's against Israeli positions on the Golan Heights. With the jump in oil revenues in 1974, the Iraqi Government began a huge military buildup and has spent nearly \$10 billion on arms since then.

In 1980, before the war with Iran began, Iraq possessed an arsenal which included over 2,500 tanks and 300 combat aircraft. Much of these have been placed in the new military infrastructure at the far west of Iraq, close to the border with Jordan, very far from the population and oil installations of Iraq and very close to Israel.

Iraq now has the money to buy almost any weapons it chooses. President Hussein spares no effort to improve his holdings. So, it came as no surprise in 1974 to hear about Iraqi interest in nuclear technology. Who could doubt that Baghdad wanted the ultimate weapon? Given the low state of Iraqi science and its vast oil reserves, the claim that Iraq would conduct research into nuclear power hardly seems plausible.

An atomic bomb brings Iraq added power in the Arab world and at home, even if it were not used. It makes Iraq the key power in the oil equation and in Arab-Israeli relations. Besides this, possessing a bomb enormously enhances the prestige of the Iraqi Government.

In short, one might say that it puts Iraq on the map. This has been a constant theme of recent years under Saddam Hussein, the effort to make Iraq important. He will make Iraq preeminent in the Persian Gulf. He will make it the key country in Arab-Israeli relations.

Would the Ba'ath regime use nuclear weapons against Israel? It has for so long called for the elimination of Israel through violence that the dropping of a bomb on Tel Aviv hardly seems like a major step for them.

I would like to read one quote from a speech by Saddam Hussein, made less than a year ago, on the 20th of August 1980. This was a time when there was discussion of whether there should be a boycott of any country that leaves its embassy in Jerusalem. There was a boycott and it met with widespread Arab approval. Saddam Hussein

asked rhetorically if it was a good idea to boycott any country with an embassy in Jerusalem and answered his own question:

Some people may ask if this decision is the best that can be taken. No, a better decision would be to destroy Tel Aviv with bombs.

Whether this would be nuclear bombs or conventional bombs, he does not say. But this is the sort of theme on which he harps and on which the leadership of Iraq has harped for so long. Should such a step be taken, it would not be a surprise to any observer of that government.

Nor would such a step meet with internal opposition. Conditioned to think of Israelis as malevolent aliens, Iraqis have little sympathy for them and the annihilation of Tel Aviv might well make Saddam Hussein a hero in his country.

The risks and drawbacks of bombing Israel would be immense, but it would make Iraq a major actor on the international scene and would transform the government's stature at home.

Despite worldwide condemnation, the rulers in Baghdad might expect this act to gain them a new and more secure hold on Iraq, solidifying Sunni control over the country. Domestic political weaknesses, therefore, mean that the benefits of using the bomb could outweigh its disadvantages for Iraq's Sunni rulers.

One cannot dismiss the possibility that they will deploy it against Israel in an unprovoked manner.

Thank you.

Senator BOSCHWITZ. Thank you, Mr. Pipes.

Ambassador AKINS, I wonder if you could briefly summarize your testimony for me, and I will ask Dr. Malone to do the same. Would you do so in 3 or 4 minutes, please.

I do not believe I saw your testimony in advance, Mr. Ambassador.

Ambassador AKINS. I did not have a prepared text.

Senator BOSCHWITZ. But I believe I did see Dr. Martin's statement.

Ambassador AKINS. I just gave an oral statement, Senator.

COMMENTS ON IRAQ

I spoke of the nature of Iraq and rather than repeat that, I would like to comment on some of the points that Dr. Martin and Dr. Pipes made, both of whom are about 50 years out of date in their judgments of Iraq.

Under the Ottoman Empire, the Sunnis certainly were given privileges and advancements, but since independence, all governments, and particularly since 1958, the governments resolutely have tried to bring the Kurds and Shi'ites into the government.

The current government in Iraq is not a Sunni government by any means. It is a totally, vigorously, secular government. The President happens to be a Sunni Arab. The Vice President is a Kurd. Another Vice President is a Christian. There are a number of Shi'ites on the Revolutionary Command Council.

Iraq is a country, despite what has been suggested today. It may not have the cohesion of an Egypt, but it has been a country for a very long time. Baghdad, at one time, was the center of the learned world. It was the largest city and certainly the center of culture not only in the Muslim world but in the entire world. Baghdad controlled all of what presently is Iraq.

Iraq has been a modern country since the Turks were overthrown at the end of the First World War.

The other comment I would like to make is the one Dr. Martin made on the danger of the Iraqis having a nuclear war because the Arabs in all of the last wars have launched surprise attacks on the Israelis. For anybody who pretends to know anything about the Middle East, that is most surprising.

The wars of 1947 and 1948 were no surprise to either side. There was general fighting. In 1956, it was Israel, Britain, and France who launched the attack on the Egyptians. In 1967, it was Israel that launched attacks on Egypt and on Syria. In 1973, the Arabs did indeed launch the attack. But you cannot say that it is always the Arabs who are launching attacks on the Israelis. It is quite the opposite. That is all I will say.

Senator BOSCHWITZ. Dr. Malone, can you summarize briefly for me?

RUTHLESSNESS AND DIRECTNESS IN HUSSEIN'S RULE

Mr. MALONE. Thank you. Rather than attempt to summarize my summary, I would simply state that there is a ruthlessness and a directness in the rule of Saddam Hussein which is quite unremarkable, given the history of turmoil, coup, and countercoup out of which the present Ba'athist regime has emerged. In my view, I would describe him as being a person who has placed a personal imprint upon Iraq as no other ruler has back to the time of King Faisal I, whose ability to come as an outsider from the Hejaz and begin this nation-building process in cooperation, to a certain extent, with the British gives him a prominent place in the Iraqi pantheon. I would even exclude Nuri Said, remarkable as he was, from the pride of place that I give to Saddam Hussein in this process of nation building upon which he is engaged at the present time.

I would leave it to Dr. Pipes and Dr. Martin to see the black side of the Saddam Hussein regime. My own visits to Iraq suggest to me that this particular forcefulness of his, this directness, and indeed, in some cases this callousness, are to be balanced, I would say, with the attempts that he has engaged upon to pull the country together and make a unified state of it. A country which has several different religious groupings and several different ethnic groups need not necessarily be embroiled in internal political strife all the time. This I do not think is a description of the United States, and I don't think it particularly is a description of Iraq at the present time.

