

QUARTERLY PROGRESS REPORT

November 1984

Contract Number: MDA903-84-C-0325  
Contract Expiration Date: 1 July 1985; \$885,782  
Short Title of Contract: Integrated Long-Term Defense Strategy  
Name of Contractor: Pan Heuristics  
R & D Associates  
4640 Admiralty Way  
Marina del Rey, CA 90295  
Project Directors: Albert Wohlstetter  
Fred Hoffman  
Phone Number: (213) 822-1715

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QUARTERLY PROGRESS REPORT

Contract No. MDA903-84-C-0325  
For the Period July 10, 1984 - October 6, 1984

TASK 1: REGIONAL ANALYSES

(a) Assess the Role of Intelligence in Terror and in Countering Terrorism by Non-Terrorist Means.

Albert Wohlstetter and Nancy Virts are continuing their work on Armenian terror. Virts has been revising their draft on Armenian terror and its relation to international terror and has written a separate draft on dissent in Soviet Armenia which may be incorporated into the longer paper, although it can stand on its own. They have also been concerned with ASALA's uses of terror in the United States and their growing intimidation of the French Armenian diaspora and of conservative US citizens of Armenian origin. Apparently members of ASALA have infiltrated the conservative organs, such as the Hollywood Observer, and their editorials now begin to read like some of ASALA's, with celebration of their terrorists as martyrs and heroes. In this connection, Albert Wohlstetter has kept in close touch with the State Department's section on Human Rights, and with Paul Henze, one of the foremost authorities on international terror. Henze is particularly knowledgeable about the wave of terror Turkish citizens, both in and out of Turkey, have been subjected to in recent years. For the main object of Armenian terrorist attack is Turkish citizens outside of Turkey and any non-Turks who are sympathetic to Turkey. The most notable exception was the 1983 bombing at Paris' Orly Airport which killed and injured a number of French citizens. Although Armenians in the diaspora often accuse the Turkish government of various forms of discrimination against the 60,000 Armenians in Turkey (most of

whom live in Istanbul), there is evidence that Armenians in Turkey are satisfied with their role as Turkish citizens. An article appearing in the Los Angeles Times contained quotes to this effect from a number of Turkish Armenians, including a university professor identified as a leader of the Armenian community and a merchant in Istanbul's covered bazaar (L.A. Times, May 12, 1982). It is also clear that Armenians inside Turkey strongly oppose Armenian terror.

Virts investigated the relationship between Armenian terrorism in the West and Armenian dissent within the Soviet Union. Although the goals of these two movements are theoretically the same, (i.e., "Free and Independent Armenia"), in reality they could not be more adverse. For terrorist groups in the West, Armenia must be free and independent of Turkey even if this means its domination by the Soviet Union. One of the major terrorist groups, the Secret Army for the Liberation of Armenia (ASALA) openly supports the USSR. While the other "more conservative" terrorist groups do not openly support the USSR, they have seldom, if ever, criticized the domination of Armenia by the Soviet Union and they have never attacked a Soviet target. In contrast, Armenian dissidents in the Soviet Union call for the establishment of an Armenian state free of either Turkish or Soviet domination. This movement has been ruthlessly suppressed by the Soviet Union. Armenians arrested for the only incident of violence by an Armenian group in the Soviet Union (a bomb blast in a Moscow subway that killed 30) were executed. None of the Western terrorist groups have taken up the cause of Armenian dissidents in the USSR. A draft of Virts' paper, "Dissent in Soviet Armenia", is attached (ATTACHMENT 1).

Virts has also drafted a paper, "Armenian Terrorist Activity in Iran" (ATTACHMENT 2), which examines the circumstances behind the recent upsurge of ASALA's activity in Iran. ASALA's activity in Iran is significant because it demonstrates ASALA's ability to act in an environment much less sympathetic to its cause than that of Western European countries in which it usually operates.

Terror by the Islamic Jihad has, of course, been the source of most concern in the government. Much of Admiral Long's report on the October 1983 bombing of the Marines was made public some time ago, but the classified portions remain very closely held. Roberta Wohlstetter discussed this report with Admiral Long and has also been in touch with some of the people working on the problem of reinforcing and protecting our embassies and consulates.

The Long report came to the following conclusions:

1. (U) The FBI report on the use of explosive-activated bottle bombs in the April 18, 1983 bombing of the U.S. Embassy in Beirut, the technique subsequently used on the Marines, stayed within FBI, CIA and INR (State Department) channels. There was no distribution to or within DOD. Thus, information on this new and deadly technique was not available to the later victims.
2. (U) Tactical intelligence useful to battalion-level in combat was excellent, but was confined to that sort of activity.
3. (U) The Marines received volumes of intelligence information but none specific enough to provide warning.
4. (U) The Marine unit had no institutional process for the

fusion of intelligence disciplines into an all-source support mechanism.

5. (U) HUMINT was ineffective, being neither precise nor tailored to the needs of the Marine commander. This reflects the national problem stemming back to national decisions re HUMINT in the Carter administration of the CIA, and the earlier Nixon Doctrine which deemphasized U.S. involvement in overseas areas.

(U) There are basically two recommendations in the Long Report:

1. (U) SecDef should establish an all-source fusion center for U.S. commanders involved in areas of high threat, conflict or crisis.
2. (U) SecDef should establish a joint CIA/DOD examination of policy and resource alternatives to improve HUMINT support in Lebanon and other areas of potential conflict which might involve U.S. forces.

In addition, the Long Report noted that a study dated 23 July 1982 (weeks before the commitment of the Marines) warned that if the question of extra-legal armed presence were not settled before the commitment of multinational forces, no one should be surprised if such a force encountered intractable problems on the ground. The initial heroes' welcome accorded the Marines overshadowed the gradual shift to dislike and the emergence of a situation where important elements of the population came to view the Marines as a projection of one of the political elements jousting for power. Even without that shift, the presence of militant Iranians would have spelled trouble for any US target. But the nature of

the welcome tended to lull the US forces. It also appears, according to a classified report commissioned by Pan Heuristics from General William Knowlton (ret.), that confusion resulting from the change in EUCOM's intelligence function for the Beirut area may have been responsible for some failures in intelligence. And, of course, good intelligence is of the essence in combating terrorists.

The government has before it a number of recommendations for improving not only the special problem of locating and eliminating sources of terror in the Middle East (as long as it wants to keep its representatives in this area of fissiparous, querulous and mutually suspicious Arab states\*) but also for improving intelligence collection in general. Apparently there will be some attempt to improve HUMINT, since high altitude photography, no matter how marvelous its resolution, is not enough. And there is more sympathy with the Israeli policy of preemptive strikes against terrorists, providing the intelligence is deemed to be accurate. But Secretary Shultz urged great caution in this respect, commenting on the London incident, when a Libyan gunman inside the Libyan Embassy killed a policewoman and wounded 11 Libyan protesters.

With respect to point 3 above of the Long Report conclusions, the most difficult message to get across to the American public is that warnings do not come with specific times and places unless they are to serve merely the disruption of business or government routines--(for example, evacuation of buildings in order to locate the bomb). When the purpose is indiscriminate murder to call attention to some ideological cause, there are no holds barred if the ideology also includes the belief

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\*See Elie Kedourie, "Disastrous Years", Encounter, November 1984.



that death will mean martyrdom on earth and heaven in the after-life. This is what makes terror by Islamic fanatics especially difficult to counter.

For the American public, to say nothing of the American government, another confusion arises from the policy adopted by the Carter administration of forbidding assistance to foreign countries to fight "national" terrorism, which was linked to the fight for "freedom", and permitting aid only against movements recognized as "international terrorist movements". The Basque terrorist movement (ETA) has apparently graduated to the international category, although it would seem that a movement based in France and trained in part in Algeria would always have had obvious international connections. President Adolfo Suarez of Spain was deeply disappointed in the US refusal to grant him technical assistance (devices for electronic surveillance) in 1977-78 to combat terrorist threats to his rule, and finally concluded that the United States wanted him to fail and Spanish democracy to fail.

On this point, the draft by Wohlstetter and Virts states:

... nationalism, as everyone knows, has been a most powerful force in modern history at least since the late 18th century. However, the cliches about nationalism and self-determination which are offered as a justifying principle for any liberation movement by a minority cannot sustain examination. Application of the Wilsonian principle of self-determination for minorities frequently created states with new more virulent minority resentments. The cliches ignore the fact that ethnic, political and religious cultures do not separate naturally and neatly into viable nation states. They also ignore the fact that specific pieces of territory have often been occupied successively by a large sequence of different cultures that would now compete in their claims for dominance. In the Middle East, in particular, many territories are an extraordinary palimpsest of incompatible historic claims to sole dominance. Conceived as a stereotype, the problems of nationalities are frequently unsoluble. They are like a system of incompatible equations which can be satisfied only by a number which is both odd and even. They are, as mathematicians would say, "overdetermined." This is particularly

true of Armenian attempts to assert claims to eastern Turkey, since the Armenians have been a minority in every one of the Turkish provinces they claim. Even at the time Armenian nationalism got its start in the late 19th century, they did not constitute a majority in any of the "Armenian" provinces, and their claims, therefore, conflicted with claims of Turks in the area and the claims of the Kurds which themselves stretched a long way back in history.

Nationalist and liberation ardor was responsible in the 19th century as well as today for some of the worst atrocities and provoked the worst counter-atrocities. It is a striking thing that today many Western Protestant church groups and Catholic "liberation theologians" sponsor terrorists in the name of liberation. Western foreign ministries as well as members of the Western press are so far from taking as seriously wrong the deliberate destruction of civilians, that they are in the habit of repeating the old cliché "one man's terrorist is another man's freedom fighter" with disturbing frequency. The implication being that it is acceptable to kill civilians for the cause of national liberation.

(b) Assess Current Trends on International Oil Markets and Assess the Implications for Vulnerability to Gross Changes in the Political Control of Supply.

No activity. It is anticipated that the next progress report will include a brief description of research, limited in scope, which will be undertaken and completed by year's end. This work will represent the total program effort under Task 1(b).

TASK 2: US NUCLEAR STRATEGY FOR THE NEXT 20 YEARS

A principal activity of Pan during the period was to support the Nuclear Strategy Development Group (NSDG) organized by Dr. Iklé and earlier activities related to it. At Dr. Iklé's request, Fred Hoffman attended meetings of the group on July 31 and September 26. With assistance from others at Pan, he prepared a paper for Dr. Iklé's use prior to the July 31 meeting, and subsequently revised it to incorporate Dr. Iklé's comments. A copy of the revised version of the paper, Directions for the Development of Nuclear Strategy: 1990-2005, dated October 4, 1984 is

attached (ATTACHMENT 3). Dr. Iklé also requested that Hoffman brief the July 31 and October 13 meetings of the NSDG and that he prepare an outline of topics for the October 13 meeting. This outline, developed by Hoffman and Pan staff members, NSDG: Structure and Issues, dated October 5, 1984 is attached (ATTACHMENT 4). Copies of the briefing charts and briefing notes, dated July 31 and October 11, respectively, prepared for these briefings are also attached (ATTACHMENTS 5 and 6).

Albert Wohlstetter, Fred Hoffman, Paul Kozemchak, Richard Brody and Gregory Jones and others at Pan provided assistance to the HSDG Phase I analysis of intermediate US defense options for Europe and CONUS. Kozemchak participated in a NSDG Working Group meeting and NSDG games.

Hoffman visited Europe to present a paper on SDI at the annual conference of the International Institute of Strategic Studies. At the request of the National Security Advisor to the President, he met during the visit with a number of officials of the United Kingdom and France for informal discussions of SDI. Subsequent to his visit, Hoffman prepared a memorandum (ATTACHMENT 7) to Dr. Iklé and Mr. Fortier reporting on the highlights of those discussions.

At Dr. Iklé's request, Kozemchak reviewed alternative ASAT agreements. At Dr. Richard Perle's request, he assisted in the development of advanced cruise missile guidance programs.

During this period, Kozemchak participated in a JCS exercise on SDI, in a three day conference of the SDIO/AIAA (American Institute of Aeronautics and Astronautics) and in DOE/Los Alamos National Laboratory Conferences on SDI.

Richard Brody drafted a paper entitled "Limited BMD and Limited Nuclear Options." This paper examines the effectiveness of intermediate defenses (i.e., less than leak-proof ones) on limited nuclear options. Two points emerged of particular importance. First, limited nuclear options are likely to focus on theater forces ("OMT" to use SIOP terminology) as a principal target set. As compared to silos, the canonical counter-force target, these tend to be relatively soft and non-redundant. As compared to war-supporting industry, they tend to be more separated from large population areas. They are neither so individually valuable that a few leakers can't be tolerated, nor so redundant that preferential defense of a small proportion is a real option.

Second, limited nuclear options are likely to be spread over time. This raises problems of precursor attacks, spoiling counter-attacks, and the feasibility of employing shoot-look-shoot tactics.

Brody also wrote a sensitive paper entitled "ICBM Launch Policy: 1974-1984" for Fred Iklé and Richard Perle in connection with NSAG considerations.

Henry Rowen and others at Pan concentrated on NATO military options for decreasing the likelihood that the Non-Soviet Warsaw Pact forces (NSWP) would cooperate fully with Moscow in a war with NATO and for exploiting any defections by these forces. Two areas under investigation have been the implications for ground force operations and for NSWP air defenses.

Regarding ground forces, the key question is how important are the NSWP forces to Moscow in the Central Region? What are the implications for the Pact if some combination of the Polish, Czech and/or East German

forces do not participate because they refuse or are not trusted by the Soviets? Another case is NSWP participation but only in rear area functions. In general, limited or no NSWP participation appears to pose serious difficulties for the Soviets. In an attack with a short preparation time, which assumes little if any reinforcement from the Soviet Union, the Soviets have less than one-half of the ground units in place in the Pact although, because they have better equipment, this ratio underestimates this combat potential. Moreover, the Czechoslovak zone may present an important weakness if the Czech Army is not involved. There would have been little time for Soviet reinforcements and SACEUR might undertake an early counter-offensive.

