6008X

MEMORANDUM

NATIONAL SECURITY COUNCIL

[redacted]

ACTION

November 3, 1976

MEMORANDUM FOR: BRENT SCOWCROFT

FROM: ROBERT L. SMITH

THROUGH: DAVID ELLIOTT

SUBJECT: Final Report of the Ad Hoc NSC Space Panel--
Part II: U.S. Anti-Satellite Capabilities

BACKGROUND

When the NSC Space Panel forwarded their interim report on the need for a U.S. anti-satellite, you requested the Panel to complete its final report on the anti-satellite question as early as possible. In response, the Panel decided to prepare its overall report in three independent parts. Part II on U.S. Anti-Satellite Capabilities has been completed on an accelerated basis and is attached at Tab A. Parts I and III, dealing respectively with survivability and future technological evolution of military use of space, are now being prepared and will be available in several weeks.

SUMMARY OF PANEL VIEWS

The Panel concludes that there is an urgent need for the U.S. to have the capability to destroy a few militarily important Soviet space systems in crisis situations or in war. This requirement does not derive from a perceived military need to respond in kind to the appearance of the Soviet satellite interception system, but rather from the necessity to counter the growing military utilization of space by the USSR. The fact of reciprocity would be a fortuitous benefit.

The Panel points out that during the last few years the Soviets have started to use satellites for direct support of their military forces--support that is greatly increasing their force effectiveness. The Panel is convinced that this Soviet trend will continue and that real-time space capabilities will become even more important to the effective use of military forces in the future.

Typifying this trend, the Panel points to the Soviet use of electronic intercept (ELINT) and radar ocean surveillance satellites. These satellites today have a worldwide operational capability to locate major U. S. naval surface combatants

[redacted]

Classified by: Brent Scowcroft

[redacted]

WARNING NOTICE
SENSITIVE INTELLIGENCE SOURCES
AND METHODS INVOLVED

and provide this location data in real-time to Soviet naval elements, both surface ships and submarines, for use in targeting long-range anti-ship missiles. This capability is expected to continue to improve. The Panel believes that this long-range missile threat to the U. S. surface Navy is of great concern and, if not countered, could bring the viability of the surface fleet into serious question.

If the U. S. had the capability to destroy the critical target-locating satellites, which are at low altitude and are few in number, the ability of the Soviets to find and target U. S. surface combatants at long range would be greatly degraded. The Panel notes that the only alternatives the Soviets have for long-range target location are the BEAR Reconnaissance aircraft and submarines, both of which are limited in area coverage and can be countered by the existing U. S. fleet air defense and ASW assets.

In the opinion of the Panel, the capability to nullify this ocean surveillance threat alone provides sufficient motivation to undertake an anti-satellite development program. There are, however, other Soviet space systems such as the low-altitude communications satellites and possibly the photo-reconnaissance satellites, which are important to Soviet military operations and could also become targets for an anti-satellite in some scenarios. This list is expected to grow as the Soviets continue to expand their space capability in the future.

The Panel believes that a limited anti-satellite capability, able to destroy a few militarily important low-altitude Soviet space systems, could be achieved by the end of 1980, using available technology, if sufficient priority is applied.

The Panel also concludes that there is a need for a parallel effort to achieve an [redacted] lower crisis threshold for use, and would be a very valuable option. [redacted]

The Panel considered the implication of a unilateral U. S. decision not to develop an ASAT and to depend on diplomatic means to restrain the Soviets' use of their anti-satellite capability in time of crisis. They conclude that it is not a realistic option since: (1) an extant capability would be uniquely available to the Soviets; (2) compliance with any limitation on possession of an anti-satellite capability is unverifiable; (3) many possible targets of a Soviet anti-satellite are U. S. military support space systems, which do not have the protection of current treaty obligations with respect to National Technical Means; and (4) a Soviet decision to attack U. S. satellites in a crisis or conflict would be based on the military utility of such action, and would not be affected by the presence or lack

of a U. S. anti-satellite capability. The Panel also concludes that a U. S. program to develop essential anti-satellite capabilities should not be delayed pending the outcome of possible arms control discussions on anti-satellite systems.

With these views in mind, the Panel reached the following specific conclusions and recommendations:

- Unless a clear U. S. policy emphasizing the need for development of an anti-satellite is enunciated, budget pressures, and possibly arms control considerations and other international policy factors, will continue to restrain progress toward a U. S. anti-satellite system. A clear statement of U. S. policy should be made to affirm the need for a near-term anti-satellite capability directed toward the following objectives:

  -- limited operational capability by the end of CY 1980;

  -- directed at low altitude satellites (rather than delaying for years until an interceptor capable of attacking satellites at all altitudes is developed);

  -- capability for 6-10 intercepts in a week;

  -- response time of about a day from Soviet launch to U. S. intercept.

- To meet the early operational capability date with a non-nuclear interceptor, state-of-the-art sensors, such as visible light optics and radar, along with intercept modes which have low-closing velocities, should be considered as possible alternatives to the current LWIR (infrared) sensor/direct ascent interceptor concept.

- High priority should be given to [redacted]

- Space-based lasers as anti-satellite weapons will not be feasible as an operational capability before the late 1980's or early 1990's.

EVALUATION OF THE PANEL'S FINDINGS

Until now, the U. S. anti-satellite technology program has been pursued at a low level and has been directed at meeting a stated "requirement" to destroy large numbers of satellites at all altitudes in a short period of time. [The ADCOM Required Operational Capability (ROC) written several years ago required destruction of 20 low altitude, 5 intermediate altitude, and 15 high

altitude satellites--all within 24 hours.] These requirements have forced use of very advanced technology and would result in a long development program and a high cost operational system. The Panel has pointed out (and I believe correctly) that there are a few especially important Soviet satellites, all at low altitude, that represent a direct military threat, and that these are the real justification for a U. S. anti-satellite at this time. This much more selective mission for a U. S. anti-satellite results in more modest performance requirements, allowing use of state-of-the-art technology and substantially reducing the system cost. The fact that the threat to the surface Navy is real today and is getting worse underscores the need to obtain a limited operational capability as early as is possible.