The work of development which is going on in Kurdistan, the amount of money and development effort which is being pursued in southern Iraq in the Shi'ite areas suggest to me that the Iraqi Shi'ites, like the Shi'ites of southern Lebanon, and indeed those of the Qatif Oasis in Saudi Arabia, look primarily to an ayatollah for spiritual guidance, to the principal leaders of the Shi'ite faith primarily or religious inspiration. But not all of those are in Iran. In fact, there is an ayatollah in Najaf, in Iraq, who counts for a great deal.

DEVELOPMENT PROGRAM REMARKABLE

So, Saddam Hussein has been able to work in those areas with the knowledge that the Iraqi Shi'ites are rooted in the soil of Iraq,

whatever their religious beliefs may be. His development program is a very remarkable one.

He is doing a great deal of face lifting in Baghdad. Every ruler of Iraq has attempted to do that. But it is a fact that he is investing in the well-being of Kurds in the north, and of Shi'ites. He has made the shrine cities of Kerbela and Najaf, which were pretty "grungy" places not so many years ago into some very interesting examples of urban development. These speak well of the man's ambitions for his country.

He wants a literate society. He wants an advanced society. He wants Iraqis to be aware of their cultural legacy. This is a side of this remarkable man that I think has to go into the record as well, whatever his hegemonic ambitions may be for the gulf region and whatever his ambitions may be with regard to serving the best interests of the dispossessed Palestinians and containing Israel.

Thank you very much.

Senator BOSCHWITZ. Thank you.

Dr. Pipes, let me ask you to respond to Ambassador Akins, who points out that all the leadership of Iraq is not Sunni. He pointed out that one vice president is a Christian and another is a Kurd. I wonder if you would respond to that.

Mr. PIPES. Yes, thank you, Mr. Chairman.

IRAQI LEADERSHIP

There have been attempts to include non-Sunni Arabs in the Government, in the administration, and in the military—in all three. But there is no question that when you pull away the official veil and look at who rules what, not only is it a Sunni Arab domination, but even more remarkably, virtually all the top leadership comes from one small town in northern Iraq, called Takrit. Most of the rulers come from there.

If you look at the officers in the army, 90 percent are Sunni Arabs. If you look at the top administration officials, I don't have figures like that, but it is a very high percentage.

Yes, there are non-Sunnis in places of power. They are few in number and they do not really hold the reins of power.

I would add that Iraq being a militantly secular Government has nothing to do with it. These are ethnic communities by now. It is not differences of theology. It is the fact that they have coalesced around ethnic religious lines. So no proclamation of secularism can eliminate these longstanding communities.

As I mentioned, the Sunni domination goes back for centuries. This is nothing new.

Senator BOSCHWITZ. Did you wish to respond at all, Mr. Ambassador.

Ambassador AKINS. Yes.

What he said is just not true. He does not know the country. He does not know these 90 percent of the leaders who are Sunni Arabs.

IRAQI GOVERNMENT IS SECULAR

The Government is secular. That is important. No preference is given to Sunni Arabs. No preference is given to people from a small

community of the country, as there is, for example, in Syria. It would be extremely interesting for Dr. Pipes to give a breakdown of the Government, for example, showing that 90 percent of the Government leaders are Sunni.

I would ask that he put this information into the record, if he has such a list.

Mr. PIPES. I would be glad to.

Senator BOSCHWITZ. Fine.

[The information referred to follows:]

[From the Princeton University Press, Princeton, N.J., 1978]

THE OLD SOCIAL CLASSES AND THE REVOLUTIONARY MOVEMENTS OF IRAQ

A STUDY OF IRAQ'S OLD LANDED AND COMMERCIAL CLASSES AND OF
ITS COMMUNISTS' BA'THISTS, AND FREE OFFICERS

* * * Up to November 1963 it [the Ba'th party of Iraq] had, to a large extent, the characteristic of a genuine partnership between the Sunni and Shi'i "pan-Arab youth. By 1968, however, the role of the Sunnis had risen sharply, while that of the Shi'is had decisively declined. As can be seen from Table 58-1, out of the total of fifty-three members of the top command that led the party from November 1963 to 1970, 84.9 percent were Sunni Arabs, 5.7 percent Shi'i Arabs, and 7.5 percent Kurds, whereas for the period 1952-November 1963, the comparable figures were 38.5; 53.8; and 7.7 percent. A similar process appears to have taken place in the intermediate and lower layers of the "active membership." This means, of course, that the party has become more homogeneous, but at the same time less representative.

The Shi'is lost their weight partly because many of them backed 'Ali Sâleh as-Sa'di when, hard on the heel of the party crisis of November 1963, he challenged the authority of Michel 'Aflaq and blamed him for the party's defeat; and when in 1964, on being read out of the Ba'th, he formed a group of his own, "the Committee for the Iraqi Region," which eventually took the name of the Revolutionary Workers' party but, torn by faction, rapidly dwindled into insignificance.

However, the chief reason for the decline of the Shi'is lay in the discriminatory practices of the police. Ba'thists belonging to this sect were, after the 1963 coup by 'Abd-us-Salâm 'Aref, on the whole more systematically hunted than their Sunni comrades and, when nabbed, treated with severity, whereas the latter frequently escaped with light sentences. The explanation for this is to be sought not so much in sectarian prejudice as in the fact that Sunni Ba'thists were often from the same town or province or tribe as the members of the police, for the departments of Interior and Security teemed with functionaries from the province of ar-Ramâdî and the northern districts of Baghdad province, from which many Ba'thists also hailed. This situation was a carry-over from the days of the monarchy, when such directors general of police as 'Abd-uj-Jabbâr ar-Râwî and Bahjat ad-Dulaimî—both by origin from ar-Ramâdî—facilitated, it would seem, the entry of their kinsfolk and clansmen into the service under their control.

Another change in the character of the Ba'th not entirely unconnected with its transformation into a virtually Sunni party is the comparative increase in the influence upon it—the comparison is with its 1963 situation—of army officers and especially Takritî army officers. Impressions, recently formed, of the assertion of civilian primacy over the military do not appear to be factually grounded, despite the increase after mid-1973 in the role of the civilian wing of the party in the affairs of government. So long as the Ba'th continues to be characterized by the insubstantiality of its ideological links and the volatility of its mass support, its ultimate reliance on the army is inescapable.

The advance of the Takritîs in the party's military branch, that is, the rise in the significance of local connections, has, of course, something to do with the tenuousness of the ideological ties just referred to. This factor—Takritization—was already at work in 1963, but is now intensified and could more directly be explained by the passing of the leadership of the Ba'th in 1964 into the hands of Ahmad Hasan al-Bakr and Saddâm Husain who, being both from Takrit, tended to attract into the party those with whom they had close social or personal relationships, that is, often men who by birth or descent were from their own town.