Aside from the balance at the FLOT, disaffection in the NSWP countries could disrupt transportation essential for Soviet reinforcements and supplies. It appears that a delay of 48 hours, or even less, in the WP LOC might have a marked effect on the outcome for a short preparation time attack.

On the WP air defense system, work so far suggests that NSWP defections could produce a major reduction in the effectiveness of this system. It is largely manned by non-Soviet personnel and the performance of air defense systems is highly sensitive to the quality of the information passed within it. Although it is too early to estimate how much those systems might degrade as the result of NSWP defection and sabotage, it appears likely that they would be seriously hurt.

Following the meeting of the European-American Institute at Ditchley Park in May, there have been extensive discussions of these ideas within the US Government and with officials and others in Europe. A parallel

work program has also been undertaken by the Arroyo Center of the Jet Propulsion Laboratory under Army Support. Some related work is also being done at the National Defense University. This work is being closely coordinated with the Pan effort.

Among the people with whom this work has been discussed during this period are the following:

Defense Department: Undersecretary Fred Iklé, Assistant Secretary Richard Perle, Army Assistant Chief of Staff of Intelligence William Odom, Director of Net Assessment Andrew Marshall, and Members of the Defense Science Board.

State Department: Secretary Shultz, Assistant Secretary Burt, Deputy Assistant Secretary Palmer.

CIA: Director Casey, Deputy Director Gates, National Intelligence Officer General Atkeson.

NSC Staff: Donald Fortier

In Europe, contacts include the German Defense Minister Worner, State Secretary Meyer-Landrut of the Foreign Ministry, Inspector General Altenberg of the Army, and General Shultze, former Commander of Ground Forces in the Central region; in Britain, Malcolm McIntosh, Advisor on Soviet matters to the Prime Minister.

Marcy Agmon examined the military impact of resistance movements in World War II Europe. She will continue to assess the effects that neutrality or resistance can have on the outcome of battle or on the prosecution of the war in general. She will also look at the conditions under which resistance groups are likely to have a useful effect.

Brian Chow has been studying the desirability of a keep-out-zone (KOZ) provision in a US/USSR ASAT-arms agreement. A comprehensive ASAT ban does not necessarily enhance the survivability of our satellites because it would severely hinder our ability to develop active defense, which should be a critical component of our satellite survivability program. At the same time, the Soviets could continue to develop their ASAT weapons covertly or in a manner that does not violate the letter of a comprehensive ban. In truth, such developed weapons might not be as sophisticated as those that could have been developed under a no-ban environment. But they could be more than adequate to destroy our satellites which would not be protected by an effective active defense. Also, a comprehensive ban would eliminate, as intended, at least the space-based weapons which might constitute a component of the ballistic missile defense.

In the planning and implementation of satellite mission survivability, there has been an underemphasis on the threats of space mines and ASAT launching platforms that could be pre-positioned precariously close to our critical satellites during peacetime and crisis. Such pre-positioning would enable the Soviets to mount simultaneous attacks, with little or no warning, on those of our satellites and backups that serve critical military missions. There is no defense, short of attacking these ASAT systems first. This creates a highly unstable and dangerous situation. A KOZ would provide the badly needed warning of a potential attack to the defender and, thus, improve stability by reducing the overwhelming advantage of the offender. The survivability of an individual satellite is improved because the warning time can be used to activate passive and active satellite defenses. So is the survivability of a critical satel-

lite's mission because the offender will no longer have high confidence that multiple attacks can destroy all of the targeted satellites and their backups. Even in those incidents in which the offender succeeds in interrupting the continuity of a mission performance, the time gap is reduced. Moreover, the additional warning time generated by the KOZ allows us to better prepare to counter a terrestrial attack that could follow the ASAT attack. The planned responses on the ground, in the air, and at sea, could be carried out with higher confidence, and some additional useful actions could be taken.

Gregory Jones continued his work on the dual criterion for targeting. He prepared the input data and evaluated the results for computer runs of fairly large attacks; the calculations were performed for PAN by the Navy. The results, however, are preliminary for the population data base that was employed was not detailed enough to give us sufficiently accurate estimates of civilian fatalities for attacks where urban population was avoided.

The main cases that were performed are a red on blue attack on army bases, and space launch facilities in CONUS using SS-11's, SS-18's or SS-24's as the attacking system; and a red on blue attack on nuclear weapons storage sites in NATO Europe using SS-22's, SS-23's or SS-20's as the attacking system.

Zivia Wurtele has been working on the formulation of models of defense-offense interactions in a multi-layered defense. The terminal layer in this defense is assumed to be preferential. Initial, very preliminary, runs have been obtained to date.



Craig Hartsell has been studying the offensive and defensive uncertainties that affect assessment of ballistic missile defenses.

**TASK 3: AMBIGUOUS WARNING (IMPLICATIONS FOR NATO STRATEGY)**

Richard Brody has been investigating the adequacy of the consideration of the problems in response to ambiguous warning with recent NATO reinforcement planning. Of particular concern appears to be the nominal scheme for prioritization of reinforcement under ambiguous circumstances and the coordination of NATO and US unilateral planning for reinforcement in response to ambiguous warning.

Related to this has been continuing support to ISP/INF on planning for NATO nuclear forces, particularly as it relates to considerations of ambiguous warning. This support was begun at the direction of Richard Perle.

Marcy Agmon has been updating Pan's data base on current Soviet aircraft capabilities in order to re-evaluate their potential for escort of transport aircraft in Persian Gulf contingencies. She is studying current US capabilities to meet this threat by means of carriers and by means of land-based aircraft.

**TASK 4: NEUTRALITY IMPROVING STRATEGIES**

Henry Rowen's work described in Task 2 above also falls under this category.

**TASK 5: COST-IMPROVING STRATEGIES**

No activity.

DISSENT IN SOVIET ARMENIA

Nancy Virts

While Armenians in the diaspora continue to loudly protest alleged violations of the rights of Armenians living in Turkey and of Armenians on trial in the West for acts of terrorism, they largely ignore the fate of Armenians living in the Socialist Soviet Republic of Armenia now in prison both for their participation in the human rights movement and for advocating an independent Armenia. It is more than a little ironic that a major Armenian newspaper like the Armenian Weekly which cannot say enough in behalf of those striving to create an independent Armenia out of land now a part of Turkey, even when the result is violent, is virtually silent when Armenians in the Soviet Union are imprisoned because they advocate independence for that part of historic Armenia now under Soviet domination. And it is almost beyond belief that ASALA can describe a state where Armenians advocating the causes of basic human rights and independent Armenia are imprisoned and tortured as "already liberated."

## Dissent in Soviet Armenia

Armenians are in prison in the Soviet Union both for their participation in the human rights movement and for advocating independence for Soviet Armenia. In April of 1977, a Helsinki Accords Monitoring Group was established in Soviet Armenia. Later that year the group released two statements calling for the preservation of Armenian as the official language of the Republic, ~~and~~ the release of all political prisoners, and

specifically protesting the imprisonment of Armenian dissidents and the unwarranted psychiatric treatment of political prisoners. Soviet authorities arrested the signers of these statements, including the three leaders of the group, almost immediately. They received prison sentences ranging from one to five years followed by internal exile. This was not an isolated act of persecution. In 1983 a Soviet Armenian literary scholar was sentenced to 10 years in prison and internal exile for compiling an underground journal on human rights and giving a graveside speech at the burial of a dissident Russian poet.

Not only are Soviet Armenians in prison for protesting human rights violations, but also for advocating the creation of an independent Armenian state. In 1963, Soviet Armenians formed the "Union of Young Armenians" which became the "National Unity Party" (NUP) in 1966. The aim of this organization was to establish an independent Armenia composed of Soviet Armenia and Armenian lands occupied by Turkey. Leaders of the NUP called for a UN supervised national referendum to allow Armenians to choose between the current communist regime and an independent homeland. Their claim was based on article 72 of the Soviet constitution which states "each Union Republic of the USSR has the right to freely secede from the USSR." According to some estimates as many as 200 Armenian Nationalists, including all the leaders and members of the NUP, have been arrested by Soviet authorities. Nationalists have received harsh sentences of up to 12 years in prison and internal exile for such crimes as writing nationalistic poetry and essays on national minorities.

The only incident of violence by an Armenian group in the Soviet Union occurred on January 8, 1977 when a bomb planted in a Moscow subway

train exploded killing up to thirty people. Soviet officials eventually arrested five Armenians in connection with the bombing. Two of those were apprehended while attempting to plant another bomb at the Kursk Railway Terminal in Moscow. One of those arrested was Stephan Zatikian, a known member of the NVP. He and two associates were found guilty of the bombing, and were executed in January 1979.

#### Response of the Armenian Community Outside of the Soviet Union

While both members of Armenian terrorist groups and members of the traditional Armenian community are aware of the situation in the Soviet Union, neither as a group has spoken up strongly against it. ASALA's apparent comment on the execution of Zatikian and his associates, "we protest the execution of Armenian patriots in the USSR who don't oppose the Soviet State", leaves their position unclear. It seems unlikely that ASALA actually meant to protest the execution of a member of a party advocating the liberation of a piece of territory ASALA considers already "liberated". However, a little known Armenian group did bomb the Soviet Information Office in Paris in February of 1980 "in memory of the three Armenian patriots shot in Moscow on January 3, 1979". Although this group, the New Armenian Resistance (NAR), has not been heard from since October 1980, there was some evidence of cooperation between them and ASALA. However, there is no evidence that Moscow's execution of Armenian terrorists has made any impact on ASALA's support of the Soviet Union. Given ASALA's commitment to Marxist-Leninism this is not surprising.

However, even the reaction of the Armenian community in the diaspora to human rights violations in Soviet Armenia has been lukewarm at best.

While Armenian newspapers are filled with articles describing the trials of Armenians accused of terrorist actions against Turkish interests in great detail and urging their readership to contribute defense funds set up in behalf of the accused, discussion of the trials of Soviet Armenians is limited. And the tone of what discussion there is is very restrained. When two Armenians in Yugoslavia were tried and convicted of assassinating a Turkish diplomat in Belgrade, articles in the Armenian Weekly strongly denounced violations of their rights which allegedly took place during their trial. The same paper published scores of articles eulogizing as martyrs to the Armenian cause the five Armenian terrorists who blew up themselves, the wife of a Turkish official and a Portuguese policeman while attempting to take over the Turkish embassy in Lisbon during the summer of 1983. However, on the recent release from prison of Soviet Armenian Paruym Hairikian, founder of the NUP, after almost 15 years of imprisonment Armenian Weekly's only comment was his release was "long overdue."

The following conclusion of one of the few articles in the Armenian press on the fate of Armenian dissidents in the Soviet Union is well justified, if somewhat weak:

"The Armenian media in the diaspora does not provide adequate coverage on the arrests, trials and prison conditions of these dissidents. In our enthusiasm and pride in the remarkable achievements of Soviet Armenia, we need not ignore the sad fact that there are scores of young Armenians who are languishing in Soviet jails for committing no crime other than writing an essay on human rights or a patriotic poem. The most elemental civil rights of these people continues to be violated without a word of protest from the West."

The last statement is not entirely correct. Amnesty International has adopted many Soviet Armenian dissidents as prisoners of conscience. Six

economists from Princeton protested the imprisonment of Eduard Arutyunyan, an economist who was one of the leaders of the Armenian Helsinki Monitoring Group, in a letter to the New York Times. However, there is no organized campaign within the Armenian community to aid these dissidents. It seems ironic that diaspora Armenians should concentrate so much energy on coercing Turkey into admitting the existence of an alledged violation of human rights over sixty years in the past while almost ignoring violations of the rights of Armenians taking place in the Soviet Union today.

Many Armenians are inclined to view the Soviet Union in a charitable light because they perceive that Armenians have suffered far less at the hands of the Russians than the Turks. However, what Armenians in the diaspora fail to perceive is that the Soviet Union, like its predecessor the Russian Empire, supports Armenian nationalism only to the extent it furthers Soviet interests, no further. The supression of Armenian nationalism within the Soviet Union should make it clear that Soviet interests do not include an independent Armenia either in the present SSR of Armenia or in historic Armenia now a part of Turkey.

That the realization has been lost on many diaspora Armenians is even more amazing in light of the fact that Soviet Armenian officials have consistently declined to support peaceful Armenian efforts against Turkey. In an interview with the Christian Science Monitor, a Soviet Armenian Foreign Affairs officer explained:

"Soviet Armenians would like to see this [peaceful efforts against Turkey], but foreign policy must be made in Moscow, not in Armenia. Steps against Turkey, a NATO member, would involve our overall relations with NATO and the need to maintain world peace."

And Soviet Armenian communist leaders have also harshly criticized the Armenian Revolutionary Federation (ARF or Dashnak Party), the major Armenian Political Party in the diaspora, for its "counter-revolutionary nationalistic ideology." In an address reproduced in the official organ of Soviet Armenia, on July 15, 1983, the Secretary General of the Armenian Republic stated:

"We should improve our relations with the Armenian Diaspora, embarking actively on projects which will expand and strengthen our activities with progressive organizations, which support the pacifist policy of the Soviet Union and actively contribute to its propaganda. We appreciate the attitude of these organizations but we should not forget the fact that the Armenian Diaspora is not a homogeneous entity. There are organizations which are hostile to us and are agents of imperialism. The ARF comes on that front."

It has been suggested in ARF publication that this recent criticism was the result of increased nationalism among young Soviet Armenians. It certainly was not prompted by an outpouring of support for imprisoned Soviet Armenian dissidents from ARF supporters in the West.

While the ARF has been strongly anti-communist in the past, recently it has adopted a conciliatory attitude towards the Soviet Union. One example is its reaction to statements of the Soviet Armenian dissidents denouncing the Soviet Union. After her release from prison one dissident, who was convicted of "hooliganism" on the grounds that she "talked loudly" during the trial of another dissident wrote a personal letter to the Soviet president seeking permission to emigrate. In the letter she wrote:

"Even ones native land can be hateful when tyranny and callousness prevail...to carry out this difficult task I will stop at nothing since henceforth my living in the USSR is deprived of all meaning."

