

DEPARTMENT OF STATE

Wathington, D.C. 10520

March 17, 1978

TO

: See Distribution

FROM

: PM - Leslie H. GelbJHC

SUBJECT: The "Dirty Dozen" -- Broadening Our

Approach to Non-Proliferation

US non-proliferation policy since 1974 has focussed heavily on containing the spread of nuclear technologies which provide direct access to weapons-grade material. This continues to be an urgent and essential first priority which has been pursued with impressive if not total success. We have concentrated on the supply side of the ledger; the International Fuel Cycle Evaluation is in part an effort to extend the same approach to consumers.

This approach does have shortcomings, however. centrates somewhat narrowly on <u>nuclear</u> transfers, activities and policies, and tends consciously to avoid linkage with other aspects of bilateral relationships. It also tends to concentrate on capabilities rather than motivations relevant to proliferation.

The attached paper is an initial effort to explore more comprehensively the capabilities and motivations which seem most relevant to proliferation in eleven "sensitive countries, and to relate them to a broad range of US bilateral programs and activities.

The eleven countries of particular proliferation concern fall into one of two categories: some have no apparent interest in obtaining nuclear weapons, but have or may soon have the technical capability to do so; others, lacking the technical capability to produce a nuclear explosive at this time, are nonetheless strongly motivated to achieve this capability. The countries included are:

- Argentina 1.
- 2. Brazil
- Republic of China 3.
- Egypt
- Iran

6.

5. India

- Israel 7.
- 8. Pakistan
- 9. South Africa
- 10. South Korea
- 11. Spain

PARTMENT OF STAT

M

SECRET

-2-

Our objective is to identify factors across the whole range of our bilateral relationships which may be relevant to proliferation. Our hope is that by looking at the entire spectrum of US activities, programs, and policies, we can devise specific non-proliferation strategies for each country which exploit all of the potential leverage available to us to influence proliferation motivations and capabilities.

The first step in this process is to set down all of the significant elements of our relationship with each country, recognizing from the outset that not all of these elements will necessarily be cf direct or obvious relevance to proliferation. A subsequent stage will attempt to boil down those lists of elements to those whose interactions with proliferation can be established and which might therefore become components of a broader non-proliferation strategy. A final stage will be to recommend specific actions on the basis of these analyses.

The paper does not attempt to draw conclusions or make recommendations except in the most general terms. We believe that these should be reserved for a second or third stage.

I would appreciate your comments and contributions by March 31.

PM/NPP:GOplinger 3/17/78 x 21835

Distribution:

S/AS - Ambassador Smith
T/D - Mr. Nye
S/P - Mr. Lake
L - Mr. Hansell
HA - Ms. Derian
AF - Mr. Moose
EA - Mr. Holbroke
EUR - Mr. Vest
NEA - Mr. Atherton
EB - Mr. Katz
INR - Mr. Saunders
IO - Mr. Maynes
OES - Ms. Mink
ARA - Mr. Todman

ACDA - Mr. Keeny

1. Argentina

A. Non-Proliferation Status

Argentina has the most advanced nuclear program in Latin America. The Argentine objective is to establish complete national independence in the natural uranium fuel cycle within the next decade. This is to include mining and milling uranium from Argentina's own resources, fabricating fuel, producing the heavy water that must be used in reactors fueled with natural uranium, reprocessing spent fuel and purifying the produced plutonium, and even constructing its own nuclear power reactors. These capabilities are equally applicable to producing fissionable material for a nuclear weapons program.

While a nuclear explosives capability does not appear to be a near-term Argentine goal, they have avoided fore-closing that option and are pressing forward in certain weapons-applicable areas such as reprocessing. The Argentines are nearing completion of a pilot scale reprocessing facility, which is expected to be completed sometime in 1980 and which could produce approximately 16 kilograms of plutonium per year (more than a "bomb's worth" of plutonium). Since this plant will be of indigenous origin, it could be operated free of safeguards and international accounting for the plutonium produced.

2

The undertaking by the West Germans to sell Argentina's regional rival, Brazil, facilities for enriching uranium and for reprocessing spent reactor fuel has given the Argentines greater incentive to acquire sensitive nuclear technologies.

These would help assure Argentina's lead in a regional competition in nuclear technology, but would also put it closer to the ability to make nuclear weapons. Argentina has already demonstrated an interest in obtaining missiles capable of carrying nuclear warheads. Thus, in the absence of comprehensive safeguards and given Argentina's nearness to a significant reprocessing capability, Argentina must be considered a real proliferation threat

OS strategy with regard to Argentina rests heavily on Argentina's desire to obtain heavy water production technology from the US and Canada. We have told Argentina this would be possible if it deferred its reprocessing program, and that more limited forms of expanded nuclear cooperation, including support for a nascent Argentine reactor export program, could be undertaken if it adopted full-scope safeguards. Argentina is seriously considering these possibilities but has indicated that a reprocessing deferral would only be possible if Brazil took parallel action.