This, as we have had occasion to note in the instance of other political forces, is a perfectly natural manner of procedure.

TABLE 58-1.—SUMMARY OF THE BIOGRAPHICAL DATA RELATING TO THE MEMBERS OF THE COMMAND OF THE BA'TH PARTY IN THE IRAQI REGION, 1952 TO 1970 (SUMMARY OF TABLE A-49)

	[Religion, sect, and ethnic origin]								Sect or ethnic group's estimated percent in total 1951 urban population of Iraq
	Commands of 1952 to November 1963				Commands of November 1963 to 1970				
	Members	Percent	Individuals	Percent	Members	Percent	Individuals	Percent	
Moslems:									
Shi'i Arabs.....	28	53.8	12	46.2	3	5.7	3	14.2	44.9
Sunni Arabs.....	20	38.5	13	50.0	45	84.9	16	76.2	28.6
Kurds.....	4	7.7	1	3.8	4	7.5	1	4.8	12.7
Turkomans.....									3.4
Persians.....									3.3
Jews.....									.3
Christians.....					1	1.9	1	4.8	6.4
Sabeans.....									.3
Yazidis and Shabaks.....									.1
Total.....	52	100.0	26	100.0	53	100.0	21	100.0	100.0

The Sunni and Takriti characteristics of the Ba'th party and its ultimate dependence on officer-Ba'thists have left their impress upon the regime that it brought forth.

To this clearly points the composition of the Revolutionary Command Council which, legally, is the highest state organ and at the same time the repository of crucial power, uniting the commanding heights of the party, army, and government.²⁵

Beginning on July 30, 1968, as a body of five, the council was enlarged to fifteen on November 9, 1969 only to be reduced to eleven in 1970, nine in 1971, seven in 1973, six in 1974, and five in 1977.²⁶ But throughout its members were all Sunnifs (See Table 58-3).

Army officers occupied the five original seats. Although since 1969 their proportion has been lower than that of the civilians or, for that matter, of the military on the 1963 Revolutionary Council (see Table 55-1), their votes carried, at least until June 1973, more weight than the votes of their counterparts in 1963 or of their civilian colleagues, the vote of Saddam Husain excepted. Again, save for the special position of Saddam which, unlike that of 'Ali Sa'leh as-Sa'di in 1963, rests, as has already been indicated, not so much on the strength of the civilian component of the party as on his family connections with Ahmad Hasan al-Bakr and his control of the special apparatus of the party's National Security Bureau, army officers held until 1973 all the key offices in the state—the presidency and premiership, the command of the armed forces, and the portfolios of defence and interior. However, in 1974 Interior passed into the hands of a civilian Ba'thist.²⁷

No less significant is the representation of the Takritis on the council. In 1968-1969, they occupied three out of the five and in 1969-1970, six out of the fifteen seats. In mid-1973 they constituted four of the nine members of the council and, as is evident from Tables 58-2 and 58-4, held not only all the foremost posts in the party, army, and government, but also, among other things, the portfolio of defence, the governorship and Security Department of Baghdad, and the commands of the air force, the Baghdad garrison, the Habbiyaniyah air base, and the tank regiment of the Republican Guard. Their role continues to be so critical that it would not be going too far to say that the Takritis rule through the Ba'th party, rather than the Ba'th party through the Takritis.

²⁵ For the definition of the powers of the council, see Article 44 of the interim constitution of 21 September 1968, *Al Jum'ah* 1968, 22 September 1968. However, by a decree of 13 July 1973, many of the powers of the council were transferred into the hands of Ahmad Hasan al-Bakr as president of the Republic and chairman of the Council of Ministers, *Al-Nadwa*, 14 and 15 July 1973.

²⁶ The five are General Ahmad Hasan al-Bakr, Saddam Husain, Lieutenant General Sa'dun Ghaidan, 'Izzat ad-Duri, and Taha al-Jazrawi (consult Table 58-1).

²⁷ 'Izzat ad-Duri, member of the Revolutionary Command Council.

But how have the Takritis come to be superior to others in power and authority? For one thing, there is a great number of them in the army. This fact is not unrelated to the impoverishment of the inhabitants of Takrit caused by the decline in the production of *kalaks*—rafts of inflated skins—for which their town was renowned in the nineteenth century. To earn their living, many moved to Baghdād and settled in what is known today as the quarter of at-Takārtah. Some found employment as railway construction workers or labored on the K2-Baiji-Hadithah oil pipeline. Others, however, were able to gain admission into the cost-free Royal Military Academy.

TABLE 58-3.—SUMMARY OF THE BIOGRAPHICAL DATA RELATING TO THE MEMBERS OF THE REVOLUTIONARY COMMAND COUNCIL, JULY 1968 TO 1977

(Religion, sect, and ethnic origin)

	Number	Percent	Sect or ethnic group's estimated percent in total 1951 urban population of Iraq
Moslems:			
Shii Arabs.....			44.9
Sunni Arabs.....	14	93.3	28.6
Kurds.....	1	6.7	12.7
Turkomans.....			3.4
Persians.....			3.3
Jews.....			.3
Christians.....			6.4
Sabeans.....			.3
Yazidis and Shabaks.....			.1
Total.....	15	100.0	100.0

* * * For the understanding of their rise to first rank, it is necessary also to refer to the frequent comb-outs in the army. No fewer than three thousand officers have been pensioned off since the Revolution of 1958. Military royalists were swept away in the days that followed the destruction of the monarchy. The position of the officer-Iraqists was badly shaken by the fall of Qāsim in 1963. The Mōsulites lost some ground after the failure of the bid for the presidency made by their leader, General 'Abd-ul-'Azīz al-'Uqaili, in 1966, but took a more severe blow after his arrest in 1969. The turn of the Ramādī officers, who linked their fate with that of the 'Aref bothers or with the group of 'Abd-ur-Razzāq an-Nāyef and Ibarhīm 'Abd-ur-Rahmān as-Dāud, had come in 1968. All these things rounded to the advantage of the Takritis. Even then, they now occupy a place out of all proportion to their numerical importance, so that, like their predecessors, they have to resort to balancing tactics and repeated shufflings of military commands.

From the foregoing observations, it is clear that the Ba'ṯhī regime reposes ultimately upon a narrow social foundation.

Mr. PIPES. I also might add that the Kurds have been in rebellion now for over a decade. So they obviously are not very content with the kind of representation they have in Baghdad. They want autonomy. They fought viciously for it, and the Shi'ites have been engaged in massive demonstrations. Our records show that about 100,000 Shi'ites have been expelled from the country in about the last decade because of ethnic tensions. Tens of thousands of them have been expelled into Iran, most recently 2 years ago.