Another group of dissidents on the last day of their trial asked a Soviet judge to send a telegram to Ronald Reagan "expressing the hope that he will remain faithful to his promises." The article describing the plight

of these dissidents, labeled these incidents as "desperate and "self-incriminating" moves resulting from frustration. Quite a far cry from the praise accorded to those engaged in terrorism against Turkey. The article, which goes on to suggest that Armenians join with Amnesty International groups in a letter writing campaign to free the prisoners, is careful to say "What is advocated here is not the drumming up of anti-Soviet or even anti-communist hysteria." Rather timid talk from an "agent of imperialism."

Pointing out what should be a rather obvious point, that the Soviet Union does not now (and never has) perceived an independent Armenia on its border as consistent with its own interests, does not imply that the Soviets have no interests in supporting Armenian terrorism. Although relations between Turkey and the Soviet Union are friendly on a superficial level, there is ample evidence that the Soviets provided the resources which made possible the large scale campaign of domestic terror within Turkey ended by the 1980 coup. Armenian terrorism is an attempt to destabilize Turkey by disrupting its foreign relations. The Soviets clearly view the destabilization of Turkey as within their interests, even if they are unwilling to tolerate an independent Armenia on their border.

Recently the Soviet Union has been supporting the Armenian cause more openly. In an interview reported in the Christian Science Monitor on December 28, 1982, an Armenian Foreign Affairs officer commented on the Armenian terrorist campaign against Turkey that "These actions are both wrong and ineffective, but we can understand the frustrations and conditions which motivate them." In the past, Soviet officials have avoided the issue or condemned terrorism more strongly. At least one



specialist on Soviet Armenia, Professor Vanaku N. Dadrian of the State University of New York at Geneseo, claims that the new statements indicate that the Soviet Union is hinting at increased support of Armenian grievances to warn Turkey against to close a relation with NATO. Soviet support of Armenian grievances still appears to be on the rise. When a new Armenian monument was dedicated in Paris in April 1984, the head of the Echmiadzin Church in the Soviet Armenian Republic attended the ceremony. Turkish officials felt compelled to protest the ceremony to France and express their regret and indignation to the Soviet Union over the presence of the Soviet clergyman at the ceremony.

Armenian Terrorist Activity in Iran

Nancy Virts  
July 20, 1984

Recently there has been an alarming upsurge in Armenian terrorist activity in Iran. Late in March 1984, terrorists carried out a series of attacks on Turkish diplomats in Tehran which left one terrorist dead and two Turkish diplomats seriously wounded. In the first incident, a terrorist was killed on the night of March 27, 1984 when the bomb he was placing in the car of the Turkish deputy commercial attaché exploded prematurely. The next morning, terrorists shot First Sargeant Ismail Pamukau, the deputy military attaché and First Secretary Hasan Sevet Oktem, in separate attacks which occurred almost simultaneously as the victims were leaving for work. According to reports in Turkish papers, terrorists were also apprehended in front of the house of yet another embassy official the same day. Later in the day, the Armenian Secret Army for the Liberation of Armenia (ASALA) claimed responsibility for the attacks in a phone call to the Agence France-Press (AFP) office in Tehran. A day later, the same caller telephoned the AFP office to threaten all governments aiding Turkey and all airlines flying to Turkey stating that they would be subject to ASALA's attack. This threat was repeated on April 10 during another phone call to the same office. The caller also warned Turkish Prime Minister Ozal against making a visit to Iran scheduled for the end of April.

On April 28, 1984, on the day Ozal arrived in Iran, Armenian terrorists shot and critically wounded a Turkish businessman while he and his wife, an embassy employee, were driving to work. In a call claiming

responsibility for the incident, an ASALA spokesman again threatened Mr. Ozal. Fortunately, the Turkish Prime Minister's visit to Iran was completed without further incident. However, given the serious nature of these attacks, an inquiry into what prompted them seems to be in order.

This is not the first time ASALA has operated in Iran. Within a six month period in 1981 there were five incidents of Armenian terrorism in Iran. The first incident, in June 1981, involved the bombing of the Swiss Air offices in Tehran. It was followed by the bombing of the Swiss Embassy in September and the bombings of the Air France office and French Embassy in November. These four bombings were part of larger ASALA campaigns designed to blackmail the French and Swiss governments into treating captured ASALA members leniently. The 1981 terrorist incidents culminated with an attempted takeover of the Turkish Embassy in Tehran in December. During the takeover attempt, two guards were killed and two terrorists were captured and later executed. Since this time, no major incidents of Armenian terrorism have been reported in Iran until the recent attacks. However, in late July 1983, in the wake of a series of attacks by Armenian terrorists in Europe that left 15 people dead in a two week period, the Orly group of ASALA threatened to attack the French Embassy in Iran with rockets within 48 hours unless France released 21 Armenians held in French prisons. Fortunately, the attack failed to materialize.

While ASALA has been active in Iran in the past, the number of ASALA operations carried out there have been small compared to the number of incidents in Western European countries. (For example, from 1973 to July of 1982, there have been five incidents of Armenian terrorism in Iran

compared to 33 in France, 25 in Switzerland and 20 in Italy.) In addition, the majority of incidents have taken place within a relatively short period of time and were claimed by subgroups of ASALA against the interests of a particular government in various parts of the world. Even though Iran has executed Armenian terrorists in the past and will likely to the same with those terrorists captured in connection with the latest series of attacks, ASALA has not publicly attacked institutions of the Iranian government in the same way it launched attacks against the governments of France and Switzerland when those governments failed its members. This does not suggest a continuous and strong ASALA operation in Iran.

Thus although Iran has a sizable Armenian community with a long history, it remains unclear how much popular support ASALA has there. What is clear from ASALA's various publications is that the leadership of the Dashnak Party in Iran has actively opposed ASALA, both under the Shah and the present Islamic government. Not only do a number of articles in ASALA's publication Armenia accuse the Dashnak leadership of Iran of being bourgeois, and cooperating with the CIA and the Shah in their drive to turn Armenian villagers into "serfs of Western imperialism" and similar political crimes, but they specifically accuse the Dashnak leadership of "destroying our newspapers, pamphlets and posters and effacing our graffiti from the walls," as well as denouncing ASALA members to the Savak under the Shah, the CIA, and the Khomeini government. If ASALA had the support of the Armenian community in Iran to the degree that it does in Western countries like France, it seems unlikely that it would feel the need to launch such virulent attacks against the traditional Armenian

leadership.

Not only does it seem likely that ASALA enjoys limited support in the Iranian Armenian community, but the Khomeini government, in spite of its own involvement in terrorism, has been openly hostile to Armenian terrorists. Those terrorists caught during the December 1981 attack on the Turkish Embassy in Tehran were executed. After the March 1984 attacks on Turkish diplomats in Iran, the Iranian ambassador to Turkey stated "these people [Armenian terrorists] will not be allowed to escape with light punishments. Their heads will undoubtedly be crushed." In contrast with Western governments that associate acts of Armenian terrorism exclusively with the alleged 1915 genocide, the Iranian ambassador stated unequivocally that the aim of Armenian terrorists and their supporters was to disrupt Iranian-Turkish relations and preserve an unstable situation in the Middle East more than it was to further the Armenian cause.

In this instance, it appears the Iranian government has been able to do what many Western governments have not, that is, recognize that Armenian terrorism has a great potential to disrupt its own foreign relations and take prompt, if somewhat extreme, steps to minimize this damage. In spite of its own involvement with terrorism (or perhaps because of it), the Iranian government has little patience with terrorists who do not further its own interests.

However, the question of what prompted a sudden upsurge of obviously well-planned and coordinated attacks on Turkish diplomats in a country with a repressive government openly hostile to Armenian terrorists and an Armenian community not known for its enthusiastic support of ASALA remains. The timing of the attacks strongly implies that they were

connected with the increasingly close relations between Turkey and Iran. At the time of the first series of attacks, a delegation from Iran's Foreign Ministry was in Ankara. And the second attack coincided with the visit of a high level Turkish political and economic delegation led by Prime Minister Turgut Ozal to Iran.

Both Turkey and Iran have repeatedly called for improved relations between Islamic countries. Trade between the two countries has increased dramatically in recent years. As a result of agreements signed during Mr. Ozal's visit to Iran, the volume of trade between the two countries is expected to rise to between 2 and 3 billion dollars. Also, recent cooperation between Turkey and Iran has not been limited to economic matters. According to the Economist, Turkey is aiding Iran in its operations against the Kurds by refusing to allow them to cross the border into Turkey. According to a report broadcast on the clandestine radio station, National Voice of Iran in Persia, Turkish planes attacked the Kurds on Iranian soil during the spring of 1984, with the permission of the Iranian government.

This cooperation has not gone unnoticed either in the West or East.

The Economist began its article in the following manner:

Old alliances never die...the Baghdad Pact is alive and living along Turkey's eastern frontier, not the border with the Soviet Union, of course, but the stretch with Iran and Iraq. For the first time these three countries, which were briefly linked in the mid-1950s, are cooperating with the Turks as the middleman, to crush the independence struggle of the Kurdish people who straddle their border lands.

However, evidently the Soviet Union is not so sure that alliances are not being formed on its border. An Iranian newspaper reported that according to a Soviet radio broadcast, "Iran, with closer relations with

Pakistan and Turkey was trying to revive the CENTO Pact." The Soviet press has also criticized Iran for its arrest of members of the Communist Tudeh Party, and its support of rebel forces in Afghanistan.

In addition to Soviet expressions of unease at Iran's closer relations with Turkey, the various clandestine radio stations in Iran have broadcast similar statements. According to one broadcast in February 1984:

...rulers of the Islamic Government of Iran are continuing their declarations of amity and brotherhood with Turkey's American regime and it is through this anti-national and coupist regime that they are getting as close as possible to America and NATO.

In another broadcast criticizing Turkish-Iranian cooperation against the Kurds, Turkey was described as "entirely dependent on world-devouring U.S. imperialism."

While none of these statements provide any evidence that the Soviet Union was directly connected with Armenian terrorists' attacks on Turkish diplomats in Iran, they do demonstrate that Moscow does not perceive cooperation between Iran and Turkey as in its own interests. The question remains whether ASALA could have pulled off such a complicated series of attacks within a country with as hostile an environment as Iran without outside assistance. As usual, there is no smoking gun to implicate the Soviet Union, but given the Soviet Union's interest in preventing close ties between countries on its border, such as Iran and Turkey, and the fact that these attacks took place at a time when relations between the Soviet Union and Iran were bad, the circumstantial evidence for Soviet involvement is there.

October 4, 1984

DRAFTDIRECTIONS FOR THE DEVELOPMENT OF NUCLEAR STRATEGY: 1990-2005

## PAN HEURISTICS WORKING HYPOTHESES

PREFACE

The following material was presented to the NSDG in the Pan Heuristics briefing at the meeting on July 31, 1984. More recent Pan Heuristics work will be summarized separately at the October 13 meeting. The material that follows constitute working hypotheses, intended to guide further Pan Heuristics investigation and quantitative analysis and do not reflect, at this stage, firm Pan Heuristics conclusions.

I. MAJOR STRATEGIC PREMISES

1. Our base case assumption is that the form of US Alliance relations remains unchanged, but we note the need to test conclusions for sensitivity to possible changes. Specifically, the US will continue to extend guarantees against attack, including both nuclear and nonnuclear attack, to both nuclear and nonnuclear major allies.
2. The US will continue to press for stronger Western conventional capabilities, with greater contributions from NATO countries and Japan. To meet the growing Soviet capabilities for force projection and access to remote areas, the US will place greater relative emphasis than in the past on increasing the flexibility of our own capabilities for conventional conflict with Soviet proxies or the SU in various theaters outside the boundaries of NATO, with or without the participation of NATO or Japan.



3. The US and NATO theater nuclear posture will increasingly focus on the deterrence of Soviet use of theater nuclear weapons; the Western threat to initiate large scale use (at the level of MAD's) of nuclear weapons to avoid conventional defeat will continue to diminish in credibility, public acceptability and consistency with US national interest. This will result from increasingly large, flexible and invulnerable Soviet nuclear forces. In the absence of radical changes in the nuclear balance, public anxieties about consequences of large scale nuclear war will continue to mount in the West, exacerbated by concerns over global effects such as nuclear winter. The Soviet Union will continue to play on Western anxieties, seeking to employ the prospect of arms control agreements to inhibit improvements in Western military posture, especially in qualitative improvements in our posture. The credibility of US nuclear guarantees will depend increasingly on the efficacy of limited nuclear responses in the near term (through 1995) and, beyond that time, on the potential of a mix of limited nuclear offensive response and defenses against long range attack.

## II. COUNTERFORCE ATTACKS AND VULNERABILITY OF NUCLEAR FORCES

1. At least until fixed-base ballistic missiles are no longer a significant part of the nuclear forces or substantial BMD have been installed (i.e., until after 1995), missiles on both sides will be subject to heavy pre-launch attrition in the absence of launch under attack tactics as a response to massive attacks (see below, page 6). Increasing precision in long range attack systems can be expected to result in high Pk for a single arriving warhead of modest (in some cases, nonnuclear)

yield against fixed, known targets, but not against very hard, deeply buried targets.

2. Submarines in port, non-alert bombers, land-mobile missiles prior to dispersal and their home bases and major support facilities will be destroyed in a counterforce attack at least until deployment of a substantial and widespread BMD. Endurance of bombers beyond the initial phases of a counterforce attack will depend on proliferation, dispersal, redundancy or defense of fixed support facilities.

3. Even under relatively unfavorable outcomes of initial counterforce attacks, and in the absence of launch under attack tactics, each side can count on retaining hundreds or thousands of deliverable warheads in the form of SLBM warheads at sea, after sustaining the initial attack. SLCMs and, depending on the ability to secure warning of SLBM and SLCM attack, weapons in alert bombers, may add substantially to the total.