B. Motivation

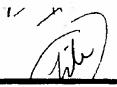
i. Security

Argentina's principal security concerns stem from regional rivalries with Chile and Brazil. Chile has rival claims to

3

islands near Cape Horn with potential claims to adjacent territorial shelf and parts of Antarctica. Brazil is the major rival for military and political preeminence in the continent and in the South Atlantic, and there are frictions over certain border areas and the orientation of Uruguay. Other concerns exist in relations with UK over final disposition of Falklands and the major powers on jurisdiction over Antarctica and surrounding waters. Isolation from US and loss of contact with US military, the absence of an imminent global threat to the region and a general disinterest in extra-regional role leads the military government to be most concerned with internal security and political evolution. Therefore, it appears

DEPARTMENT OF STATE



SECRET

4

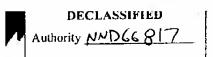
that Argentina's major incentive for moving to an actual weapons program would be to assert the appearance and fact of strategic predominance in Latin America. Looked at from that perspective, there is a direct relationship between Argentina's nuclear intentions and its ability to achieve its objective through a strong force posture.

ii. Political

Perhaps the strongest motivating force for Argentine pursuit of sensitive nuclear technology is political, and intimately connected with traditional rivalry between Brazil and Argentina. Argentina places a high premium on its preeminent position in nuclear technology in Latin America, far ahead of its nearest competitor, Brazil, in both nuclear capabilities and in independence. While comparative military capabilities are a part of this motivation, it is more a matter of overall prestige and image-building than security. The most important Argentine objectives for maintaining and extending its lead are:

(a) to avoid falling behind Brazil in any specific nuclear technology (e.g., if Brazil reprocesses, so must Argentina);

(b) to obtain heavy water production technology on a commercial scale, greatly reducing dependence upon outside help; and (c) to press ahead as a nuclear exporter.



5

iii. Economic

Argentina has strong economic motivations for expanding its nuclear power program and reducing its dependence upon imported fossil fuels. This is a particularly important factor in its current effort to obtain additional reactor technology and above all heavy water production technology from the US and Canada. It is not, however, a factor in the Argentine reprocessing program, which has no economic rationale in a system based upon heavy water reactors.

C. U.S Programs and Activities

i. Arms Transfer Policy

Because of the human rights situation in Argentina, the Congress has prohibited any security assistance or the issuance of munitions control export licenses for commercial arms purchases after September 30, 1978. For the same reason we refused FMS credits to Argentina in FY 77 and 78. Argentina still has about \$30.3 million in unused prior year FMS credits and is continuing to try to purchase defense articles and services commercially or for FMS cash. However, for the last six months almost all requests for FMS cash or credit purchases or for munitions control licenses have been turned down or held up on human rights grounds. Recent approval in principle of certain transactions, including KC-130 tankers, helicopters and naval periscopes, as exceptions to the Department's wait-and-see

6

But the outlook is not good for a resumption of business as usual. Our ability to carry through a protracted negotiating process to meet non-proliferation objectives will continue to be affected by decisions on arms transfers.

Resentment among Argentinian military leaders at US arms transfers policies could particularly harm our nuclear objectives, since the Argentinian armed services also run the nuclear energy program.

ii. Force Posture

Our current US force posture provides little non-proliferation leverage. We have no military installations in Argentina and virtually no military cooperation.

7 - -

2. Brazil

......

A. Non-Proliferation Status

The Brazilians and the FRG are embarked on the largest proposed transfer of nuclear technology to date. If all the elements of the deal are completed, Brazil will have up to eight light water power reactors, a uranium reprocessing facility, a pilot enrichment facility, and a fuel fabrication plant. Unlike Argentina, all of Brazil's presently planned nuclear facilities will be under IAEA safeguards. However, like Argentina, Brazil is not a party to the NPT, nor has it waived into force the regional Treaty of Tlatelolco, and thus has not committed itself to accepting safeguards on all future nuclear facilities and forswearing development of "peaceful" nuclear explosives.

Despite the foregoing, we do not look upon Brazil as a serious prospective proliferator in the near term, primarily because its sensitive facilities will be developed on an experimental basis and entirely under international safe-guards. Nonetheless, Brazil's acquisition of reprocessing and enrichment technology would in time provide the technical basis necessary to support a nuclear weapons program. It would, as well, set a precedent for other aspirants to acquire complete nuclear fuel cycle technology.

We have engaged in efforts over the past year to obtain deferral or cancellation of the reprocessing and enrichment

8

portions of the FRG-Brazil deal. We may want to examine further the relationship between our non-proliferation strategy in Brazil and our politico-military relations with the FRG to see if there are ways to conduct our relations with the FRG which would allow us to influence more effectively the FRG's actions in the non-proliferation area.

We have not made as much progress in furthering our nonproliferation strategy in Brazil as we have in Argentina. During
the Secretary's recent visit to Brasilia, which followed our
discussions with Argentina referred to above, the concept of
a mutual reprocessing deferral by Brazil and its rival,
Argentina, was first broached to Brazilian officials. We are
hopeful that once the Brazilians have absorbed the implications
for their security of a regional nuclear reprocessing competition, they will become more flexible. If this should occur
we would hope that the following could be accomplished:

-- deferral of any further reprocessing activities

for a <u>substantial period</u> of time (as with Argentina), and

-- acceptance of IAEA full-scope safeguards (possibly through implementation of the Treaty of Tlatelolco).

B. Motivations

i. Security

Brazil's drive to become a regional and potential global power results in a desire for self-sufficiency in politics, economics and technology. They may perceive some security SECRET

2

1

9

threat in regional conflicts (Peru vs. Chile) and territorial frictions with neighbors, potentially impacting on hinterland development. Furthermore, they are sensitive to Argentine military power and nuclear development, particularly in view of their own isolation from the US in defense matters and their greatly reduced contact with US military.