Senator BOSCHWITZ. Is it correct that the 1975 agreement to which Dr. Martin agreed was predicated on the Iranians helping the Kurds of northern Iraq?

Mr. PIPES. On stopping that help.

Senator BOSCHWITZ. Stopping the help was part of the reason for that.

NO IRANIAN HELP FOR THE KURDS

Mr. PIPES. That's right. That was the quid pro quo: no more Iranian help for the Kurds in return for half the Shatt al Arab waterway.

Ambassador AKINS. That is not the whole story, Senator. There was an agreement between the Iraqi central government and the Kurds in 1970. In 1973, the United States with Iran and Israel went to Mulla Mustafa Barzani—this has been described by Barzani himself—and said "You start the revolt in 1973—"

Senator BOSCHWITZ. Went to whom?

Ambassador AKINS. They went to the Kurdish leader and said you start the revolt against the Iraqi Government and we will support you to the end.

Mulla Mustafa has said, "I would not have believed the Shah, but I did believe the Americans. I trusted the Americans."

Well, that was his tough luck. He fought the Iraqis from 1973 to 1975, and then the rug was pulled out from under him.

After 1975, there has been no Kurdish revolt in Iraq, though there is in Iran. The Iraqi Government has worked out an accommodation with the Kurds. As Dr. Malone has pointed out, Iraq is investing tremendous quantities of money in Kurdistan. There is no repressive regime in Kurdistan today. It is comparable, roughly, to the treatment of Biafra after the civil war in Nigeria, and is infinitely better than our treatment of the South after our Civil War.

DIFFERENCES OF OPINION

Senator BOSCHWITZ. The principal purpose of our hearing is to get some background on Iraq. I see that there are some sharp differences of opinion with respect to this. The purpose of the background was to get an assessment of the raid against the reactor by the Israelis. So let me ask if in your opinion, Dr. Malone, the Iraqis had this very large research reactor for the purpose of a program of energy, or did you feel that they were preparing an Islamic bomb? Do you think that this whole complex was a threat to the Israelis?

What is your opinion?

Mr. MALONE. Well, if they were preparing a bomb, I am sure it would not be an Islamic bomb because of the secular nature of the regime.

Senator Boschwitz, I think it would be useful to try to place this in a particular context.

WHAT MADE RAID INEVITABLE

Mr. MALONE. The aerial blitzkrieg on Baghdad poses many questions. One of the most important is what made the raid inevitable. It is my belief that the raid was made inevitable by something called Camp David. Leaving aside all the cant and sophistry on the objectives of the Iraqi nuclear program, which may well have intended to produce bombs for one or another purpose, I think that there are certain facts that we should face.

Camp David was a famous victory for Israel, so far as the Arabs are concerned. It destroyed, by removing Egypt from the equation, the military potential to push Israel toward the negotiating table.

In accomplishing this, Camp David's participants provided the sense of urgency characterized by the Iraqi nuclear program, a sense of urgency which has been restated very recently at the conference on nuclear energy held in Damascus.

To me, Saddam Hussein's aspiration to play a leading role in Arab affairs is quite unremarkable. So is his decision that a nuclear program was a means of establishing some sort of comparability with Israel's capacity to project power.

Almost as unremarkable would be his understanding of the inevitability of an Israeli attack on the nuclear facility. I don't think he could have concluded otherwise. The sabotage in France of the reactor equipment bound for Baghdad, the assassination of an Egyptian specialist employed in the project were events in a not-so-secret war. It is a war with a long history.

Saddam was around when Kissinger recruited those Israeli advisers for duty in Iraqi Kurdistan, to whom Ambassador Akins has made reference. Saddam Hussein witnessed the aplomb with which the Israelis have ignored the persecution of Iranian Jews in order to carry on a flourishing weapons trade with Khomeini's Iran. I think Saddam Hussein would have no difficulty in establishing that the photo-reconnaissance mission of last year, at the beginning of the Iraq-Iran war, was not an Iranian bombing raid, but was an Israeli photo-reconnaissance mission. Some intelligence sources suggest that they had as many as 800 pictures out of that particular mission, which, of course, could account for the fact that they were able to do such a surgical job on the site which they were over for something like 105 seconds.

Why would Saddam Hussein build a reactor site which was to be seen just off the road, near Baghdad? As a result of the remarkable development of these last weeks, he has achieved the status for Iraq which accrues in the Arab world and in the Third World from becoming a target of Israeli aggression.

Certainly he has a lot of material for some very rousing speeches when Baghdad hosts the Nonaligned Conference next year. His nuclear program has produced the explosion, which has blown up the Reagan-Haig policy of somehow aligning Egypt, Israel, and Saudi Arabia in an anti-Soviet coalition. He has even, somehow, through providing this target managed to vindicate Ahmed Zakhi Yamani for his New York speech which identified Israel, rather than the Soviet Union, as the primary threat to the Kingdom.

So, my feeling in all of this is that it is like the "fleet in being" theory of the 19th century.

Senator BOSCHWITZ. That what?

"FLEET IN BEING" THEORY

Mr. MALONE. The "fleet in being" theory. The British Royal Navy was not built to go around the world bombarding hostile coastlines or to intimidate people through actual shellfire. The fleet was built to provide the political clout which was necessary for Britain to carry out its objectives. I submit that the nuclear program in Iraq falls somewhat into the same category. It was not the idea of building a bomb to use it. We have speculated on what this would

do to his prestige in the world if Saddam were to use it, his prestige in certain parts of the world.

Senator BOSCHWITZ. What did it do to his prestige to invade Iran?

Mr. MALONE. I'm sorry, I could not hear you.

Senator BOSCHWITZ. What did it do to his prestige to invade Iran? They got bogged down in Iran and fouled the other guy's waterhole in the sense of destroying his oil facilities, the production facilities, the processing and shipping facilities.

Mr. MALONE. It would be very difficult for me to assess in the particular terms of families who have lost sons in Kurdistan what his prestige is. But certainly it is a popular war in the general sense in Iraq. It certainly is a popular war with the Saudis and the Jordanians. The Saudis in particular feel that they had more to fear from hegemonic ambition from Iran than from Iraq.

So there is an element of prestige in this for him.

Now I think, in domestic terms, he is responding to border raids, to subversive activities on the part of the Iranians in the Shi'ite areas, and to respond to these in the way that he did create a certain amount of prestige. It also does other things, as we learned when Czar Nicholas went to war during the First World War, largely to get people's minds off the domestic problems of that particular country.