4. Combinations of hardening, moveability, and deceptive basing in combination with a widespread, non-dedicated BMD can provide land-based long range missiles with very high leverage against attack by ballistic missiles after 1995. Candidates for such basing would be Midgetman or smaller ballistic missiles and long range cruise missiles.

5. The most serious problem of assuring response to counterforce attacks is that of assuring the ability to target remaining forces in a manner that will deny Soviet attack objectives, threaten Soviet power and political control over its empire, reduce Soviet incentives and ability to damage the West, and will contribute to terminating the conflict. An enduring and capable C<sup>3</sup>I system is essential for making appropriate responses to likely Soviet attacks. This problem is intensified by

growing asymmetries between the vulnerability of C<sup>3</sup>I in the SU and the West.

6. Soviet spokesmen and some Western strategic discussions refer to the possibility of launch under attack as a contribution to deterrence of counterforce attacks. US policy should definitively and publicly reject launch under attack as a Western tactic and a basis for force planning. It raises serious problems and the purpose served is unclear. The primary problem is the incompatibility of launch under attack with national interests under a wide variety of circumstances of nuclear attack. It is doubtful that the warheads so launched in the event of attack could be targeted in a manner consistent with overall Western employment policy (including the maintenance of control over the escalation process). It is also doubtful that the additional weight of US retaliatory attack (given the other surviving warheads referred to above) would make a major contribution to Western survival. Its credibility in contributing to deterrence is questionable because of the inability to insure a timely Presidential decision. Launch under attack would also undermine stability and the coherence of our alliances during a crisis and reduce long term public acceptance of our nuclear strategy. It greatly increases the prospects of disaster in the event of accidental or unauthorized launches of nuclear attacks against us. Its inclusion, even tacitly, in US strategy would probably result in arrangements and operating procedures that would raise the risks of mistaken or unauthorized launch of US weapons, and it would undercut (as it has in the past) arguments to reduce the vulnerability and increase the flexibility of our forces.

### III. THE CONTEXT FOR ASSESSING FUTURE NUCLEAR POSTURES

1. Soviet incentives to execute a counterforce attack might arise from a belief they would otherwise be attacked imminently or a Soviet assessment that nuclear attacks appear to be a way to resolve in their favor a threatening conventional or regionally confined conflict situation.

2. Improvements in Western conventional capabilities strengthen deterrence overall. However, if we can defeat a conventional attack but have no response to a limited nuclear attack, the Soviets will have greater incentives to employ limited nuclear options in the event of imminent or actual conventional conflict. Or, if the Soviets mistakenly engage in a conventional attack which fails to achieve its objectives quickly, our lack of limited nuclear options would increase Soviet incentives to consider or threaten limited nuclear attacks if they seemed to promise early and decisive results for them. Splitting the Western coalition in crises or conflicts will be an important objective of Soviet threats or actual use of their military power. Soviet strategy appears to have recognized the importance of the development of flexible options, including the possibility of limited nuclear strikes. Certainly Soviet programs are developing increasing capabilities for such strikes. Prudent US strategy requires the ability to deter such strikes as well as plans to respond in the longer term (months or years) to crises that alter the form of Alliance relations or fundamentally change perceptions of the Soviet threat.

3. Deterrence of Soviet nuclear attacks that are limited in objectives, size, region or target classes attacked, will assume

increasing importance for the US as the flexibility of Soviet nuclear capabilities continues to increase. Deterrence of such attacks rests on US ability to deny Soviet achievement of their objectives in such contingencies by limited nuclear attacks and on our development of credible and militarily effective US responses to such attacks. US active and passive defenses can play a major role in the first; the development of effective and discriminating long range attack capabilities is required for the second. To avoid self-deterrence and undermining the credibility of Western offensive response, we need weapons and a targeting policy that respond effectively to limited nuclear attacks while minimizing collateral damage. In the development of forces and employment policies to meet this need, we must assess the relative importance of incremental contributions to large scale attack options against the flexibility to respond to limited Soviet attacks.

#### IV. THE ROLE OF ACTIVE DEFENSES

1. We should evaluate active defenses in the light of their possible contribution to deterring Soviet attack as well as in their contribution to defeating the Soviet attack and preserving as much as possible of our society in the event that deterrence fails. It is important to note, however, that the two tasks imply substantially different approaches to the treatment of uncertainty and the offense-defense interaction.

2. Much of the assessment of BMD in the West has ignored the role of active defenses in deterrence (except for their role in protecting our ICBM silos) and worse, has confined itself to a limited and unrealistic view of Soviet attack objectives. Such assessments measure defense performance in terms of the ability to ensure with high confidence the

survival of a large fraction of our cities and urban population in the event of a well-executed Soviet attack that has the primary objective of destroying as many civilians as possible. This criterion places the burden of uncertainty on the defense planner, requires an extremely high level of effectiveness, minimizes the operational flexibility of the defense and maximizes that of the offense.

3. In contrast, analysis of active defense should deal with a realistic consideration of the motives, objectives and plans of the attacker. It is clear that the highest priority attack goals for a Soviet attack planner assessing his capabilities, will be the destruction of Western military targets. His objectives are likely to take the form of destruction of specific, functionally-related subsets of targets in CONUS or theaters of operations. Depending on its purpose and size, the targets of an attack might include some or all of C<sup>3</sup>I, long range missile forces, bombers, their operating bases, reconstitution facilities, major units of general purpose forces prior to redeployment, force projection facilities, combat support facilities, and perhaps war-supporting industries.

4. In setting criteria for the success of an attack, the planner will have to take into account the redundancy of specific target subsets and their strategic importance as he determines the fraction he needs to destroy and his required confidence level. Where he must destroy a large fraction of a military target subset, the attack planner is denied the advantage of preferential targeting (an offensive option that contributes to the difficulty of the unrealistic assured survival defense objective). Where the attacker also requires high confidence, the uncertainties introduced by defenses require large increases in force allocations for

the achievement of attack goals. With given forces, this will contribute to the deterrence of attack. The favorable leverage afforded by such defenses will also powerfully influence the long term arms competition (see below page 9).

5. In assessments of attack outcomes, the offensive planner must make assumptions about the performance of the defenses and the offensive countermeasures--matters about which he is likely to be substantially uncertain unless he can reliably identify an Achilles heel in the system. To avoid failure in his highest priority attack objectives, with a given set of forces, the attacker will have to err on the side of overestimating defense effectiveness, which will require him to uncover lower priority targets. The inability of the attack planner to realize either the desired target coverage or the level of confidence available prior to defense deployment will contribute to deterrence of the attack.

6. If the SDI R&D program succeeds in developing ballistic missile defenses with the characteristics contemplated in the Defense Technology study, such defenses would increase the attacker's difficulties far more than the country-wide defenses considered before the ABM Treaty. Relevant characteristics include multi-layered defenses, greatly increased ability to discriminate decoys, moveable survivable components and greatly increased footprints for the terminal layer. The last two powerfully raise the leverage of the terminal layer when assessed against realistic Soviet attack objectives. They deny knowledge of the location of defense components, greatly increasing the difficulty of attacking the defenses themselves. Also, they permit the defense to exploit preferential defense tactics, giving it the "last move," by permitting both the physical

shifting of interceptor missiles and the preferential allocation of interceptors among targets within a given footprint.

7. The effect of introducing US active defenses on crisis stability depends on the prior level of vulnerability of offensive forces and C<sup>3</sup>I, the employment options available, the effect of the defenses on the pre-launch vulnerability of offensive forces and the vulnerability of the defenses themselves, as well as the ability of the defenses to deny attack objectives and protect US civilians. (In addition, of course, it depends on the SU posture, including its deployment of active defenses.) It should be a major force design objective to reduce the vulnerability of our offensive forces (see I. above) and to take advantage of the opportunities to do so offered by the introduction of defenses. The vulnerability of defenses themselves is a critical factor in the design and evaluation of our forces. The vulnerability of space-based, airborne, and fixed ground components are special concerns.

8. The ability of US defenses to reduce damage to civilians is unlikely to detract from stability. A widespread BMD deployment could reduce collateral damage to civilians in relatively likely types of SU attacks, while contributing to deterrence of such attacks by denying Soviet attack objectives. For realistic levels of defense effectiveness in initial deployments, however, massive nuclear attacks would still be vastly destructive and their outcomes highly uncertain from the US point of view. Soviet concerns about US initiation of preventive war are unlikely to be high. In any case, US incentives to initiate nuclear attacks would not be measurably increased by likely sorts of defense deployments and would be substantially below their levels at various times



in the past--times when Soviet policy appeared untroubled by the threat of US-initiated nuclear conflict. If the effectiveness of defenses increased over time, the Soviets would at no point be faced with a "use it or lose it" situation that might realistically lead them to initiate a conflict rather than pursue the options of improving their own posture.

#### V. THE ROLE OF PRECISION IN ATTACK SYSTEMS

1. Until the US and our allies deploy effective BMD in theaters of operation and CONUS, we will have to rely exclusively for deterrence on the development of less vulnerable, effective and selective long range offensive forces with suitable passive defenses, supported by appropriate C<sup>3</sup>I capabilities. To achieve the needed flexibility, such forces will require great precision and warheads designed for specific effects against particular types of targets rather than generalized destructiveness. Nonnuclear offensive weapons will assume an increasing role as a element of proportionate response to limited Soviet nuclear attacks. Flexibility in targeting, as well as endurance, will also increase in importance for this role.

2. As the Soviets continue to upgrade their air defenses and introduce ballistic missile defenses, the ability to penetrate those defenses will assume increasing importance, especially for limited offensive attacks. The effects of active and passive defenses deployable by the West or the SU on the prospects for limited attacks is particularly in need of analysis; the effects of a Soviet deployment on third country (French, UK, PRC) nuclear forces is also important.

VI. INCENTIVES IN THE LONG TERM COMPETITION

1. In the long term competition, the West would suffer a disadvantage in the event of a technology freeze leading to a purely quantitative competition. The superior Western technology base represents a potential counterweight to high and stable levels of Soviet arms production. If lags in Western incorporation of appropriate new technology into deployed weapons systems can be avoided, the West can maintain qualitative superiority. Apart from qualitative superiority, Western maintenance of a high rate of technical obsolescence (even if it is two-sided) can force higher long term costs on what would otherwise be a quantitatively superior Soviet military establishment.

2. Internal social, demographic and economic factors will intensify pressures on Soviet leadership to avoid the need for high replacement rates for their massive military forces. Their choices will be maintenance of an increasingly painful level of military spending, obsolescence of their forces, unilateral reductions in forces or agreed limitations on forces.

3. If US BMD can achieve high leverage against the Soviet offense as discussed above, it can constitute a fundamental influence on the nature of the long term military competition. It would provide incentives for the Soviets to seek other instruments than nuclear ballistic missiles for achieving their military objectives. Depending on the possibilities for air defenses, this might lead to greater relative emphasis on manned or unmanned aircraft. Or it might lead to a relative deemphasis of long range attack in the allocation of military resources. In any case, it is likely to reduce the absolute threat level from long range attack systems.

It would also fundamentally alter the prospects for reaching agreements on the control of nuclear offensive weapons, especially if it reduced the preeminent role of nuclear ballistic missiles in current military strategy. In addition, robust defenses could ease verification problems that are likely to grow in severity with the advent of small, possible mobile missiles, reducing sensitivity to the adversary's offensive force size.

October 5, 1984  
F. S. Hoffman

NSDG: STRUCTURE AND ISSUES

I. NEED FOR AN EVOLUTION OF NUCLEAR STRATEGY

A. Problems of Traditional Nuclear Strategy Given Soviet Buildup

1. Geopolitical asymmetries between East and West

Alliance guarantees in a coalition of independent states -- the political unsuitability of suicidal threats for the West

Western public opinion and nuclear antipathies

Western public demand for arms control and Soviet control over its supply

2. Prognosis for Alliance relations

Perceptions of threat and "divisible detente"

Divergence or convergence in "out-of-area" interests?

Alternative directions for Alliance relations

Atlantic partnership?

Directorate?

An aging status quo?

Implications for nuclear guarantees, general purpose force commitments

Role of French, U.K. nuclear forces

3. How respond to Soviet coercive use of nuclear power in peacetime, crises?

Against U.S. allies

Against unaligned countries, but involving key U.S. interests

Iran, Pakistan, China

4. Can West restore control over escalation in conflict with the SU?

Is flexible response still a feasible strategy for the West?

Soviet incentives to develop limited nuclear options

Need for Western responses

5. Is deterrence of Soviet MAO's suitably based and adequate?

Vulnerability of Western forces, C<sup>3</sup>I

LUA vs. rideout

Targeting for Western retaliatory responses - relation to Western interests in the event of Soviet attack

Diminishing feasibility of counterforce responses

Societal damage in the event of large scale nuclear attack:

Immediate collateral damage

Nuclear winter

B. Opportunities for Evolution of Nuclear Strategy

1. Potential for application of Western technology base

Improved nonnuclear forces

Better protected, more effective and discriminating nuclear offense

Defenses against long range attack systems (strategic and theater)

2. Potential relative advantages for West in qualitative vs quantitative competition

Reducing the need for massively destructive offensive nuclear stockpiles

Prudence

Political suitability

Cost-imposing strategies

Accelerating the obsolescence of massive SU military investments

Opportunities for leverage on future SU investments through application of the superior Western technological base

Soviet incentives for limiting nuclear stockpiles

## 3. Internal tensions within the U.S.S.R. and the satellites

Opportunity and threat

Implications for selective nuclear capabilities and targeting

II. TIME HORIZON AND OPTIONS FOR NSDG

What weight in U.S. plans to quantitative competition, qualitative improvement?