Nonetheless, the absence of an imminent global threat to the region and Brazil's disinterest in an extra-regional role, except possibly in Africa, leads the military government to be most concerned with internal security and political evolution. As a result Brazil has no clear present interest in acquiring nuclear weapons, although the military appears to want to preserve access to the nuclear option. This situation could change



10

radically if Argentina sought or was perceived by Brazil as seeking its own nuclear option. Short of that, Brazil's nuclear intentions are unlikely to be significantly influenced by the degree if its access to conventional arms sources or by the status of regional or bilateral security arrangements including super power guarantees.

ii. Political

Like Argentina, Brazil's motivations for expanding its nuclear power program, and sensitive nuclear technologies, are strongly influenced by prestige and image-building considerations. Brazil sees this aspect less in terms of immediate regional rivalry and its position within the Latin pecking order than as one aspect of Brazil's emergence as a major world power. While still far behind Argentina in nuclear capabilities, Brazil is the predominant Latin American power and regards technological advancement, energy independence, and potential military capabilities as important indicators of its overall position in the world.

iii. Economic

Brazil has large energy needs to support its future economic growth. While alternative energy sources, including hydroelectric power, exist, the present government has strongly emphasized nuclear power as the priority objective. Brazil's nuclear power program is based upon the light-water, enriched-uranium fueled reactor type. US action in 1974 in closing

11

its order books for future fuel contracts, and the conversion of existing Brazilian contracts to "conditional" contracts, was traumatic for Brazil's nuclear planning, and probably had much to do with its subsequent conclusion of the agreement with the FRG which has become a major issue in our bilateral relationship. Given Brazil's deep aversion to dependence upon external fuel sources, the economic rational for acquiring however its own enrichment capability must appear persuasive;/knowledge-able Brazilians probably recognize that little economic justification for reprocessing will exist for at least a decade.

Many Brazilian scientists believe, however, that the FRG/Brazil deal made Brazil more dependent than ever, and on a single supplier.

C. US Program and Activities

i. Arms Transfers Policy

12

approval of over a dozen Munitions List license applications for handguns and ammunition for the Brazilian Navy and various types of communications equipment for several government agencies because of Congressional objections. Brazil refused to accept FMS financing for FY 78 and has asked us not to submit a human rights report to Congress for FY 79. As a result, it will become ineligible for any kind of security assistance, including FMS cash or credit sales and grant training. It will remain elibible, however, for commercial purchases with munitions control export licenses. In recent months, however, we have turned down most requests for FMS sales or munitions control licenses. Taken altogether, arms trasnfer business with Brazil is not a US growth industry and is not likely to again be one if present human rights and arms transfer policies continue. transfers remain a sensitive issue within the context of US-Brazilian relations. Any abrupt cancellation of these commercial arms sales, however, could impinge on the extremely difficult negotiations we are attempting to sustain in the nuclear area.

ii. Force Posture

US force posture at present provides no non-proliferation leverages. We have no military installations there and virtually no military cooperation. However, there exist a potential common interest in the South Atlantic, African littoral and petroleum Sea Lines of Communication. Also, Brazil's naval strength, although modest, could evolve to make them a significant partner in South Atlantic security in the 1980s.

13

The US human rights campaign and the subsequent decline in security assistance have greatly reduced our non-proliferation influence. But, Brazil remains capital and technology hungry, creating an atmosphere the US could capitalize on through positive initiatives such as constructively pursuring Brazil's global ambitions.

14

Republic of China

A. Non-Proliferation Status

Taiwan has been engaged in a suspected nuclear weapons program since the PRC first exploded a nuclear device in 1964. Taiwan has an impressive group of scientists and engineers, most of whom are apparently of the Ministry of Defense, rather than the Atomic Energy Council or the nuclear research institute. The Taiwanese have a Canadian supplied research reactor capable of producing bomb quantities of plutonium, and the independent fuel cycle capability to run the reactor without outside support. They also have the technical know-how to separate and purify plutonium for use in explosives and may have completed sufficient experimental high explosive work to be reasonably confident of producing an effective first-generation nuclear explosive.

We believe that we have a fairly good handle on Taiwan's nuclear activities. Following US intervention, the ROC has agreed to reorient its nuclear research away from activities relevant to weapons production. We are also making arrangements to remove spent fuel of the major research reactor from Taiwan, thus depriving the ROC of a ready source of plutonium. Without such direct intervention, the ROC could have assembled a nuclear weapon within a year or two. The ROC probably anticipate the date when they may wish to resume a greater nuclear weapons effort. In addition, further isolation of

15

of the Taiwanese may well bring to an end IAEA safeguards and inspections, which even now are tenuous.

B. Motivations

i. Security

Given the PRC's overwhelming conventional superiority and its modest nuclear arsenal, the ROC probably sees a nuclear weapons capability as a potential deterrent against absortion by the PRC in circumstances where US protection has diminished or disappeared.

ii. Political

Our desire to prevent ROC development of nuclear weapons conflicts with our overall China policy of moving toward full diplomatic relations with the PRC. As long as we still have diplomatic relations and the Mutual Defense Treaty with Taipei it is unlikely the ROC would pursue a nuclear weapons program that would risk a break in US relations. When and if we break relations with Taipei, however, we will lose this leverage. Taiwan will, however, continue to have extremely important economic ties with the US, and we may continue to supply it with arms, depending on what kind of settlement is possible with Peking.

iii. Economic

The ROC has no clear economic motivation for the development of a reprocessing capability, except for the desire to keep its nuclear research program and personnel at a high level of competence. There are substantial economic considerations in the possible loss of US support for fueling the

16

ROC's power reactor program, and such a loss would be acceptable only if the ROC's national security were clearly and immediately threatened. We have already used the threat of cutting off cooperation in nuclear power on at least two occasions to force the ROC away from nuclear weapons research.