It is a very hard question for me to deal with, Senator, but I do not think we can exclude the possibility of the Iranian war being fairly popular in Iraq and in a good part of the Arab world, though not entirely, to be sure.

Senator BOSCHWITZ. It is interesting to hear you blame the development of the Iraqi nuclear program on Camp David. Should we conclude from this that they are not willing to try the negotiation route?

EGYPT NOT MILITARY FACTOR IN ARAB WORLD

Mr. MALONE. My feeling is that Camp David as a process is not completed and the results are not all in. But very much in is one result, which is taking Egypt out as a military factor in the Arab world. That has been achieved, and that is very much in the best interests of Israel, and perhaps is in the best interests of many other people, that is, to include the Egyptians. However, we have not seen the other part of the process, which has to do with some meaningful steps toward autonomy on the West Bank and in Gaza. I think that this aspect of the Camp David process has been completely and utterly sabotaged by Prime Minister Begin.

This being the case, it perhaps lends more urgency to this very fateful and dangerous nuclear program.

What we have had, Senator Boschwitz, is the paying of an appalling cost for what has been achieved in these last weeks. The myth of nonproliferation safeguards has combined with the reality of Camp David to bring the Middle East to the edge of another war.

IRAQ INTENTIONS OF NUCLEAR PLANT

Senator BOSCHWITZ. Ambassador Akins, I did not hear exactly what you felt the intentions of the development of the nuclear plant was and the purposes of that reactor, the size of the reactor, the use

of the very highly enriched uranium, the purchasing of a couple of hundred tons of natural uranium the only purpose for which is for a blanket for the purpose of creating plutonium. What is your assessment of the drive behind this? What we are examining in this committee is whether or not it was the intention of the Iraqis to use that for aggressive purposes and whether there was an element of self-defense involved.

Ambassador AKINS. As Dr. Malone and Dr. Martin have said, Saddam Hussein is a proud man. He has intensely felt ambitions for his own country and for the Arab world. He has embarked on a program to eliminate illiteracy in the country. He wants to restore the old glories of Baghdad as the intellectual center of the world, certainly of the Arab world.

A nuclear facility has to be part of that in his view. Whether he had some other view, I don't know. I have already said that I cannot look into the hearts of men. All I know is that he agreed to safeguards and he agreed to inspections, which did occur.

Hussein is an extraordinary individual.

DANGER AND TRAGEDY OF ATTACK

After the attack, however—and this I think is the most dangerous and the most deplorable part of the Israeli attack—I do not have any doubts anymore. I think as a result of the Israeli attack, there has been a determination inside of Iraq, and the Arab world, to get their own bomb. It probably did not exist before, or at least was questionable. The Arabs have a lot of money. They have a lot of power. There are a lot of people who have access to nuclear technology who could sell it or give it to the Arabs, to Iraq, or to a coalition of Arabs. We could start with Pakistan and we could go to India and we could go to China. I don't think the Soviet Union probably would do this. But other candidates might.

This is the real danger and the real tragedy of this extraordinary attack on that nuclear facility.

If Israel had waited, it has been testified here today, the treaty could be broken or the Iraqis could stop the inspection.

Senator BOSCHWITZ. They could what?

Ambassador AKINS. They could stop the inspections, and perhaps they could, but they haven't.

Senator BOSCHWITZ. But they did.

Ambassador AKINS. No; they did not. They did so only during war, but they had subsequent inspections. The French have testified that they have gone in, looked at the facilities, and said there was no way the Iraqis could be building a bomb.

If the Iraqis were to say "we are breaking the treaty, we are withdrawing from the treaty, there will be no more inspections," then perhaps the Israelis would have had a legitimate excuse for moving. As it is, they didn't. But they have created a monster for themselves and probably for others, too.

Senator BOSCHWITZ. Dr. Pipes, do you wish to respond to some of the comments that were made?

Ambassador Akins has said that part of the Iraqi effort is to remove illiteracy and return great power and eminence to Baghdad, which, as was quite correctly pointed out, has existed there in the past. Did they also pursue other areas of scholarly research?

IRAQI AGRICULTURAL RESEARCH

Ambassador AKINS. Oh, yes, indeed. The research that the Iraqis are doing in agriculture is astounding. They have brought back into cultivation areas in Iraq that have not been cultivated since the Mongolian invasion. They have done a lot in desert agriculture.

Senator BOSCHWITZ. In agriculture.

Ambassador AKINS. Yes; that is the future wealth of the country. Saddam Hussein also points that out. He says that oil is transitory and that the wealth of the country lies in agriculture. They have done a lot in that field.

Senator BOSCHWITZ. Are there any areas of high technology in which they became involved, or any areas of science or other areas of learning to which they have particularly directed their attention?

Ambassador AKINS. The medical faculties in Baghdad and Mosul are quite good. That is about it.

Senator BOSCHWITZ. Dr. Pipes, do you wish to comment? You really did more directly address it in your statement, and it could well be that the other two witnesses did, too, though I am sorry I was not here when they presented their full statements to the committee.

We really are here to assess the attack, to assess whether or not there were elements of self defense, whether or not there were elements of provocation. I wonder if you would address that once again. Perhaps also respond, if you wish, to any of the statements made by the other two witnesses.

Mr. PIPES. Thank you, Mr. Chairman.

I think there is a consensus on this panel of one thing only; that is, it was certainly within the realm of the possible that the Iraqis were building a bomb. All of us agree that this was something that they might have done eventually if not at present.

POSSIBLE ROUTES OF DIPLOMACY

One of the main criticisms of Israel has to do with the fact that it had not gone through all the possible routes of diplomacy. However, one has to remember that there was a time limit. The exact date is in question, whether it be July or September. In any case, everyone agrees that the nuclear reactor in Baghdad would become hot very soon and that this then would change the possibilities of destroying it, as was recently done. If it were done after it became hot, then the whole population of Baghdad possibly could be exposed.

If we all agree that it was a possibility, then we have to try to figure out what the Israelis could have done that they did not do.

I myself do not see what other options were open to the Israelis. They have no particular claim at the United Nations to which anyone will pay attention. They have much less money than do the Arab states and they cannot build up military forces in the same way that their rivals do. They have to be clever, they have to be quick and nimble.

I think, ultimately, to answer your question, Mr. Chairman, it boils down to how one judges the situation politically. In this way, the Middle East resembles relations between the United States and the Soviet Union. Some of us believe the United States is fundamentally defensive, and that when it goes on the offense, it does so

to protect itself. Others, who are not friendly to this country, believe otherwise.