1990: Effects of Programmed Modernization

1995: New Offensive Missiles, Basing Systems, Intermediate BMD IOC

Reduced missile size &amp; basing flexibility

Extreme precision, improved warheads, range, stealth in cruise missiles

Improved ballistic missile accuracy

Terminal defense layer in theaters &amp; maybe CONUS

Increased capacity, hardening & redundancy in C<sup>3</sup>I

2000: Elimination of ICBM Vulnerability, Robust Intermediate BMD

Widespread 1, 2 or 2 1/2 layer BMD in CONUS &amp; Theaters

"Untargetable" missiles, reconstitutable bombers

Effective offensive capability with minimum collateral damage  
vs fixed undefended target, extremely precise ballistic  
missilesCapable, survivable C<sup>3</sup>I

2005 +: Full, Multilayered BMD System

Relative prospects: air and missile defense

Incentives: employment policy, force structure, arms agreements

Stability: transition vs "end point"

## Force Structure Issues

Major shifts in emphases? Offense, defense, flexibility

Numbers, composition: Growth, replacement, modernization

Relative quality: cep, lethality, measure-countermeasure

competition between offense and defense including stealth, new  
lethal mechanisms, one-time capabilities

Employment Policy, C<sup>3</sup>I Issues

Role of preplanned vs adaptive strike planning

Adaptation of targeting to specific contingencies

Adaptation of targeting to different conditions of warning

Implications for targeting Soviet general purpose forces,  
C<sup>3</sup>I, strategic forces

Role of nonnuclear weapons in strategic strike planning

LUA vs. Rideout

III. CRITERIA FOR ASSESSMENT OF ALTERNATIVES: CRITICAL ISSUES

Ability to respond to Soviet attacks in the absence of strategic warning

Soviet incentives and targeting in such attacks

Ability to ride out Soviet counterforce attacks and respond in conformity with U.S. policy and interests

Ability to limit damage to U.S. and Allies

Ability to protect U.S and allied interests in post-attack situation: reserve forces

Performance of U.S. alternatives in situations originating in crises or limited conflicts

Need to establish context in form of contingency trees

Focus on role of long range nuclear attacks at critical decision points

Incentives motivating possible attacks

Objectives of alternative strategic attacks under assumed circumstances -- targeting implied

Attacker's ability to achieve objectives at various levels of violence

The dual criterion

Strategic denial through defenses

Credibility, adequacy and suitability of adversary's retaliatory response

The dual criterion

Likelihood of attack, given virtual conflict outcomes -- strength of deterrence

Consequences of attack if deterrence fails

Direct damage to each side

Incentives for further escalation, termination

Suitability of alternatives to U.S. political objectives in crises, conflicts

Maintaining Alliance cohesion

Inducing neutrality in Soviet satellites

Selectivity and controllability of U.S. response

Threatening Soviet control as incentive to war termination

Targeting Soviet connectivity, political control apparatus, general purpose forces, nuclear reserve forces

Effects of U.S. alternatives on long term military competition

Political and economic viability in maintaining a favorable military balance

Leverage in imposing costs on Soviets

Incentives for Soviets to reduce the destructive potential of their military posture

Possible contributions of arms agreements

Growing verification problems for agreements limiting size of offensive forces

Possible role of active defenses in increasing tolerability of verification uncertainties

Ambiguities and compliance problems in agreements imposing qualitative constraints on forces

e.g. ABM Treaty



IV. THE ROLE OF EFFECTIVE AND DISCRIMINATING OFFENSIVE FORCES

A. Maintenance of deterrence against nuclear attack must continue to rest exclusively on offensive systems until at least mid-1990's

B. Principal issues

Vulnerability of weapons, C<sup>3</sup>I

Suitability to future missions

Effectiveness under dual criterion

Adaptability to use in diversity of likely contingencies

Targeting process

Capability for LNO's in presence of Soviet defenses

The dual criterion and the requirement for precision

C. The dual criterion and offensive force tradeoffs

Attack effectiveness, collateral damage and requirements for numbers

The critical importance of extreme precision

Effects against diverse targets

V. THE ROLE OF ACTIVE DEFENSES

A. How good must defenses be to be useful?

Less-than-leakproof defenses can strengthen deterrence

Deny Soviet confidence in achieving large scale attack objectives vs. C<sup>3</sup>I, nuclear offensive force targets, general purpose force targets

Deny low-warning precursor attacks

Deny achievement of limited but crucial objectives with small forces

Reduce incentives to rely on LUA

Less-Than-Leakproof Defenses Can Protect People if Soviets Attack

If Soviet attack objectives give priority to military targets, capable but not leakproof defenses can reduce collateral damage

to civilians by:

Forcing concentration of Soviet forces on high priority targets

Preferentially defending against missiles that would inflict particularly high collateral damage

Less-Than-Leakproof defenses can exert high leverage against Soviet force planners

Soviet force planners will have to make conservative assumptions about defense effectiveness

Capabilities for high confidence of high effectiveness against military targets can be made infeasibly expensive

They will diminish the military utility of long range offensive forces, particularly massively destructive ones like SS-18s

#### B. How Effective Can Defenses Be?

The vulnerability of defenses to direct attack is a major uncertainty

Most serious for defense components in low earth orbit

Requirement for a full, sophisticated, multi-layered system is driven by assumptions that:

Must approach leakproof capability

Must contend with a fully responsive Soviet offensive threat

Utility of less-than-leakproof defenses addressed under [A] above

Note that large parts of Soviet forces will be similar to present forces for decades to come.

Soviet forces will not totally change character quickly

Intermediate options therefore useful

CONUS terminal layer

CONUS terminal plus mid-course or terminal plus early boost phase

Defense against theater missiles

Such defenses jointly defend diverse military targets and population

[ADDED ON 10/6 AFTER 10/5 TRANSMISSION TO FCI]  
 C. Soviet offense-U.S. defense interaction

Short term

Effects of defenses on allocation and effectiveness of given offensive forces

Parametric analysis for various levels and compositions of offense and defense, characterization of offense objectives

Joint effectiveness of defenses in strategic denial, reduction in collateral damage to civilians

Long term

Defense leverage -- marginal exchange ratios

Parametric analysis for various assumptions about attack objectives, measure/countermeasure competition, burden of uncertainties, preferential defense possibilities, vulnerability and redundancy of military target system

Joint effectiveness of defenses in strategic denial, reduction in collateral damage to civilians

VI. TWO-SIDED OFFENSE-DEFENSE INTERACTION

The requirements for eliminating Soviet confidence in disarming attacks

The unlikelihood of intense Soviet concerns for U.S. disarming attacks

LNO's

Prospects for maintaining deterrence of Soviet LNO's

Prospects for maintaining U.S. escalation control via LNO's

VII. SPECIAL ISSUES

What deters Soviet attack?

Relation to crisis/conflict context

Strategic denial

The nature of Soviet attack objectives

What target sets?

Required effectiveness and confidence levels

Offensive threats

Military power base, political control apparatus,  
nomenklatura

Economic targets

Civil population

# **PRESENTATION OUTLINE**

**ISSUES & APPROACH**

**PAN HEURISTICS TASKS**

**COMPLEMENTARY WORK REQUIRED**

## LONG-TERM NUCLEAR STRATEGY: WHY ADDRESS NOW?

- PROBLEMS: SUITABILITY OF TRADITIONAL STRATEGY GIVEN SOVIET BUILDUP

- FEASIBILITY OF COUNTERFORCE RESPONSE TO SOVIET COUNTERFORCE STRIKE
- FEASIBILITY OF U.S. EFFORTS TO MATCH OR RESTRAIN SOVIET BUILDUP
- WHO CONTROLS ESCALATION?: MC 14/2 AND FLEXIBLE RESPONSE

- OPPORTUNITIES: TECHNOLOGY AND THE TERMS OF THE STRATEGIC COMPETITION

- WESTERN TECHNOLOGY BASE
- SOVIET VULNERABILITIES

## BASE CASE STRATEGIC PREMISES

- ALLIANCE GUARANTEES
- INCREASED RELATIVE EMPHASIS ON FLEXIBILITY OF U.S. FORCE DEPLOYMENT
- INCREASED RELATIVE EMPHASIS ON DETERRENCE OF SOVIET TNF USE
- CONTINUED PRESSURE BY SOVIET UNION ON WESTERN EFFORTS TO IMPROVE MILITARY POSTURE

## APPROACH TO STRATEGIC NUCLEAR ASSESSMENT

### ● TIME HORIZONS AND OPTIONS

- 1990: EFFECTS OF PROGRAMMED MODERNIZATION
- 1995: NEW OFFENSIVE MISSILES, BASING SYSTEMS, INTERMEDIATE BMD IOC
- 2000: ELIMINATION OF ICBM VULNERABILITY, ROBUST INTERMEDIATE BMD
- 2005+: FULL, MULTILAYERED BMD SYSTEM

### ● THREAT

- FORCE STRUCTURE
- EMPLOYMENT POLICY AND C<sup>3</sup>I

### ● DEFINITION OF ALTERNATIVES

### ● CRITERIA FOR ASSESSMENT OF ALTERNATIVES: CRITICAL ISSUES

- ABILITY TO RIDE OUT COUNTERFORCE ATTACKS
- ABILITY TO DETER WIDE RANGE OF ATTACKS
  - STRATEGIC DENIAL, CREDIBLE AND EFFECTIVE RESPONSE



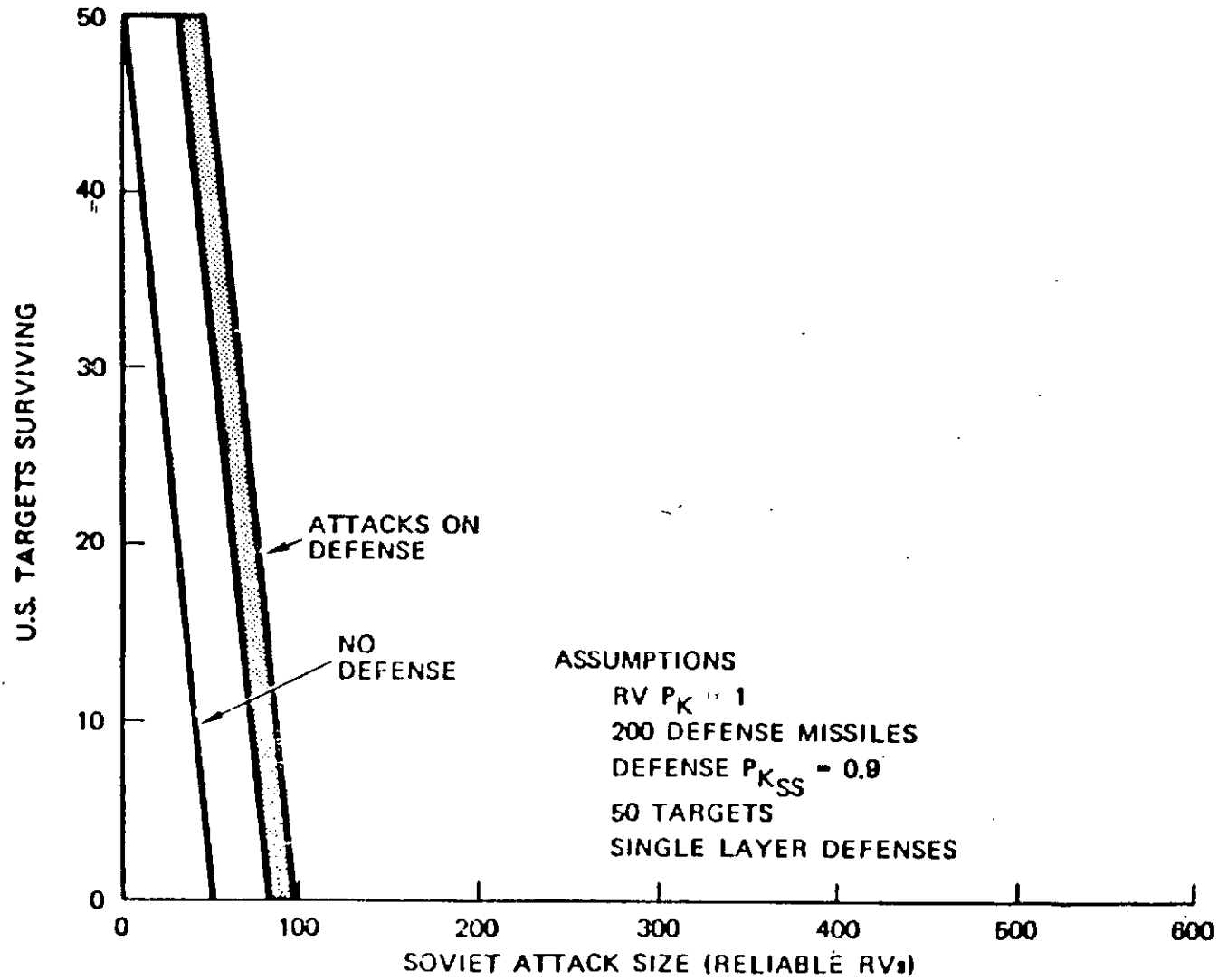
## COUNTERFORCE ATTACKS AND VULNERABILITY OF STRATEGIC FORCES

- FIXED-BASE MISSILES AND OTHER POINT TARGETS INCREASINGLY VULNERABLE
  - PRECISION vs HARDENING
  - ACTIVE DEFENSE, DECEPTIVE BASING MAY REVERSE TREND
  
- ENDURING ABILITY TO RIDE OUT ATTACK
  - DEPENDS ON ACTIVE DEFENSE, REDUNDANCY OF FIXED FACILITIES
  
- EMPLOYMENT ISSUES
  - MOST PROBABLE OUTCOME
    - LARGE FORCES SURVIVE ON BOTH SIDES
    - HOW EMPLOY OURS?
  - DEVELOP SELECTIVE TARGETING OBJECTIVES
  - SUPPORTING C<sup>3</sup>I REQUIREMENTS
  - EXPLICIT REJECTION OF LAUNCH UNDER ATTACK