We may need to do so again.

C. US Programs and Activities

i. Arms Transfer Policy

The continued sale of defensive military arms will sustain the ROC's confidence in its conventional deterrent capabilities and will thereby reduce the prospects that the ROC would, in a mood of desperation, seek to produce nuclear weapons. Thus, other policy reasons for continuing to supply Taiwan with the defensive military arms it requires to maintain a credible deterrent reinforces our proliferation interests.

In reviewing export licenses for military related technology and equipment, we have been careful to deny the ROC access to items which would contribute to a nuclear weapons development program.

ii. Force Posutre

US has already made clear it will remove all forces from Taiwan, and ROC is concerned over continued US capability and willingness to help defend Taiwan after these remaining symobolic forces are gone.

17

iii. Defense Treaty

The ROC already assumes that our Defense Treaty will be nullified once normalization occurs with Peking.

iv. Intelligence Sharing Arrangements

Our intelligence sharing arrangements are a two way street and provides us an important source of leverage.

18

4. Egypt

A. Non-Prolferation Status

Egypt's nuclear plans and capability are modest, and are projected to remain so. Egypt has one nuclear power research reactor supplied by the Soviets a number of years ago, but has none of the ancillary fuel cycle facilities that would provide experience in preparation of fissionable materials for nuclear explosives. Egypt desires to acquire a nuclear power plant from the US, but this too would not be of direct relevance to a nuclear weapons program. The significance of Egypt for proliferation resides largely in the possibility of a nuclear reaction in Israel to actions Egypt may take - in the areas of nuclear power programs, safeguards, and in non-nuclear areas.

B. Motivations

i. Security

Egypt's main security concern has been Israel, but Israeli withdrawal from Sinai could leave Egypt relatively secure from external attack. Concern has grown about Soviet influence in the region especially in the Horn of Africa and North Africa and the affect on the Suez Sea Lines of Communication. Soviet influence has further enhanced the ability of Libya and other rivals to destablize Egyptian politics, but unless Israel or Libya go nuclear or unless there is a radical upheaval in Egyptian politics, a sense of compulsion to develop the nuclear option is considered minor.

19

C. US Programs and Activities

Egypt has shown increasing interest in expanding its modest arms supply relationship with the US. However, it now attaches higher priority to maintaining momentum in the peace negotiations. The Administration has recently proposed the sale of 50 F-5 aircraft to Egypt. A decision to increase arms transfers to Egypt would be linked almost exclusively to enhancing Mideast peace negotiations, minimizing any residual leverage available for other purposes. To the extent that increased arms transfers increase our overall leverage in Egypt, however, an expanded military supply relationship could allow us some say in non-proliferation matters in the future. Egyptian action on the NPT, however, is probably linked to some degree to Israel action on full-scope safeguards.

US military relations with Egypt are in the process of gradual restoration.

US economic assistance to Egypt has also become very substantial and is a positive source of non-proliferation influence;

20

5. India

A. Non-Proliferation Status

India's ability to fabricate a workable nuclear explosive is proven. In addition, India's efforts to develop a satellite launch capability have direct application to nuclear weapons delivery systems. India has developed a large measure of independence in its nuclear program, although the loss of foreign technological assistance would be extremely costly in time and money. In fact, India will soon be in a position to export at least technological expertise and, eventually, nuclear hardware. In terms of basic nuclear capabilities, India can be regarded as a sixth nuclear power.

The Desai government is rethinking the direction of India's nuclear program and has publicly rejected peaceful nuclear explosives device (PNE). Although the Indians are capable of exploding a second nuclear/ they have not for at least two reasons: the US could cease supply of enriched uranium, and India's scientists have been unable to find a convincing application for a PNE. We are continuing to use our influence to persuade the Indians to accept full-scope safeguards. We hope to avoid a resumption of any nuclear tests or initiation of a nuclear weapons program.

B. Motivations

i. Security

India's recourse to nuclear weapons will in large measure be a function of its relationship with neighboring states and its ability to counter hostile moves by conventional means.

21-

Whatever threats China or the USSR might pose to stability in the sub-continent, India is unlikely to develop nuclear weapons as a response to those established nuclear powers. For the near term India has enhanced its political and military standing by having demonstrated a nuclear capability, and barring unforseen developments is unlikely to develop a nuclear military force.

India's fundamental insecurity is not always forth-rightly admitted but relates to

the continued divisions within India along regional or sub-national lines; and

the revolutionary and secessionist potentials of radicalization of the Indians 75 million Muslims.

Fear of major Soviet or Chinese attacks is discounted, but the political influence of these states working through the domestic vulnerabilities just mentioned is take seriously. Over the long-term, a capability to deter Chinese nuclear threats is viewed as prudent. The threat from Pakistan has always been taken seriously because of the domestic Muslim minority.

ii. Political

As long as Desai is Prime Minister, there is some hope of using his moralistic pronouncements on NPT and CTB to box India into full-scope safeguards commitments.

iii. Economic

US economic ties with India have been significant, but Indian economic diversification has reduced our potential non-proliferation leverage.