DOD has recently taken a number of steps that are consistent with the Panel recommendations. Several months ago, DOD increased the out-year funding (FY 1978-1982) for space defense related items (including space surveillance, spacetrack, and space survivability, as well as an anti-satellite) by 70% from roughly $1 billion spread over the five years to about $1.7 billion. The majority of that increase went to the development of a prototype anti-satellite interceptor and its supporting systems. Several weeks ago DDR&E and the Air Force tentatively decided to re-orient this anti-satellite development program toward an earlier operational date limited anti-satellite capability using state-of-the-art technology.

In considering the Panel recommendations, there are several alternatives for future U. S. military posture in space which can be kept in mind:

1. All-Out Competition in Space:

   This option would proceed with acquisition of an extensive U. S. anti-satellite capability for use against all Soviet space assets, as suggested by the ADCOM requirements. It would accept the need to substantially enhance the survivability of essential U. S. military space assets to counter Soviet anti-satellite capabilities, as well as to provide some level of backup non-space alternatives for certain essential military functions.

2. Restrained Competition in Space

   This option would proceed with acquisition of a limited U.S. low altitude anti-satellite interceptor for selective use against a few especially threatening Soviet satellites. It would actively explore arms control measures such as high altitude anti-satellite test ban to restrict further development of high altitude anti-satellite interceptor capabilities. It would also explore arms control measures to raise the crisis threshold for interference with space assets at all altitudes. This option would require some continuing emphasis on survivability measures for critical U. S. space assets, particularly those at low altitudes.

3. Treat Space as a Sanctuary

This option would forego development of a U. S. anti-satellite, emphasizing further arms control measures to restrict anti-satellite capabilities. It would undertake development of alternate counters to Soviet threats such as long-range anti-ship missiles.

The last of these options, treating space as a sanctuary, is neither enforceable nor verifiable, as pointed out by the Panel.

The first option, all-out competition in space, is the path ADCOM has been indirectly supporting for some time; however, it has major budgetary and other implications with respect to U. S. high altitude space assets. Further, there are no high altitude Soviet space systems that represent a direct threat to the U. S. at this time, and some Soviet high altitude space assets, such as the early warning satellites, would not be attacked indiscriminately in any event.

The recent DOD decisions on the anti-satellite development program are sliding toward the middle option, restrained competition in space, although this is not necessarily recognized as a policy objective. As yet, no real emphasis has been put on exploring complementary arms control measures.

NEXT STEPS

Although DOD is now moving fairly aggressively toward a near-term limited capability anti-satellite, budgetary pressures, and other policy factors are likely to impede progress unless a clear statement of national policy on anti-satellites is made. It would be particularly helpful to clarify the inter-relation of development of low altitude anti-satellite interceptor with arms control measures to restrict growth of anti-satellite capability to high altitude. Further Presidential emphasis would help to ensure that the current momentum is channeled in the right direction and would clear away any remaining bureaucratic roadblocks.

These points were discussed informally with a number of agencies, including DOD, DDR&E, the Air Force, and ACDA and were received favorably. In our discussions with DDR&E and the Air Force, the question of further NSC action, in the form of a NSDM on U. S. anti-satellite capability, came up. Both these organizations felt that such a NSDM would be very helpful in that it would clearly establish objectives for such a capability and would clear away bureaucratic roadblocks.

The Panel report was also discussed in some detail with ACDA. They would support a decision to get on with a limited nearterm low altitude U. S. anti-satellite and would support moving directly to a NSDM if the urgency warrants. Toward that objective, we have drafted the proposed NSDM at Tab B and have informally coordinated it with the above agencies. I believe it would now be desirable to transmit the Panel Report, along with the draft NSDM, to DOD, State,

ACDA, and the DCI for formal comment. As you know, elements of the intelligence community believe that increased emphasis on a U. S. anti-satellite program would stimulate a more aggressive Soviet program of active and passive anti-satellite measures to interfere with our overhead reconnaissance assets in a crisis or in peacetime. They are concerned that a U.S. anti-satellite would have a negative net effect on our peacetime intelligence posture and suggest further study before taking any action. Forwarding the draft NSDM to these agencies for formal comment would provide an opportunity to draw out these views in more detail. A suggested transmittal letter is at Tab II.

In view of the President's interest, you may wish to send him a summary of the Panel's conclusions. A transmittal memorandum is at Tab I.

I also believe you would find it useful to meet with Dr. Buchsbaum, the Panel Chairman, and Dr. Herzfeld, the Vice Chairman, to get a firsthand understanding of the Panel's views. Such a meeting would take about 45 minutes.

RECOMMENDATIONS:

1. That you sign the memorandum to the President summarizing the Panel's views (Tab I).

2. That you sign the memorandum to the Secretary of State, Secretary of Defense, Director of Central Intelligence, and the Director of Arms Control and Disarmament Agency, asking for comments on the Panel's report and the Draft NSDM (Tab II).

3. That you agree to meet with the Panel Chairman (Dr. Buchsbaum) and Vice Chairman (Dr. Herzfeld) for about 45 minutes to hear the Panel's views firsthand.

Agree to Meeting_____

Cannot meet_____

Attachments:

Tab I -- Memo to President

Tab II --Memo to SecState, SecDef, DCI & ACDA

Tab A -- Panel Report (Part II)

Tab B -- Draft NSDM