## ROLE OF ACTIVE DEFENSES

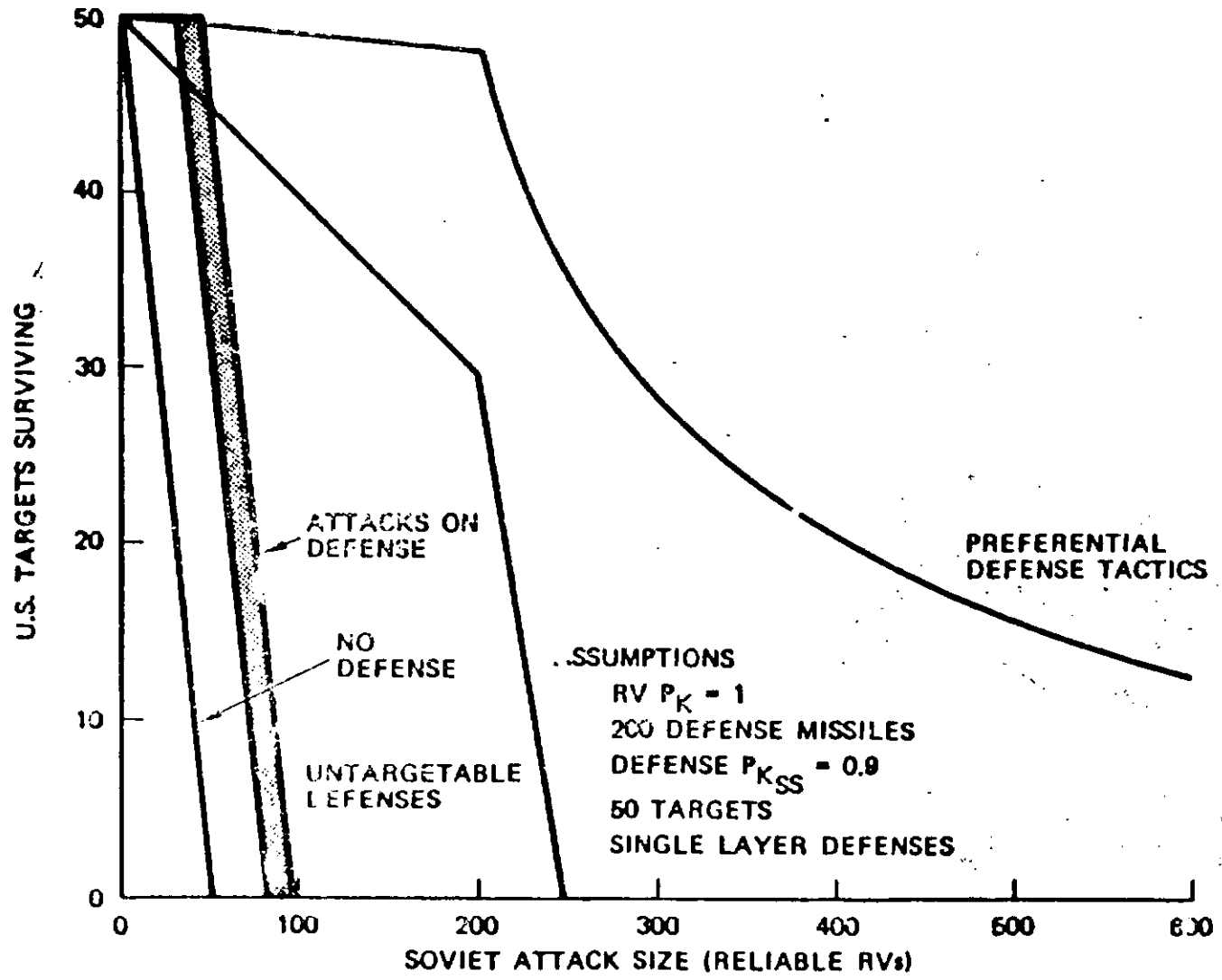
- DEFENSES FOR DETERRENCE vs DEFENSES FOR DAMAGE LIMITING
- ASSURED SURVIVAL
  - UNREALISTIC ATTACKER'S OBJECTIVES
  - DEFENDER'S OBJECTIVES: HIGH CONFIDENCE OF HIGH PERFORMANCE
- DEFENSES FOR DETERRENCE
  - STRATEGIC DENIAL
  - SOVIET ATTACK OBJECTIVES
  - ATTACKER'S CONFIDENCE AND DETERRENCE: THE BURDEN OF UNCERTAINTY
  - MILITARY TARGETS, SDI DEFENSE CHARACTERISTICS AND "THE LAST MOVE"
- ACHILLES' HEELS, COUNTERMEASURES
  - VULNERABILITY OF DEFENSES TO DIRECT ATTACK
  - PENETRATION AIDS
- DEFENSES, DETERRENCE AND LEVERAGE
  - IMPACT ON LONG-TERM COMPETITION
  - BALLISTIC MISSILE DEFENSE AND AIR DEFENSE

EFFECT OF U.S. TERMINAL BMD CHARACTERISTICS  
TARGETABLE DEFENSES



EFFECT OF U.S. TERMINAL BMD CHARACTERISTICS

TARGETABLE DEFENSES  
UNTARGETABLE DEFENSES  
DEFENSE HAS "LAST MOVE"

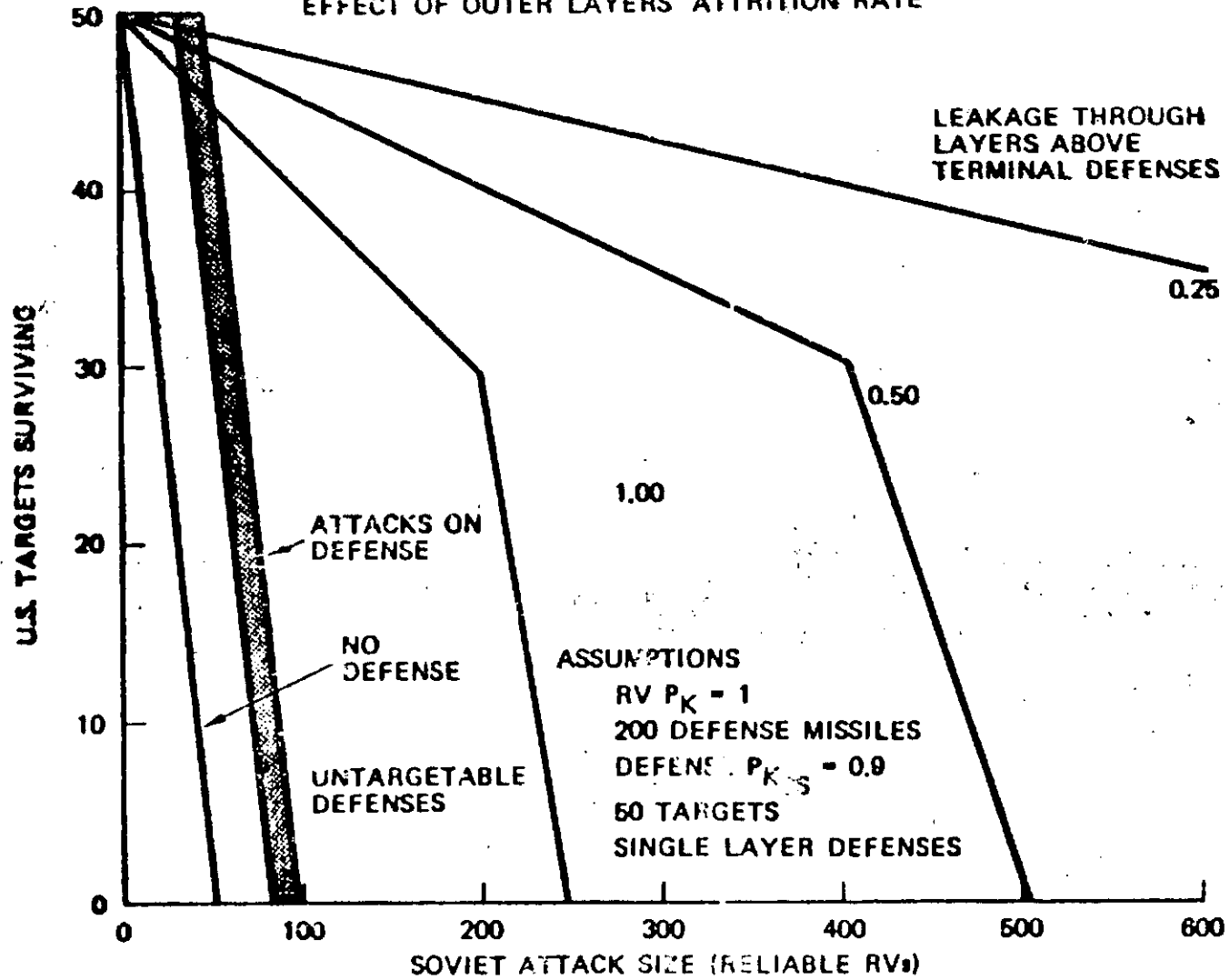


# EFFECT OF U.S. TERMINAL BMD CHARACTERISTICS

TARGETABLE DEFENSES

UNTARGETABLE DEFENSES

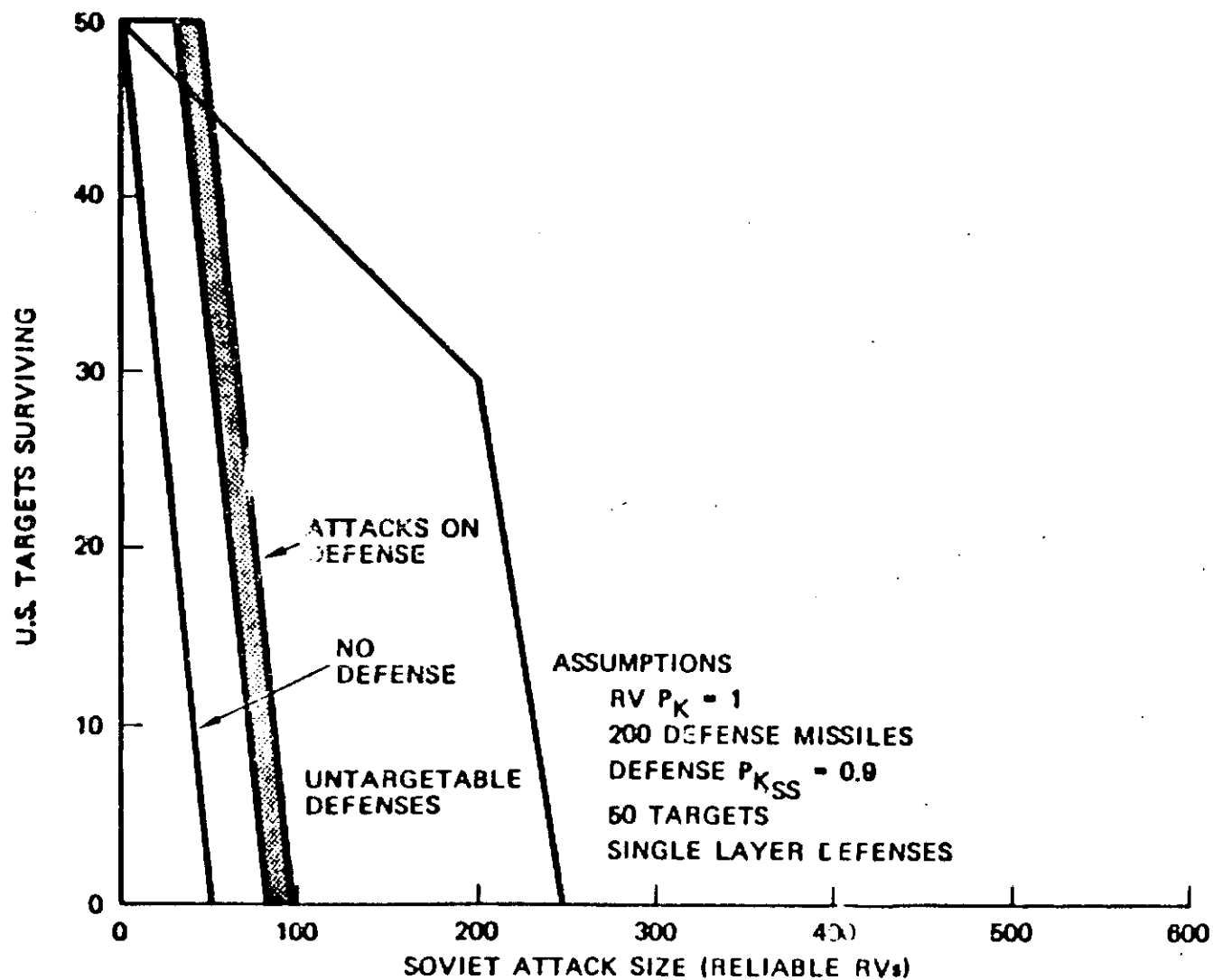
## EFFECT OF OUTER LAYERS' ATTRITION RATE



EFFECT OF U.S. TERMINAL BMD CHARACTERISTICS

TARGETABLE DEFENSES

UNTARGETABLE DEFENSES



## THE ROLE OF PRECISE AND DISCRIMINATE ATTACK SYSTEM

- MILITARY EFFECTIVENESS, COLLATERAL DAMAGE AND SELF-DETERRENCE

- PRECISION, LETHALITY AND EFFECTIVENESS
- COLLATERAL DAMAGE AND RESTRAINT OF ESCALATION
- ABILITY TO DISCRIMINATE AND STRATEGIC OBJECTIVES

- PRECISE AND DISCRIMINATING OFFENSE AND SOVIET DEFENSES

- STEALTH AND PENETRATION AIDS
- EFFECTS ON COLLATERAL DAMAGE
- EFFECTS ON LNO's

## CAN WE CONTROL THE INCENTIVES IN THE STRATEGIC COMPETITION?

- QUALITATIVE vs QUANTITATIVE
- STRATEGIC DENIAL AND SELECTIVE THREATS vs WIDESPREAD DESTRUCTION
- ACTIVE DEFENSES: LONG-TERM INCENTIVES
- ARMS AGREEMENTS



# **PAN HEURISTICS TASKS**

**DEFINITION OF ALTERNATIVES**

**CONTINGENCY DEVELOPMENT**

**ASSESSMENT OF CONFLICT OUTCOMES**

**ASSESSMENT OF LONG TERM INCENTIVES**

# COMPLEMENTARY WORK REQUIRED

TECHNICAL/OPERATIONAL ANALYSES

FORCE STRUCTURE ALTERNATIVES & TRADEOFFS

GENERIC TARGET ANALYSIS

LARGE SCALE ATTACK MODELS

ALLIANCE FUTURES

7/31 SRG

LONG TERM NUCLEAR STRATEGY: WHY ADDRESS NOW?