22

· C. U.S. Programs and Activities

i. Arms Transfer Policy

Our arms transfers to India have been minimal. In 1976 our sales agreements amounted to approximately \$3 million. Our security assistance program in India is limited to a small grant military training program (IMET). Most transfers have been spare parts for weapons the US supplied India in 1963. We currently supply India no sophisticated technologies or lethal weapons, and our leverage on nuclear policy through arms transfers is small.

India could be affected by major arms transfers to

Pakistan. Thus, restraint in arms transfers to Pakistan

could be a factor in our ability to influence India's nuclear

policies. But the effects are double-edged; our connection

with Pakistan has always made our dealings with India problematic.

23

6. Iran

A. Non-Proliferation Status

Iran has a significant plan for a nuclear program and is unlikely to jeopardize it by being caught in a nuclear weapons program. In completing these plans, however, Iran will eventually acquire access to, and expertise in, most areas of the nuclear fuel cycle needed for the design and manufacture of nuclear weapons.

Iran is a party to the NPT and advocates a regional nuclear free-zone. For the foreseeable future Iran apparently does not intend to acquire fuel reprocessing technology.

B. Motivation

i. Security

Iran lives in the Soviet shadow, has a second powerful and historically hostile neighbor in Iraq, has a brittle political system and sits on a coveted resource that could critically affect the fate of the West.

Political radicalization and instability of neighboring states is worrisome as is the declining US and British influence east of Suez which leaves a vacuum that Iran feels compelled to fill.

Iran is further disturbed by perceived shifts in the US-Soviet military balance.

Iran cannot hope to use nuclear weapons in effective defense against the USSR. While there might be some deterrent

24

value, Iran might also be more heavily targeted. But nuclear options might be perceived as a useful complement to Iran's political and military efforts to build regional stability, especially if one or more neighbors evidence intentions to go the nuclear way. A Pakistani weapons program in particular could provoke an Iranian response.

ii. Political

Iranian uncertainly about US domestic policies and long term attitudes toward Iran spons desire for security independence including divestation of external ties and, possibly, the nuclear option.

iii. Economic

Nuclear power is a key component in Iran's industrial advance to economic self-sufficiency, a critical replacement for depleted oil, and a symbol of modernization and prestige.

25

C. US Programs and Activities

i. Arms Transfer Policy

The Shah has consistently asked for the most sophisticated weapons that the US sells abroad. In 1976 the United States agreed to transfer in excess of \$5 billion in material to Iran. This year the Iranians provided us with a long range projections of their planned arms requests. This includes more F-14 and F-16 aircraft and large numbers of self-propelled artillery pieces.

Given the quantity and quality of our arms relationship, some leverage arises in using arms supply to help deter a future Iranian nuclear weapons decision. But there are inherent limits on our leverage given Iran's importance to the US due to: key US intelligence and communications facilities within its boundaries; its role as a supplier of oil to the US; its purchases of approximately \$3.5-4.0 billion of US civilian goods per year; and, its influence in the outcome of Middle East negotiations.

"Negative leverage" may be the most relevant factor.

The Shah has consistently linked his ability to acquire conventional arms from the US to his inclination not to attempt to obtain a nuclear weapons capability. Should the US attempt to significantly reduce its supply of arms to Iran we would risk giving the Iranians incentive to acquire nuclear weapons, although it is equally likely that the Shah would turn to Western European suppliers as he is now doing in the case of naval vessles which we declined to provide.

26

7. Israel

A. Non-Proliferation Status

There are clear indications of Israel's longstanding interest in possessing a nuclear capability, but we lack a basis on which to conclude whether Israel now has nuclear weapons. A key facility in Israel's nuclear program is the Dimona research reactor, supplied by France in the early 1960's, which can produce weapons-quantities of plutonium annually. We believe Israel has reprocessed some spent fuel from that reactor to obtain plutonium; if a significant reprocessing capability does exist, the Israelis could produce weapons on demand.

Israel has maintained a careful ambiguity in its public references on the question of whether it has or could produce nuclear weapons. Moreover, Israel refuses to accept IAEA safeguards on all its nuclear facilities, which would mean placing the Dimona reactor and any reprocessing and plutonium handling facilities under safeguards.

B. Motivations

i. Security

We are unable to judge whether Israel sees actual demonstration of nuclear weapons to be in its self interest, or whether its steadfast and careful ambiguity in public references on the question of whether it has nuclear weapons meets its requirements. Given Israel's capabilities, we judge it likely that it could and would resort to nuclear weapons if its

27

existence as a state were threatened. Thus far, however,

Israel has met its challenges by means of its close security

relationship with the US and with its almost unhindered access

to conventional arms from abroad. Should either of these

elements fail, Israel might well demonstrate a public capability.

ii. Political

Israeli insecurity is profound because of Israel's precarious location, the number, size and commonality of its opponents, and the intractability of the regional conflict.

US political and defense commitments remain indispensable but have become more uncertain as the oil factor has grown in importance.

US and NATO force postures vis-a-vis the USSR and Warsaw
Pact together with interests in secure access to Middle Eastern
oil, however, continue to guarantee a strong US stake in a Middle
East settlement which also promises improved Israeli security.