I would say the same thing about Israel. Some believe that Israel is fundamentally an offensive state. We have heard about this. We have heard that Israel is interested in more territory, that it wants more power. Others believe that it is fundamentally defensive, just trying to keep things manageable and to stave off its enemies. How one assesses this determines how one answers your question.

I think that Israel is basically a defensive state, one which would like to live in peace with its neighbors. Therefore, I think this was a defensive move.

Please let me add just a couple of points.

VICTIM OF SURPRISE ATTACKS

Ambassador Akins noted that Dr. Martin said that the Israelis had been the victim of surprise attacks in all these wars. Dr. Martin is no longer here, but I thought I heard him say that all the wars included elements of surprise attack. I did not think he indicated which side began the conflict.

It is true that all the Arab-Israeli wars did include surprise attack. He did not say that the Israelis were the victims.

The second point is in relation to Dr. Malone's statement.

Senator BOSCHWITZ. Pardon me, but I am not sure that I heard you. Would you please repeat your last statement.

Mr. PIPES. Well, it is getting a little complicated.

I heard Dr. Martin say that the possible use of an atomic weapon is increased due to the fact that all four wars so far have included elements of surprise attack. This, therefore, increases the likelihood that a nuclear weapon of Iraq's would be used in a surprise attack.

Ambassador Akins took exception to this and pointed out, correctly, that Israel had, in fact, initiated some of those surprise attacks. However, Dr. Martin had not specified who began the surprise attacks.

That is just a point on the record.

Senator BOSCHWITZ. In a sense, every war starts with a surprise attack.

Mr. PIPES. Yes; in a sense.

Also, the thrust of Dr. Malone's testimony has been approval of the tremendous economic gains that have been made in Iraq—the building of infrastructure, the development of education, and so forth. That's true. Who can deny it?

IRAQ HAS FREE INCOME

Iraq has a free income now of some \$20 billion a year. We would all be doing very well if we had such free money. It is no particular credit to the Iraqi regime that it is making so much money off oil sales. It is a fluke of circumstances that oil is produced at a very low price and sold at a very-high price and that the possessors of that oil can reap the profits. This does not imply much good about the regime that spends the money.

Senator BOSCHWITZ. Gentlemen, unless you have some closing statements, I have none.

Dr. Malone, Ambassador Akins, Dr. Pipes, if you wish to say anything in conclusion, we would be very pleased to hear it.

Mr. MALONE. May I note just two things, Senator.

First, Senator Boschwitz, thank you for this opportunity.

Yes, the price of oil is high. When it is producible, that is to say, when your facilities have not been bombed to bits, it is produced for very little investment once your facilities are in place. I give credit to Saddam Hussein for being the first of all of the rulers of an oil-producing state—which was producing oil back during the time of the First World War—the first ruler, really, of Iraq, to spend the money wisely. He has spread the jam around, as it were, so that the disparate elements of the society could benefit. In this connection, a very important market for Western technology has been created. I am not talking just about nuclear technology, but am talking about John Deere tractors and American telecommunications, and many other products which we should be selling in Baghdad, actively competing with the British, the Japanese, the Koreans, and the French to sell.

So, it represents an opportunity, and it should not, as the result of some action by this country, be pushed back toward the Soviet Union.

Finally, we talked about those four wars, but I think we really have not noted one particular characteristic. We mentioned sneak attacks, and, as you correctly said, most wars start with some sort of sneak attack. But each of those wars successively has enlarged the radius of conflict in the region. If you were to draw a circle on the map after 1948 and were to look at where the conflict took place, where people were shooting and were shot at and killed, it would be a very small circle. In 1956, the circle's radius became greater. In 1967 and 1973 it became greater still.

I would put the Israeli raid on the reactor in that same category. If you were to draw that circle around, it would encompass a very large area.

Senator BOSCHWITZ. The list of combatants has not grown, however.

Mr. MALONE. The list of combatants has not grown, but when a state decides that it has the unilateral right to inflict a solution, well, when you take that radius, I would advise the Turks to be very polite to Menachem Begin. I really feel that we have widened the radius of conflict and made such things as the nuclear taking out of the Aswan Dam a great possibility if some future ruler of Egypt is not as conciliatory as President Sadat has been.

Thank you.

Senator BOSCHWITZ. My staff man very properly points out that the Iraqis seem to have widened the conflict by including Iran and those conflicts, certainly among the Arab nations, have been going on for quite some time.

Ambassador Akins, do you have a comment?

ISRAEL'S SECURITY CANNOT BE ENHANCED BY ATTACKING ARABS

Ambassador AKINS. What I have said here and said in many other places and many times before I will repeat: Israel's security cannot be enhanced by attacking the Arabs, by taking over new Arab lands, or by destroying nuclear facilities. Israel can have security only by having peace with the Arabs.

There are a lot of Arabs today who are willing to have peace with Israel. Or at least there were when Zaki Yamani was here in April. He stated it very explicitly on behalf of most of the moderate Arab countries, and King Hussein has said the same thing: The Arabs will live in peace with Israel if it withdraws to its 1967 borders; Israel can have any security guarantees it wants.

Senator BOSCHWITZ. Dr. Pipes, do you have anything further to say?

Mr. PIPES. I have no concluding statement.

Senator BOSCHWITZ. Gentlemen, we thank you all for coming here today. We thank you for your patience in staying for so long. We are helped by your views and I am sure that others in the Senate will review this record.

Again, thank you very much for coming.

This hearing is adjourned.

[Additional questions and answers follow:]

STATE DEPARTMENT'S RESPONSES TO ADDITIONAL QUESTIONS
SUBMITTED BY SENATOR HAYAKAWA

Question 1. How many C-141 airlift sorties were required to transport the necessary command and control equipment for AWACS and why was this number required?

Answer. Airlift for the necessary command and control equipment is as follows: Message Processing Center—1 C-5 and 1 C-141; TSQ-91 Operations Center—2 C-5s; Forward Air Control Post—1 C-5 and 12 C-141s; and 3 C-141s for communications support.

Question 2. Describe our current capability to deploy and support quickly multiple contingency scenarios involving AWACS aircraft, if called upon.

Answer. The Air Force has War Readiness Spares Kits for a 6 AWACS and a 3 AWACS deployments. Also, AWACS aircraft are forward based at Kadena AB, Okinawa, and Keflavik, Iceland. AWACS can fly to nearly any location in 24 hours from its home base at Tinker AFB, Oklahoma, or one of the forward bases. However, the capability to effectively support multiple contingencies is limited by the number of Message Processing Centers (MPC's). USAF assets total eight; however, commitments to Korea, the European Central Region and Saudi Arabia reduce the number of MPC's available for contingency scenarios to two. Assuming 24-hour coverage is desired or a long range deployment is envisioned, only one additional limited scenario could be supported outside Korea and Europe.