PROBLEMS: SUITABILITY OF TRADITIONAL STRATEGY GIVEN SOVIET BUILDUP

FEASIBILITY OF COUNTERFORCE RESPONSE TO SU COUNTERFORCE STRIKE

FEASIBILITY OF U.S. EFFORTS TO MATCH OR RESTRAIN SOVIET BUILDUP

- East-West Asymmetries
- Nuclear antipathies

WHO CONTROLS ESCALATION?: MC 14/2 & FLEXIBLE RESPONSE

- Credibility of destructive threats
- Presupposition of Western advantage in escalation

OPPORTUNITIES: TECHNOLOGY AND THE TERMS OF THE STRATEGIC COMPETITION

WESTERN TECHNOLOGY BASE

- Sensors, information processing
- Effective & discrim lethal mechanisms: Nonnuclear, DEW, nuclear

SOVIET VULNERABILITIES

- National & ethnic strains: East Europe & USSR
- Unfavorable economic, social, demographic trends

7/31 SR6

CAN WE CONTROL THE EMPHASES IN THE STRATEGIC COMPETITION?

QUALITATIVE VS QUANTITATIVE

Can we restrain Soviet improvement or only slow down our own?  
Should we even if we could? Forced obsolescence

STRATEGIC DENIAL & SELECTIVE THREATS VS WIDESPREAD DESTRUCTION

Defense; effective & focussed offense  
Acceptability to West: Coalition, democracy

ACTIVE DEFENSES: LONG TERM INCENTIVES

ARMS AGREEMENTS

7/31 SRG

APPROACH TO STRATEGIC NUCLEAR ASSESSMENTTIME HORIZONS & OPTIONS

1990: EFFECTS OF PROGRAMMED MODERNIZATION

1995: NEW OFFENSIVE MISSILES, BASING SYSTEMS, INTERMEDIATE BMD IOC

Reduced missile size & basing flexibility  
 Extreme precision, impr w/heads, range, stealth in cruise msls  
 Improved ballistic missile accuracy  
 Terminal defense layer in theaters & maybe CONUS  
 Increased capacity (?), hardening & redundancy in C3I

2000: ELIMINATION OF ICBM VULNERABILITY, ROBUST INTERMEDIATE BMD

Widespread 1, 2 or 2 1/2 layer BMD in CONUS & Theaters  
 "Untargetable" missiles, reconstitutible bombers  
 Effective offensive capability with minimum collateral damage  
     vs fixed undef tgts: extremely precise ballistic msls  
 Capable, survivable C3I

2005 +: FULL, MULTILAYERED BMD SYSTEM

Relative prospects: air and missile defense  
 Incentives: employment policy, force structure, arms agreements  
 Stability: transition vs "end point"

THREATFORCE STRUCTURE

Major shifts in emphases? Offense, defense, flexibility  
 Numbers, composition: Growth, replacement, modernization  
 Rel. quality: cep, lethality, defs & chrmas to defs, to stealth

EMPLOYMENT POLICY & C IDEFINITION OF ALTERNATIVES

Major emphases: see above

7/31 SRG

PAN HEURISTICS APPROACH TO STRATEGIC NUCLEAR ASSESSMENT: CONT'D.

CRITERIA FOR ASSESSMENT OF ALTERNATIVES: CRITICAL ISSUES

Assessments embedded in realistic contingencies  
Criteria developed from working hypotheses

ABILITY TO RIDE OUT COUNTERFORCE ATTACKS

Crisis stability

ABILITY TO DETER WIDE RANGE OF ATTACKS

Strategic denial through defenses

Credible, proportionate & effective offensive response

Escalation control

Political objectives: induce neutrality in E. Europeans

Long term: high SSPk induce more stable SU posture

Now examine Pan Heuristics working hypotheses

7/31 SRG

BASE CASE STRATEGIC PREMISES

Test for sensitivity

ALLIANCE GUARANTEES

Continued guarantee: nucl & nonnucl allies vs nucl & nonnucl attack

INCREASED RELATIVE EMPHASIS ON FLEXIBILITY OF U.S FORCE DEPLOYMENT

Conventional and supporting nuclear

INCREASED RELATIVE EMPHASIS ON DETERRENCE OF SU INF USE

Diminishing emphasis on U.S./NATO initiation

Mil balance & public anxieties

CONTINUED PRESSURE BY SU ON WESTERN EFFORTS TO IMPROVE MILITARY POSTURE

Threats

Negotiations

7/31 SRG

COUNTERFORCE ATTACKS & VULNERABILITY OF STRATEGIC FORCES

Counterforce refers to all long range nuclear forces

FIXED-BASE MISSILES & OTHER POINT TARGETS INCREASINGLY VULNERABLE

## PRECISION VS HARDENING

Precision will maintain high SSPK

## ACTIVE DEFENSE, DECEPTIVE BASING MAY REVERSE TREND

Advantages of smaller missiles  
Counterforce terms of exchange may become prohibitive

ENDURING ABILITY TO RIDE OUT ATTACK

DEPENDS ON ACTIVE DEFENSE, REDUNDANCY OF FIXED FACILITIES

3

C I, bombers, ICBM & SLBM support

EMPLOYMENT ISSUES

## MOST PROBABLE OUTCOME

LARGE FORCES SURVIVE ON BOTH SIDES

HOW EMPLOY OURS?

Objectives: Deny Soviet attack objectives  
Threaten Soviet power & control  
Reduce Soviet incentives & ability to damage  
Terminate conflict

## DEVELOP SELECTIVE TARGETING OBJECTIVES

3

SUPPORTING C I REQUIREMENTS

EXPLICIT REJECTION OF LAUNCH UNDER ATTACK

LUA consistency with overall empl policies incl esc control?  
Future validity of empl assumpts re SU attack  
CSI reqd to distinguish in timely fashion  
Incremental contribution of additional weight of attack to survy?  
Credibility of Presidential response: any contrib to deterrence?  
Crisis stability & coherence of alliance  
Effects on likelihood of mistaken, unauthorized launch  
Undercuts arguments to reduce vulnerability, incr flex.



ROLE OF ACTIVE DEFENSES

DEFENSES FOR DETERRENCE VS DEFENSES FOR DAMAGE LIMITING

Typically assessed as though contributed only if deterrence failed

Implications aggravated by adoption of "assured survival" goal

ASSURED SURVIVAL

UNREALISTIC ATTACKER'S OBJECTIVES

DEFENDER'S OBJECTIVES: HIGH CONFIDENCE OF HIGH PERFORMANCE

The burden of uncertainty

City attacks and preferential offense: "last move"

DEFENSES FOR DETERRENCE

STRATEGIC DENIAL

Implies defeating actual offensive plans

SOVIET ATTACK OBJECTIVES

Arise out of conflict contingencies

Priority to specific military objectives: functionally related target sets: e.g. C3I, ICBMs, bomber bases, major g.p. force uts before redeployment, force projection fac., combat support fac.

Redundancy & offensive objectives: Interactive design by defense

ATTACKER'S CONFIDENCE & DETERRENCE: THE BURDEN OF UNCERTAINTY

MILITARY TARGETS, SDI DEFENSE CHARACTERISTICS & "THE LAST MOVE"

Attacker's need to destroy high fraction

Defender's need to protect a small fraction

Non-targetable defense

Moveability and large footprints

ROLE OF ACTIVE DEFENSES: CONTINUED

ACHILLE'S HEELS, COUNTERMEASURES

VULNERABILITY OF DEFENSES TO DIRECT ATTACK

PENETRATION AIDS

DEFENSES, DETERRENCE & LEVERAGE

IMPACT ON LONG TERM COMPETITION

BALLISTIC MISSILE DEFENSE & AIR DEFENSE

THE ROLE OF PRECISE & DISCRIMINATE ATTACK SYSTEMS

MILITARY EFFECTIVENESS, COLLATERAL DAMAGE & SELF-DETERRENCE

PRECISION, LETHALITY & EFFECTIVENESS

Extremely precise missiles, specifically tailored warheads vs large yield

Numbers required: Implications for targeting: functional analysis, critical nodes

Collateral damage as bonus: shock & recovery

Uncertainty & retribution

But collateral damage now overwhelmingly negative

COLLATERAL DAMAGE AND RESTRAINT OF ESCALATION

Dual criterion: max mil eff subj to constr on coll damage

ABILITY TO DISCRIMINATE AND STRATEGIC OBJECTIVES

Political vs military C I

Inducements to neutrality in prosecuting war

PRECISE & DISCRIMINATING OFFENSE & SOVIET DEFENSES

STEALTH & PENETRATION AIDS

EFFECTS ON COLLATERAL DAMAGE

Dual criterion harder to satisfy: Importance of precision

EFFECTS ON LNO'S

INCENTIVES IN THE LONG TERM COMPETITION

WESTERN QUALITY VS. SOVIET NUMBERS

CAN TECHNOLOGY COUNTERWEIGHT NUMERICAL SUPERIORITY

Lags in the incorporation of technology

A COST-IMPOSING STRATEGY OF FORCED OBSOLESCENCE

DEFENSES & INCENTIVES TO SHIFT EMPHASES

BALLISTIC VS AIR OFFENSE

OFFENSE VS DEFENSE

NUCLEAR VS CONVENTIONAL

INCENTIVES TO LIMIT NUMBERS

OBSOLESCENCE

INTERNAL STRAINS

ARMS AGREEMENT INCENTIVES

Defenses and verification problems

10/11/84

NOTES FOR: MAJOR ISSUES OF NUCLEAR STRATEGY

WHAT DETERS SOVIET AGGRESSION

Need for credible response under varying contingencies

Denial and discriminate response vs indiscriminate destruction

Need to understand Soviet attack objectives, outcome assessment

Can we threaten Soviet military power and control without indiscriminate destruction of civilians?

POSSIBILITIES FOR DAMAGE-LIMITING

What combination of measures :

Counterforce

Active and passived defense

Intra-war deterrence

Assumptions about Soviet attack objectives

RESTRAINING THE COST AND DESTRUCTIVENESS OF NUCLEAR WEAPONS STOCKS

Qualitative vs. quantitative competition

Cost imposing strategies: forced obsolescence

Reducing destructiveness of U.S. forces

Arms agreements vs. influencing Soviet unilateral incentives

FORCE EMPLOYMENT ISSUES

Maintaining incentives against indiscriminate Soviet attack

(the role of LNO's

LNO's in future Soviet strategy:

Soviet flexibility increasing

MAO's too destructive

If NATO conventional strength increases, SU will need LNO's

Deterring Soviet LNO's

U.S. LNO's and extended deterrence

Future defense effectiveness

Avoiding reliance on LUA: ACCIDENTS, CONTROL OF ESCALATION

U.S. responses to large scale attack

Warning, response to warning and targeting (general purpose forces)

FORCE STRUCTURE ISSUES

Reducing vulnerability of military targets to long range attack

Maintaining discriminate capability to attack military targets

Need for enduring capability

Forces

3

C I

The role of active defenses

Strategic denial

Limiting damage

NOTES FOR: A CONTINGENCY TREE

BRANCH POINTS AT MAJOR DECISIONS

SHOWS ALTERNATIVES: ILLUSTRATIVE IN CHART

CAN: ACCEPT (NO RESPONSE), COUNTER, ESCALATE (BY JUMPS ALSO)

LIKELIHOOD OF ALTERNATIVES NOT FIXED, BUT DEPENDS ON:

Current situation and future threat

Relative anticipated outcomes

Anticipations of subsequent moves

DECISIONS BASED ON ANTICIPATED OUTCOMES :

"VIRTUAL" WARS

Bad outcome means -- Don't go! DETERRENCE HOLDS

CONTINGENCY TREE LINKS THEATER, STRATEGIC ISSUES

Avoids "context-free" academic analysis of strategic issues

Relates motives for attack to concrete objectives, problems

NOTES 2 ON: CONTINGENCY TREE

ALTERNATIVES ON CHART ARE ILLUSTRATIVE OF POSSIBILITIES

Chart alternates SU, U.S. "moves"

Assumes U.S. capability for intervention has improved by 1990

(a) Soviet win in Iran with nonnuclear

RATIONALE

CVBG's important early

Air cover for establishment of CENTCOM forces

Air cover for SLOC's

Intercept SU airlift (if any)

SU uses nucs to eliminate early and with hi conf

Importance of MOB attacks to kill SNA, as U.S. response

Survival of remaining naval forces incl CVBG's if any

Protection of SLOC's

Chart shows several SU responses

NOW CONSIDER POSSIBLE OUTCOMES, BEGINNING WITH MOB ATTACK



NOTES FOR: U.S. ATTACKS ON 42 MOBILE

ILLUSTRATES LARGE DIFFERENCES RESULTING FROM VARIATIONS IN YIELD OF A115

A factor of 3 in # bombs reduces collateral damage by a factor of 13

Further reductions possible by excluding a small number of targets

(Data base not adequate to estimate)

## NOTES FOR: SOVIET LNO VS NATO

SU RESPONSE MIGHT BE TO ATTACK NATO EUROPE: Less risky, split Alliance

TURKISH BASES A THREAT TO SU OPERATIONS IN SWG

U.S. FORCES IN EUROPE MAY BECOME REINFORCEMENTS

SU MAY ANTICIPATE SPREADING

HAVE CONSIDERED VARIOUS ATTACKS: SHOW TWO

First is on flanks

Second a set of critical targets in AFCENT: Major MOB'S + TNF storage sites

Moderate to severe damage criteria

SMALL FORCE LEVELS HAVE HI EFFECTIVENESS

COLLATERAL DAMAGE HI BUT FAR FROM CATASTROPHIC: Much left to lose

BUT ALSO SHOW EFFECTS OF INTRODUCING DEFENSES

ATBM may be earliest application of SDI technologies

1 or 2 layer with AO and exo homing overlay interceptor

More engagement time for late midcourse or terminal than for ICBM

Less deployment time for pen aids

Offense conservatism -- SSPK = 0.8

DEFENSE CAN DRIVE UP FORCE REQUIREMENTS FOR LNO

Preferential defense gives favorable leverage

Denies achievement of attack objectives

EFFECT ON COLLATERAL DAMAGE

Available model won't handle

In uniform defense, # penetrators very small: 10 coll dam

In pref def, depends on degree of collocation, ht of burst -- IF ATTACK IS MADE: BUT UNLIKELY GIVEN OUTCOME

NOTES FOR: SOVIET LNO vs U.S.