Evidence that Israel is nuclear weapons capable has an ambiguous effect:

- it may be domestically reassuring, probably offers some deterrence against all-out Arab warfare, and may be some incentive to Arab states to find a political settlement;
- it raises the stakes of major power interest in a settlement and may margionally increase the risks of hostile major power intervention in the region;

SECRET SECRET

28

- but, it also provides incentives to Israel's opponents to follow suit (and there is evidence that Libya and perhaps Iraq would like to).

iii. Economic

C. US Program and Activities

i. Arms Transfer Policy

Our commitments to Israeli security and military assistance to Israel are longstanding, extensive, and highly political in nature. Recent arms transfers are the 15 F-15s and 75 F-16s that are part of the Middle East aircraft package. Israel has requested in addition an extensive 10 year list of equipment (MATMON C) totalling \$15 billion. We do not expect to address this rquest in its entirety. Rather arms approvals for Israel will likely continue to be made on an annual basis after extensive review and analysis. These decisions will be most affected by our commitment to Israel's security and the Middle East peace process. The existence of this relationship, in fact, may be responsible for whatever restraint Israel has exercised regarding nuclear weapons.

Israel's recent arms requests were not fully satisfied.

Whether the US could find ways to be more forthcoming in our arms supply relationship as a means of moving Israel toward full-scope safeguards is uncertain and involves complex factors related to the entire question of a Middle East peace settlement.

Moreover, any increase in US arms supply to Israel would probably entail additional US financing. More certainly, however, if serious doubts arose in Israel concerning the US commitment—either in arms supply or in the broader security commitment—they could have the effect of driving Israel away from considering full safeguards and toward either development of nuclear weapons or more explicit indications of willingness to employ nuclear weapons in the Middle East.

ii. Political Support

Dependence on the US for political support and military assistance gives the US extensive non-proliferation leverage over Israel but this is qualified by

- strong domestic US interests supporting Israel unequivocall
 {and
- -/the clandestine character of the Israeli nuclear program and its freedom from safeguards which make official deniability possible and shield the program from attempts to verify military use.

The high US priority in finding a peace settlement in the area is overriding and inhibits effective pursuit of non-proliferation objectives in Israel.

30

8. Pakistan

A. Non-Proliferation Status

The French have contracted to supply Pakistan a reprocessing facility. It is our assessment that the Pakistanis are intent on obtaining the reprocessing plant to give them a nuclear weapons options as a counter to India, even though at France's insistence the plant would be covered by international safeguards. Negotiations for the French facility, in process when India exploded a nuclear device in May 1974, were immediately thereon accelerated. With the recent change in the Pakistani government, the French/Pakistan deal has become less certain and it is possible that the French will reconsider the deal. At this juncture, France is seeking to interest Pakistan in accepting a modification of the contract to shift the plant to a form of co-processiong. Pakistan has refused to alter the contract, but the French are continuing to press alternative modification proposals. The US has made known its preference for cancellation.

Pakistan must be considered a proliferation threat even if the French reprocessing plant does not go forward. Its scientists and engineers are competent. There are indications of interest in nuclear explosives-related research and development work. Pakistani technical personnel have been trained in such sensitive fuel cycle areas as reprocessing. They may even have access to a small reprocessing laboratory in Pakistan. Canada severed its nuclear relationship with Pakistan last year; if safeguards are not maintained on the Canadian supplied KANUPP

31

power reactor and its spent fuel, Pakistan would have access to a source of plutonium. Should the Pakistanis acquire a significant reprocessing capability, we are concerned not only that the Paks may develop weapons, but also that the Indians would feel constrained to resume their nuclear test and perhaps move toward a weapons program

B. Motivations

i. Security

It is not clear that Pakistan perceives a security requirement for nuclear weapons, although it may well see the long term viability of the present Pakistani state to be questionable and may also regard its current conventional capabilities as inadequte against potential neighboring adversaries. Whatever Pakistan's sense of insecurity may be, it was undoubtedly enhanced by India's demonstration of a nuclear capability in 1974, which reinforced an existing imbalance between the two countries on the conventional level. In this context Pakistan's access to foreign arms supplies and its ability to rely on great power guarantees of the status quo in the sub-continent may be critical elements in the formulation of Pakistani long term nuclear intentions.

Indian Ocean and other arms control negotiations in the region may be a source of non-proliferation influence over Pakistan to the extent they encumber or restrain India militarily (which is not their perceived present direction). Conventional arms transfers to Pakistan are the most decisive potential source

32

of US non-proliferation leverage.

ii. Political

iii. Economic

Potential economic assistance may be a significant source of a non-proliferation influence; our potential influence will be severely curtailed if the French reprocessing deal goes through and the Glenn Amendment is invoked.

33

C. U.S. Programs and Activities

i. Arms Transfer Policy

Our grant security assistance to Pakistan has been limited since 1965 to a modest grant military training program (IMET).

We also provide defense articles and services on a commercial and FMS cash basis. (Since 1975 these have amounted to about \$50 million per year, largely for spare parts, ammunition and communications equipment.) In addition to a request for MK 46/ASROC torpedoes now being processed, Pakistan has expressed serious interest in acquiring self-proposed howitzers and less explicit interest in 110 F-5E/F aircraft. The Glenn (earlier the Symington) Amendment prohibits military assistance under the Foreign Assistance Act to any country which acquires reprocessing technology under other than narrowly-defined conditions. We believe that no transfers of technology from France to Pakistan have yet occurred which would bring the Glenn Amendment into effect.