Question 3. Was the Air Force aware of operational command and control deficiencies that might occur in support of this AWACS deployment, and if so, what measures were taken to avoid any degradation of capability? What measures, if any were necessary following the initial deployment of all necessary command and control equipment?

Answer. The Air Force was aware that deficiencies might occur in support of the AWACS deployment. Specifically, the Saudis had no capability to receive AWACS data in near-real time. To overcome this degraded situation, a Message Processing Center (MPC) was deployed to allow immediate display of pertinent information received from the AWACS. Following the initial deployment of the AWACS and the MPC, a mobile operations center was deployed in order to improve the interface with the Saudi Arabian command structure. Additionally, a back-up MPC was deployed to insure continuous 24-hour operation during periods of equipment maintenance.

Question 4. Describe the tactical data link capability of the equipment.

Answer. The tactical data link capability of the AWACS consists of a two-way, secure Tactical Digital Information Link (TADIL-A) for the exchange of air track surveillance information and a one-way TADIL-C capability for control of TADIL-C equipped fighter aircraft. The TADIL-A capability allows the AWACS to exchange air track data with U.S. Navy ships equipped with the Navy Tactical Data System, U.S. Navy airborne early warning aircraft, and elements of the Air Force and Marine Corps ground tactical air control systems.

Question 5. Did the air controllers in Saudi Arabia receive the AWACS data manually and, if so, why did this occur? Describe any other operational deficiencies with the current command and control equipment.

Answer. AWACS data is received digitally at the U.S. Message Processing Center where it can be displayed for Saudi personnel. AWACS data is also displayed at the U.S. TSQ-91 Operations Center. AWACS information is manually provided to Saudi Arabian air defense units because they do not have the capability to receive E-3A information via data link. The major operational deficiencies with the current command and control equipment are a lack of automation at the most mobile and forward radar element, limited flexibility in tailoring the system to support small-scale operations and a limited amount of ground interface equipment to establish digital data link with the E-3A.

Question 6. How much time would the Saudi air force have to respond to an air attack on its oil fields from Iran or any other hostile Persian Gulf state?

Answer. With AWACS on station in the area 50 miles inside the border of Saudi Arabia, AWACS would still detect low-altitude intruders 150 nautical miles from their target. If the intruders were travelling at 600 knots, the Saudis would have approximately 15 minutes warning time.

Without AWACS, the Saudis are limited to line-of-sight ground-base radars with low level detection ranges of 20-30 nautical miles. These radars would provide the Saudis with about 2-4 minutes warning.

Question 7. What is the present Air Force capability to effectively support multiple contingency scenarios involving AWACS aircraft?

Answer. The capability to support multiple contingency scenarios is limited by the number of Message Processing Centers (MPCs). USAF assets total eight; however, commitments to Korea, the European Central Region, and Saudi Arabia reduce the number of contingency available MPCs to two. Assuming 24-hour coverage is desired or a long-range deployment is envisioned, only an additional limited scenario could be supported outside Korea and Europe.

Question 8. How quickly could the Air Force improve and field a tactical air control system which will provide a greater survivability, mobility, automation, and interoperability for any contingency?

Answer. The Air Force has a validated requirement to upgrade the air surveillance and control elements of the Tactical Air Control System. The time required to field an improved system depends on a number of factors such as availability of funding, extent of development effort required, and method of procurement used. In an effort to field the required capability at the earliest possible date, the Air Force had initiated a study of a USMC development program, TAOC-85, which meets about 75 percent of the Air Force requirement. The study is to be completed by 1 Oct 81. If the study shows that changes to the TAOC-85 are feasible and fiscal year 1982 funds were made available it appears that approximately two years development time could be saved—providing a fielded system in the 1987 timeframe.

Question 9. How much has the Air Force requested in fiscal year 1982 to meet this requirement? How much has the Air Force requested in fiscal year 1982 for Operations and Maintenance for the current 407L/485L TACS? Specify how these funds will be expended if approved.

Answer. The Air Force has requested a total of \$254.677 million in fiscal year 1982 to meet the requirement of the active duty Tactical Air Control System (TACS). This includes \$82.519 million for 3080 procurement, \$1.2 million for 3600 research and development, \$30.154 million for operation and maintenance, and \$140.804 million for military personnel. These figures do not include those elements of the Air National Guard TACS that are 407L equipped. ANG TACS funds are not broken out as to manual/407L units.

The Air Force has requested a total of \$30.154 million in fiscal year 1982 for operation and maintenance for the current active duty 407L/485L TACS. This includes our largest Tactical Air Control Wing in Germany, the 601st TAIRCWG, which has in place 15 radar elements.

If approved, the fiscal year 1982 funds indicated above will be used to sustain current TACS force structure in the CONUS and in Europe; procure badly needed tactical communications-electronics equipment, combat communications and initial spares; and permit secure communications modifications to existing tactical equipment. Fiscal year 1982 funds will also enable the safety modification of the AN/TCC-30 Communications Central and entails fail safe circuit cards that will eliminate a cause for fire and damage to components. The resources will also provide for the modification of TACS Message Processing Centers (AN/TYC-10) by

adding UHF-FM radios that will be used for data or voice between the MPC and the E-3A or other aircraft. Current projects within the TACS Improvements Program (485L) include the Modular Control Element, Computer Assisted Force Management System, Ultra Low Sidelobe Antenna, Anti-radiation Missile Alarm, Arm Decoy, System Trainer and Exercise Module, and Multi-Band Beacon.

[Whereupon, at 6:20 p.m., the committee adjourned, subject to call of the Chair.]

APPENDIX

IAEA COMMENTS ON THE TESTIMONY OF ROGER RICHTER ON JUNE 19, 1981, BEFORE THE SENATE FOREIGN RELATIONS COMMITTEE

1. Mr. Richter, in his testimony, makes two basic assertions: First, that Iraq has embarked on a nuclear weapons program; and second, that the safeguards system of the International Atomic Energy Agency (IAEA) would not detect that program.

2. In making his assertions that Iraq has embarked on a nuclear weapons program, Mr. Richter presents no specific facts to support his claim except to refer to the existence of facilities and nuclear materials in Iraq.

3. The Administration is separately providing answers to the question as to whether Iraq was engaged in a nuclear weapons program. From our perspective Mr. Richter's testimony sheds no additional specific light on this question.