TREE SUGGESTS SEVERAL SU RESPONSES

Not all mutually exclusive

e.g. LNO on CONUS as well as on NATO

NOW CONSIDER LNO ON CONUSE

Sovs might wish to prevent reinforcement of CENTCOM engaged forces

Attack on 54 major Army, Marine ground force bases, TAC, MAC bases

Under other circs, obj may be C I, warning, threat assessment

1995, UNDEFENDED: SMALL FORCES GIVE HI EFFECTIVENESS

SUBSTANTIAL COLLATERAL DAMAGE, BUT SMALL RELATIVELY: Much more to lose

DEFENSES AGAIN DENY ACHIEVEMENT WITH LIMITED FORCES

Terminal endo interceptor + AOS or 2 layer system

No leverage with uniform defense, but high protection vs coll dam

Pref defense gains leverage but gives up prot vs coll dam --

IF ATTACK IS MADE -- BUT UNLIKELY GIVEN RESULTS

Motives for LNO

Minimize warning

Significant results with small force expenditure

Limited risk of escalation

All defeated by having to increase forces

NOTES FOR: LARGE COUNTERMILITARY ATTACK ON CONUS

1995, UNDEFENDED

High effectiveness vs both silos and OMT

BUT HI COLL DAM BECAUSE OF HI SS24 YIELD VS OMT

NO FALLOUT CALCS: WOULD SU USE LOW AIRBURST?

2000, UNDEFENDED

IF SOVS WANT TO AVOID, USE COMBINATION OF NEW 1 & 2,

NEW 2 REDUCES COLLATERAL DAMAGE AND GETS 80% OF OMT

COULD MAKE IT UP WITH #'S

2000, DEFENDED CASES

SDI TERMINAL DEFENSE WITH HI INTERCEPTOR INVENTORIES

OFFENSE CAN'T ACHIEVE HI EFFECTIVENESS

Preferential defense of silos raises offensive force reqmts

13K def msls vs 20K off msls at 70% of silos

If attack reqmts 80%, def leverage increases: 11K vs 20K

Modest level deceptive basing increases more: 8K vs 20K

And marginal leverage favorable too

Even more so at lower force levels

EFFECT OF DEFENSE ON COLLATERAL DAMAGE AS BEFORE

BUT SILOS REMOTE, SO PEF DEF NOT SO COSTLY IN COLL DAM

WILL SU GROUNDURST?

LOW AIRBURST, EPW

TENTATIVE CONCLUSIONS

LIMITED BUT SIGNIFICANT OBJ CAN BE ACHIEVED WITH LO COLL DAM

Yield is critical for coll dam

For area targets, reducing yield increases #s reqd: BUT

Can we decompose "area targets" by targeting fns rather than fac

Precision is critical for reducing yield vs hard point targets

CONTINGENCY ANALYSIS LIKELY TO SHOW THAT DETERRING LNO'S IS IMPORTANT

RELATIVELY MODERATE CAP DEFS CAN RAISE FORCE REQMTS FOR LIM ATTACKS TO:

Increase risks

Reduce effectiveness

Remove poss of tactical surprise

PREF DEF OFFERS VERY HI LEVERAGE, BUT DOESN'T FULLY PROTECT VS COLL DAM

EVEN LARGE COUNTERMILITARY STRIKES CAN BE DESIGNED TO AVOID HI CATAST DAM

PREF DEF OF SILOS, UNIFORM DEF OF OMT CAN DENY ATTACK OBJECTIVES

LIMITATIONS

RESULTS TO DATE PURELY ILLUSTRATIVE

Model, data base not suitable or adequately accessible for NSDG

Better ones avail & more accessible

But probably need new generation to handle simult

Dual criterion

SDI type defs

Need ZEROth order design of defense systems for analytic purposes

HOW DO SOVS STRUCTURE ATTACK OBJ, ASSESS ANTICIP OUTCOMES?

MEMORANDUM

TO: D. Fortier, Dr. F. C. Ikle

FROM: Fred Hoffman

SUBJECT: Highlights of Discussions of BMD During European Visit, 9/7-18/84

1. European critics, 18 months after President Reagan's March 23, 1983 speech, remain fixated on his espousal of the goal of "rendering ... nuclear weapons impotent and obsolete". They assert that such a goal is unrealistic, divisive and antithetical to deterrence. They choose to ignore his remarks in the speech about the need to maintain our conventional and strategic offensive forces while the SDI proceeds. They also resist attempts to focus on intermediate BMD options as an outcome of SDI, referring frequently to Secretary Weinberger's remarks about the possibility of leakproof defenses -- an outcome flatly labelled as impossible by U.S. technologists participating in the IISS conference (a group largely on record as opposing SDI -- a list of participants in the two sections of the SDI committee at IISS is at Attachment 1.)

2. Two major European concerns appear to be the possibility that the U.S. and the S. U. may acquire some protection against nuclear attack while Europe will remain vulnerable, and that the achievement of such protection by the superpowers will weaken deterrence against Soviet attack ("make the world safe for conventional war" and eliminate the possibility of LNO's). Here as in other criticisms, opponents of SDI tend to slide over the implicit and unwarranted assumption that the Soviets will proceed with BMD only if the U.S. does (see also paragraph 4). They also assert that it threatens the prospects for limitations of offensive weapons and that its resource requirements will conflict with other high priority efforts.

3. Europeans reacted with surprise and a mixture of great interest and skepticism to assertions by Albert Wohlstetter (who participated in several of the meetings) and myself that a defense against theater ballistic missiles was among the earliest possible applications of the technologies under development in the SDI. Some appeared particularly interested when I pointed out that some defense against ballistic missile attack in the future might be a prerequisite, not only for a viable theater nuclear posture, but for a viable conventional posture as well, since the Soviets can be expected to have conventionally armed theater ballistic missiles capable at least of clearing the way for a massive air assault by destroying NATO air defenses.

4. The British and French are also, and perhaps most intensely concerned with the effect of BMD on their national nuclear forces. They are unwilling, however, to place themselves in opposition to R&D on BMD and generally will admit that if such R&D discovers the possibility of a defense that can exact, say 80% attrition, the Soviets are highly likely to develop and deploy it regardless of what the U.S. does. Continued U.S. emphasis on the inconsistency of such a position with one that blames the

SDI for threatening the viability of their nuclear forces may ultimately cause them to suppress this criticism, but for the time being it appears frequently.

5. If it becomes necessary to address SDI in the near future (in the context of the coming debates, for example, I believe that it is important to stress the following points:

The elimination of the nuclear threat is a broad ultimate goal of our security policies to which SDI can make an important contribution -- not necessarily a mechanical result of a literally leakproof defense.

Over time, ballistic missile defenses can open new incentives for both sides to reduce their reliance on and inventories of ballistic missiles of indiscriminate destructive power by increasing the stability of the balance and by reducing the military utility of such weapons. They can also help ease growing verification problems in offensive arms limitation agreements.

Repeat the statements in the March 23 speech about the need to persevere in the objectives of strengthening deterrence and improving conventional capabilities "in the meantime" and the possible contribution of less than leakproof defenses to these objectives. Refer to the never-released portion of the March 1983 study directives that asked for an examination of the deterrent role of ballistic missile defense.

Contrast an evolutionary approach with a growing role for defenses with an indefinite sole reliance on threats of offensive retaliation.

6. In sum, reactions to SDI were predominantly negative among French and English Foreign Office and MOD officials I encountered at meetings in London and Paris and at the IISS annual conference at Avignon. John Weston gave a fairly typical listing of French and English concerns in the course of a comment on my paper at IISS (summary of Weston's comments is at Attachment 2.) A group including several journalists at a luncheon in London arranged by the Institute for European Defense and Strategic Studies (list of participants is at Attachment 3) was substantially more receptive. Lord Chalfont, in private conversation with Albert Wohlstetter and myself, was highly interested in our views on the deterrent role of SDI and the possibility of an effective defense against theater ballistic missiles, and offered to arrange a session with members of both Houses of Parliament who are active on security matters. I did not visit Bonn and do not recall much in the way of comment at IISS by FRG officials though I have had indications that there is a very high level of current governmental interest in SDI in Bonn.

ATTACHMENT 1

PARTICIPANTS LIST, IISS COMMITTEES 1A AND 1B: "THE STAR WARS' DEBATE"

Transmitted separately.



26th ANNUAL CONFERENCECOMMITTEE 1A

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Papers: Hoffman (Fri), Freedman (Sat)

Respondents: Hafner (Fri), Nerlich (Sat)

Rapporteur: Bobbitt

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Ball	Lowenstein
v. den Bergh	Merlini
Bertram	Millett
Boyer	Neuhold
Builder	Nicholls
Bundy	Oliver
Choi	Panitza
Clesse	Pozzi
Dannenbring	Ruina
Darilek	Rivkin
v. Eekelen	Schratz
Fricaud-Chagnaud	Stahel
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Blunden		Maaranan
Brandon		Matteson
Carnesale		v. Niekerk
Chevallier		O'Carroll
Cotta-Rumusino		Pirie
Ellsworth		de Rose
Feigl		Schumacher
Foell		Schwartz
Froment-Meurice		Stone
Gottlieb		Takahata
Haley		Thomson
Hollingworth		Tsipis
Honick		Ward
Ilsoe		Weston
Jackson, B.J.		v. Weizsacker
Killham		Whyte
Kind		Young, E. (Lady Kennet)
		Wohlstetter, A.

ATTACHMENT 2SUMMARY OF COMMENTS AND QUESTIONS BY JOHN WESTON AT IISS ANNUAL CONFERENCE, 9/15/84On the President's Speech and the SDI

The absence of reference to Soviet defense programs in the President's March 23 speech, gave the impression that defenses are a purely U.S. initiative.

Europeans are sceptical about the problem of ICBM vulnerability

U.S. ballistic missile defenses would be decoupling by comparison with an "indivisible defense" based on offensive retaliation

On the Paper Presented by Hoffman

The paper espouses the objective of "damage-limiting", which is infeasible and destabilizing. (I believe he recognized after my response that this was a misreading of the paper, in which I referred to the "damage-limiting" objective as a historical fact and as a distortion of the role of defenses -- FSH.)

Defense of military targets would leave the prospect of catastrophic collateral damage from counter-military attacks. Only a leak-proof defense could prevent this.

The resource requirements for a ballistic missile defense would simply not fit within the realities of other Western military needs and Western budgets.

A defense against theater ballistic missiles could be countered by depressed trajectories.

Defenses against attack by nonnuclear ballistic missiles was a different subject than SDI.

Antinuclear sentiment is growing. (I cannot reconstruct the conclusion drawn by Weston from this observation -- FSH.)

It's all very well for Hoffman to talk about the role of defenses in deterring attack and the virtues of reliance on a mix of offensive and defensive forces, but the President's objective for SDI is clearly the elimination of the nuclear threat.

Ballistic missile defenses are antithetical to arms control.

(I responded to the above; there was no rejoinder from Weston -- FSH.)

ATTACHMENT 3

PARTICIPANTS LIST, INSTITUTE FOR EUROPEAN DEFENSE AND STRATEGIC STUDIES:

LUNCHEON MEETING, LONDON 9/10/84

Chairman: Gerald Frost

Speaker: Fred Hoffman

Bruce Anderson, Weekend World, independent TV program

Prof. Arnold Beichman

Gino Bianco, Journalist

Lionel Bloch, Lawyer, writes for Daily Telegraph

Christopher Cviic, The Economist, ed. The World Today, Chatham House Journal

Peter Foster, Director, Council for Arms Control

Prof. Lawrence Freedman

Dennis Gormley, Pacific Sierra Corp., IISS

Paul Hodgson, BBC, Eastern Europe affairs

Melvin Lasky

Admiral Sir Louis Le Bailly

Kenneth Minogue, Lecturer, L.S.E.

Norman Reddaway, Foreign Office

Prof. Stankiewicz

Philip Towle, Cambridge University

Prof. Albert Wohlstetter

Mrs. Roberta Wohlstetter

ATTACHMENT 4

PARTICIPANTS LIST, QUAI D'ORSAY LUNCHEON, 9/12/84

Mme. Isabelle Renuard, Director, Dept. of Strategic and Disarmament Affairs, Min. External Relations

M. Benoit d'Aboville, Dep. Dir. (Disarmament), Dept. of Strategic and Disarmament Affairs, Min. External Relations

M. Francois Burea, MOD

M. Delbourg, MOD

M. Guilluy, Dep. Dir., (Strategic Offense, NATO), Dept of Strategic and Disarmament Affairs, Min. External Relations

M. Jean P. Rabault, Dir., Planning and Strategic Studies Group, MOD

M. Sidiude, MOD

Mr. David Pabst, U.S. Embassy, Paris

Mr. Fred Hoffman

Prof. Albert Wohlstetter

Mrs. Roberta Wohlstetter

Attachment 5

ADDITIONAL MEETINGS

Lord Chalfont, London, 9/9/84

Mr. Malcolm Macintosh, U.K. Cabinet Office, London, 9/10/84

Mrs. Pauline Neville-Jones, Policy Planning, U.K. Foreign Office, London, 9/11/84

Gen. Pierre Gallois, (ret'd.), Paris, 9/12/84

M. Jean Louis Gergorin, Min. External Affairs, Avignon, 9/15/84

M. Pierre Lellouche, IFRI, Le Point, Avignon, 9/16/84

M. Olivier Chevrillon, publisher, Le Point, Paris, 9/17/84