For all practical purposes, therefore, we have already clearly signalled our ability to use security assistance as leverage. Should the French cancel the reprocessing deal altogether, with resultant strong and adverse reaction in Pakistan, we might consider using a resumption of FMS sales to ameliorate this reaction and to provide a visible, non-nuclear alternative to Pakistan's security concerns. As Pakistan is a poor nation, however, they could not purchase large amounts

34

of defense articles without outside assistance. Pakistan is, of course, part of the action-reaction cycle in arms competition in South Asia. Significant arms transfers to India, such as the Jaguar sale, could give Pakistan additional motivation to exercise the nuclear option.

35

9. South Africa

A. Non-Proliferation Status

This past August, we learned of the existence of a facility in the Kalahari Desert which could be associated with nuclear explosives testing.

South Africa has clearly demonstrated competence in nuclear science and technology. South Africa's pilot enrichment plant at Valindaba, now in operation, was indigenously designed and built. This enrichment facility may be capable of producing highly enriched uranium -- the probable material for any South African device. We believe that South Africa could produce a nuclear explosive fairly quickly.

In the aftermath of international publicity regarding the suspected nuclear weapons test site in the Kalahari Desert, the SAG gave public assurances of its peaceful nuclear intentions, but has not clarified the purpose of the test site. We have urged the SAG to reinforce its assurances by adhering to the NPT and accepting interim safeguards at its Valindaba enrichment plant. We indicated that we could not otherwise continue any form of nuclear cooperation with South Africa.

If the South Africans meet our conditions, we would undertake to supply low enriched uranium (LEU) for the nuclear power reactors now under construction in South Africa by the French. Since the South Africans will not for several years

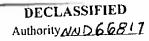
. 3ñ

have sufficient capacity to produce their own power reactor fuel, they must either depend on the US (or possibly France) for this supply or defer completion of the power reactor project. They also desire that the US continue fueling the Safari research reactor, a US supplied facility that operates on highly enriched uranium (HEU). Safari is South African's major nuclear research tool; the question of its future operation is of major concern to South Africa and could lead it to produce HEU from its own enrichment plant, failing resumption of fuel supply by the US.

B. Motivations

i. Security

Until recently South Africa was assumed to have no perceived military requirements for nuclear weapons. Its worsening geo-political situation may be changing the calculus. South Africa feels itself increasingly hemmed in, as developments in neighboring former buffer states (Manibia, Angola, Rhodesia, Mozambique) place these states in a potential adversary relationship with South Africa. Moreover, because of US and broader western opposition to South Africa's domestic policy, South Africa feels increasingly isolated from the West and unable to rely on outside allies in case of need. These developments appear to be creating in South Africa something like a seige mentality. We no longer exclude the likelihood that South Africa will develop and possibly test nuclear weapons



37

both to demonstrate its staying power in a future regional conflict and to make clear to its domestic and foreign audiences that South Africa can go it alone if need be.

ii. Political

iii. Economic

C. U.S. Programs and Activities

i. Arms Transfer Policy

The US has not supplied arms to South Africa for a decade, and the embargo was recently reinforced and made total when the US extended it to include spare parts and maintenance items. Hence, between the US and South Africa there are not SECRET

38

outstanding bilateral military supply relationship questions.

Other Western nations, including France, previously a major supplier, have also ceased arms supply to South Africa. Our arms transfer policy toward South Africa is one element in a skein of present and proposed sanctions or cutbacks in the economic and commercial areas. Arms transfers are not a potential tool in managing the South African nuclear problem, although our policy (and those of others) undoubtedly contributes to South Africa's increasing sense of isolation—from which we might expect the motivation for a nuclear weapons program to develop.

39

10. South Korea

A. Non-Proliferation Status

The US intervened effectively two years ago to prevent consummation of a French/South Korean deal that would have given South Korea a reprocessing facility. Since then, the Park government has placed its nuclear weapons program on hold, and shifted resources to other programs. We made it clear to President Park that a Korean nuclear weapons program would jeopardize our bilateral relationship across the board. The Koreans feel powerful incentives to move toward developing a nuclear weapons capability.

If the ROK did decide to resurrect its nuclear weapons program it would have a long way to go to attain the range of capabilities necessary for success, but given sufficient time (perhaps 5 years, certainly within 10) and investment, it is well within their capabilities. However, before such an effort could actually produce an explosive device, the ROK would have to abrogate the NPT.

For the foreseeable future the US will continue to have sufficient leverage to prevent the ROK from going nuclear, if we are prepared to us it. Our support is vital for the ROK nuclear power program. If we threatened to reduce or even cut off our military support, it is extremely unlikely that any ROK government could withstand the pressure. A head-on US-ROK confrontation, however, would carry grave risks, not only for

40

stability on the Korean peninsula but also for our relations with Japan.