4. Mr. Richter makes a number of comments concerning various aspects of the IAEA safeguards system as it relates to Iraq. His main points are examined in the following paragraphs.

(a) He states that as much as 24 kilograms of plutonium could be produced each year in the Osirak reactor through irradiation of uranium. There is agreement (although not on this particular number) that significant amounts of plutonium theoretically could be produced annually in this type of reactor if natural or depleted uranium were introduced into the core or as a blanket. An essential condition, which Mr. Richter's testimony does not mention, to achieving such a capability is an uninterrupted supply (sufficient for frequent refuelings) of highly enriched uranium fuel, fuel which Iraq can not now produce and for the foreseeable future will not be able to produce. In our view, France, as the supplier of this fuel, would not provide quantities of fuel beyond that actually needed for the Osirak research program, a program which was to have been conducted jointly by Iraq and France.

(b) Mr. Richter implies in his prepared testimony that the IAEA does not acknowledge that clandestine plutonium production is a problem to be dealt with at material test reactors of this type. This does not coincide with our understanding. The IAEA has in the past recognized this to be a potential risk for various types of reactors, including some large research reactors, and has developed and implemented certain inspection measures for dealing with this risk. In our view, the internal IAEA documents referred to by Mr. Richter indicate that the IAEA is addressing this risk for material test reactors.

(c) Mr. Richter describes in his testimony the nature of inspection activities that have been carried out to date at the Osirak reactor. While we are not in a position to comment on the details of his description, it is our understanding that the main features in his description, i.e., counting, identification, and measurement with portable assay equipment of the highly enriched uranium (HEU) fuel assemblies, are indeed correct. We share his view that these are adequate activities for the HEU fuel itself.

We also share his view that these activities are not sufficient for dealing with the diversion possibility of clandestine plutonium production at an operating reactor of this type. Where we disagree with Mr. Richter's testimony is in his implications that the IAEA clearly would not have carried out the necessary additional inspection activities after the reactor had commenced operations. We understand that the IAEA has been proceeding first to define the magnitude and nature of the potential problems, which would have to be faced once the reactor went critical, and then to identify and assess alternative inspection procedures for dealing with these problems.

The use of surveillance cameras, mentioned as a desirable procedure by Mr. Richter, is one of several procedures being considered by the IAEA. We understand that the IAEA is considering measures beyond camera surveillance in its safeguards

approach to detecting plutonium production at these reactors. The internal IAEA documents referred to by Mr. Richter suggest IAEA resistance to taking the necessary steps. We have been advised by the IAEA that the IAEA was in fact at the time developing plans for the necessary additional inspection activities and for including them in the facility attachment for the facility.

(d) A general implication of Mr. Richter's testimony is that the entire scope of IAEA safeguards in Iraq would have been no different in the future than in the past and that what was done in the past was inadequate. From our perspective this testimony fails to recognize the essential facts that the amount of HEU present was less than a significant quantity, that the reactor had not been in operation, and that, therefore, there was no produced plutonium to reprocess. It is, of course, only conjecture on Mr. Richter's part that Iraq would not have put under IAEA safeguards the hot cells and fuel processing facilities at the time that nuclear material was to be introduced into these facilities. Had Iraq failed to do so, it would have been in violation of the NPT.

(e) The testimony also implies that the safeguards system is inherently deficient, i.e., the legal basis of the safeguards system needs to be changed. While further rights for the IAEA might be envisaged, their existing rights are extensive and constitute the basis for an effective system. Under NPT safeguards agreements states have an obligation to report to the IAEA all nuclear material in all peaceful nuclear activities. Mr. Richter stresses that inspectors can not go everywhere they wish to look for unreported material. It has long been recognized that it is not reasonable for IAEA inspectors to roam across a country looking for unreported nuclear materials and undeclared facilities.

Rather, the approach that has been taken, which we believe is the only feasible approach, is for the IAEA to conduct inspection activities sufficient for ensuring that all reported nuclear material is adequately accounted for and that all nuclear material introduced into certain facilities under safeguards, such as reactors, will be known to the IAEA independent of the reporting by the state. This is in fact what the IAEA was proceeding to do. We believe that safeguards have to be conducted on this basis, rather than on the basis of searching for suspected or conjectured activities.

In addition, we must reiterate that all NPT safeguards agreements give the IAEA the right and obligation to ensure that safeguards will be applied on all nuclear material in all peaceful nuclear activities in the states concerned. We believe the IAEA Secretariat would have a clear basis for bringing the issue to the IAEA Board of Governors if it had any grounds for believing that an NPT party was not fulfilling its obligations.

Unfortunately, we believe, the testimony includes incorrect implications of other inadequacies in the formal basis for safeguards, for example, that the inspection effort allowed by the safeguards agreement is only three inspections a year. This is not correct. The Iraq safeguards agreement, like all other NPT safeguards agreements, allows up to 50 man-days of inspections per year, including some unannounced inspections, for each of the two research reactors provided by France (Isis and Osirak). The IAEA has the right to conduct additional ad hoc inspections of receipts of HEU fuel from abroad and, if all of this is not sufficient, additional special inspections. In short, we believe that the rights of the IAEA are adequate.

The facility attachment for each facility would include an estimate of the actual amount of inspection effort that the IAEA considered would be needed at the facility. This could be well below the above amount, but would be subject to adjustments if needed. It is certainly true that the IAEA has manpower limitations which have reduced implemented inspection levels below that desirable. The IAEA is working to remedy this and we are supporting them in this effort.

(f) It is true that inspectors are individually accepted by inspected states. While there are certainly differences in the experience and training of individual inspectors, we generally believe that the IAEA inspectors are sufficiently motivated and geographically mixed that any collusion with inspected states is extremely unlikely. While this right of states to accept or not accept individual inspectors has been important in gaining acceptance of safeguards, there are also provisions in the safeguards agreements to guard against excessive use of this right.

(g) In his description of IAEA inspections, Mr. Richter does usefully bring out one important point which has not received much focus. This is the difficult nature of the job of being an IAEA inspector. The inspectors, who are generally technical people and not diplomats, are in the forefront of a unique international experience in going into nuclear facilities in a country to verify that the country is

telling the truth about its nuclear activities. The IAEA and its inspectors need the continued technical, financial, and political support of the United States and other like-minded countries. We hope that these hearings will help to reinforce and strengthen that support.

5. These comments have been shown to the IAEA, and the IAEA has advised us that our descriptions of the IAEA plans, procedures, and implementation measures are correct.