B. Motivations

i. Security

The ROKG seems convinced that nuclear weapons are a vital part of the overall deterrent against North Korea. The ROK will certainly view our planned removal of all nuclear weapons from Korea by the end of 1980 as significantly lowering the deterrent against North Korea, despite our assurances of the continued availability of nuclear weapons in the Western Pacific. The vulnerability of peace near the North Korean border, adds to the perceived need for an effective and rapidly available deterrent. They fear that even if North Korea itself had no nuclear weapons, it might be supported in a conflict by its nuclear-armed allies--the USSR and China. There has also been a gradual erosion of ROK confidence in the effectiveness of the US security guarantee since the withdrawal of a US division from Korea in 1971. This concern has since been fueled by our withdrawal from Vietnam and by our planned ground force reductions in Korea over the next 4 to 5 years. To the extent that the ROKG continues to have doubts about our willingness or ability to meet our security commitment to it, pressures to develop its own nuclear weapons will continue.

41

ii. Political

Amongst increasing ROK nationalistic feelings and a resentment of dependence on US, renewed North-South dialogue, if feasible, might reduce tensions and lessen incentives for ROK nuclear proliferation.

iii. Economic

C. US Programs and Activities

i. Arms Transfer Policy

Individual security assistance cases are not necessarily critical to nuclear proliferation, but taken collectively and combined withour overall policy, they have an important impact on ROK perceptions of US reliability, and the need for nuclear weapons

As compensation for the troop withdrawal, we plan to transfer to ROK at no cost approximately \$800 million of equipment, virtually all of which is in the current inventory of US forces in Korea. In addition to and separate from the compensatory package, we are considering the sale of various other equipments, including M-48 tanks, F-16, A-7/A-10 aircraft, and the provision of extensive credits for purchases of military material.

42

At the present time there appears to be considerable reluctance in Congress to approve the compensatory package and to provide large amounts of security assistance, pending further developments in the "Koreagate" affair.

One of the positive steps we can take which might help to head off a ROK decision to resurrect its nuclear weapons program would be to follow-through with the arms transfer package tied to our troop withdrawals and to generally be as forthcoming as possible in our arms transfer policy toward the ROK, particularly in providing more advanced weapon—ystems necessary for ROK defense. At the same time, we should continue our present policy of restricting Korean access to technology which would contribute to development of an independent missile development program.

ii. Defense Commitment

Entire US-ROK defense relationship is most powerful, yet difficult to use, source of leverage. OUR US force posture is a most important element bearing on proliferation, especially, regarding actions on our nuclear weapons in Korea, and the pace of withdrawals of conventional forces.

43

11. Spain

A. Non-Proliferation Status

There are indications of some interest on the part of the Spanish military in a nuclear option, but we have no evidence of -- and doubt that there is -- an active research and development effort on nuclear weapons. The Spanish have in the past reprocessed spent fuel on a small scale, and presumably possess some separated plutonium, although most certainly well less than a bomb's worth. In addition, Spain is the only Western European country not to have ratified the NPT. None of this suggests that Spain is an immediate proliferation risk, although its combination of capabilities and lack of disincentives to go nuclear is stronger than in most other West European countries.

Spain's desire for closer ties with Western Europe, as well as its clear lack of a rationale for possessing nuclear weapons, are probable inhibiting factors on any Spanish decision to develop nuclear weapons.

B. Motivations

i. Security

There appears to be no security motivations to develop a nuclear capability now, although refusal to sign the NPT probably reflects a desire by significant elements within Spain not to foreclose the nuclear option.

41

ii. Political

Spain's nuclear policy does not, in the current or anticipated European setting, rank among priority US objectives vis-a-vis Spain. Our primary concerns involve: maintaining close bilateral political and military ties which provide access to bases in Spain for US forces; and encouraging Spanish entry into NATO, which will provide a wider, legitimizing framework for Madrid's relations with the US and other European nations. Spanish membership in NATO, by providing such a framework, is likely to reduce even further Spanish interest in nuclear weapons. The US is consciously seeking not to overplay its hand in promoting Spanish entry.

iii. Economic

The further development of Spain's nuclear power program is of large economic and energy significance. Since Spain remains dependent on outside sources of nuclear fuel which could be terminated if a weapons program were pursued, the economic pressures deterring proliferation in Spain clearly are overriding in present circumstances.

C. U.S. Programs and Activities

i. Arms Transfer Policy

Our conventional arms relationship with Spain is to a large extent an adjunct of our base rights arrangements, which have been extended through 1981 by the Treaty of Friendship and

Cooperation. Specific levels of Security Assistance are spelled out in the treaty: over a five-year period \$135 million in grant military aid (\$15 million a year), cost sharing obliqations marked for modernization projects and \$600 million in Foreign Military Sales credits (\$120 million a year). Credit financing, thus, is involved in most of the FMS arms transfers-\$120 million financed of an estimated total of \$145 million in FY 1978. We estimate that another \$20 million worth of arms will be sold commercially. The Treaty also committed the US to supply or to lease--or to help acquire--certain specific items of military equipment, such as late generation fighter aircraft.

ii. Arms Control Negotiations

Spanish perceptions of their security needs could be influenced by developments in the MBFR negotiations, to the extent that they see likely MBFR outcomes as limiting Western capabilities to deal with the Soviet threat.

If the area subjected to MBFR measures remains limited to central Europe, Spanish territory becomes increasingly attractive to the West as a "safe haven," especially should Spain enter NATO.

Should MBFR associated measures be extended to include CSCE territory, Spanish security interests would be tied more closely to other Western European states, and particulary if Spain joined NATO. This could reduce Spanish interest in meeting its security needs through strictly unilateral efforts.