ILLEGIB

3

SECTION II: CURRENT GOALS/TRENDS NSC, NRO, NSA reviews completed.

CURRENT GOALS

SECONDORNET -1 ALGINTY

The basic public policy on U.S. national space activities was initially set forth in the National Aeronautics and Space Act of 1958:

"The Congress hereby declares that it is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all mankind.

"The Congress declares that the general welfare and security of the United States require that adequate provision be made for aeronautical and space activities. The Congress further declares that such activities shall be the responsibility of, and shall be directed by, a civilian agency exercising control over aeronautical and space activities sponsored by the United States, except that activities peculiar to or primarily associated with the development of weapons systems, military operations, or the defense of the United States (including the research and development necessary to make effective provision of the defense of the United States) shall be the responsibility of, and shall be directed by, the Department of Defense; and that determination as to which such agency has responsibility for and direction of any such activity shall be made by the President..."

Proceeding from this basic legislation, in the past 19 years the U.S. has pursued many specific goals which provide the basis for the following broad formulation of current national space goals.

- To develop civil applications of space and make space more accessible so that the benefits of space activities and the knowledge gained will be beneficial to the people of the U.S. and to mankind and its institutions.
- To protect, maintain and enhance the utility, integrity and viability of national space intelligence capabilities as an essential element of national security.
- To develop military space systems to enhance national defense through increased effectiveness of military forces, increased strategic stability and deterrence of attack, protection of U.S. assets in space, and defense against threats from space.
- To increase the body of scientific knowledge about the Earth, the space environment and other celestial bodies.

-	To	use U.S.	space	activities	as	an	instrum	nent	of t	foreig	n p	olicy
	to	enhance	nationa	al prestige	, to	ma	intain	the	free	e use o	o f	space

			25X1
ILLEGIB		TOP SECRET	25X1
Sounce:	S PACE POLITY	TOT SECKET	

4

for peaceful purposes, promote international stability through increased international cooperation and understanding, and to influence the policies and actions of other states.

- To encourage commercial exploitation of space for economic benefit while protecting the technological advantages enjoyed by U.S. industry in space activities.
- To preserve free and independent U.S. access to space.

TRENDS

While the above goals are not completely consistent, in 19 years relatively few policy conflicts have arisen. There are, however, identifiable trends, some of which form the underlying causes of current issues and a source of concern for the future. They are:

- The increasing near-real-time capabilities of national intelligence assets to assist the management of crisis situations at the national level with a resulting increase in capability to support military operations at the tactical level.
- The desire for better remote sensing data to meet the responsibilities of civil, intelligence and military activities with a resulting convergence of capabilities and a need for better interactive management of these activities.
- The increasing international acceptance of reconnaissance activities in space in support of strategic stability with a resulting pressure from the U.S. civil and military sectors to relax security controls to increase the utility to those sectors.
- Rapidly increasing dependence of U.S. and Soviet military forces on support from space systems which cannot be satisfied as well or at all by other means.
- A growing threat to military forces from space systems with a resulting incentive for each side to negate the other's satellites.
- The emergence of a significant threat by the USSR to the use of space by the U.S. with a resulting need to develop a U.S. response to this threat.
- The increasing international pressures to expand the legal regime for the conduct of space activities with a resulting need to retain U.S. leadership in these negotiations and safeguard U.S. interests.

TOP SECRET

25X1 25X1

5

- The tendency toward consolidation of some aspects (e.g., launch systems) of the civil, military and intelligence activities prompted both by technology and by opportunities for cost avoidance with a resulting coalescence of the sectors.
- The growth of opportunities for commercial remote sensing which gives rise to the need to develop U.S. policy to govern that activity.
- The growing competition from other nations in the development of the capability to build and launch satellites with a resulting reduction of U.S. influence on the kinds and types of activities conducted in space.
- The growing international participation in and dependence on satellite systems with a resulting decrease in the likelihood of interference with such satellites.

These trends indicate that the world's use of space is maturing and with this maturity there is an erosion of the U.S. ability to control events in space (although we have never controlled the Soviet program). Accordingly, there is an increasing need to keep up-to-date, the policy framework that guides the implementation of U.S. programs to avoid undue risk to any one sector from the actions of another sector. There is also a need to minimize international constraints on U.S. freedom of action in space.

25X1

SECTION III: ISSUES FOR DECISION

This section presents the essential underlying issues affecting the U.S. space program. Decisions on these key issues will provide broad guidance for resolving the many specific problems addressed in PRM-23.

The discussion which follows provides a statement of each key issue, existing policy, current practice and potential solutions. A summary of existing U.S. space policy is presented at Annex B. References in this report are to the bibliography in that Annex.

The issues presented for decision are:

- Can security restraints on intelligence systems be relaxed and still provide adequate protection of the program and its products?
 - What relationships and/or controls are appropriate to establish a proper balance between civil requirements and national security concerns in the remote sensing field?
- V- What policy should be applied to the use of intelligence and civil space systems for national defense needs in peace and war?
 - What should be U.S. policy on space system survivability?
 - What should be the U.S. policy on antisatellite activity (ASAT) and ASAT arms control?

The issues presented for reaffirmation of existing policy or endorsement of new policy are:

- Are the current levels of control on the export of unclassified space-related products and technologies serving the national interest or do they require revision?
- Are additional guidelines needed for the Space Transportation System (STS) utilization in the U.S. space program?
- What should be the U.S. position in discussions on the international legal regime for space?

TOP SECRET

7

1. ISSUE: Can security restraints on intelligence systems be relaxed and still provide adequate protection of the program and its products?

In 1960, after the U-2 incident and the first successful U.S. photographic satellite, the President directed that "the products of satellite reconnaissance, and the information of the fact of such reconnaissance revealed by the product, shall be given strict security handling under provisions of a special security control system approved by me." The U.S. was in urgent need of strategic intelligence, the Soviet Union was threatening to treat reconnaissance satellites as they did the U-2, and the world reaction to remote sensing from space was unknown. In 1962, NSAM 2454 established a goal and defined tactics for creating a favorable international environment for U.S. reconnaissance activities. By 1973 there was much greater confidence in the acceptance of such operations; the Soviet Union had an active program of its own, the UN Outer Space Treaty endorsed the freedom of use of space for peaceful purposes and certain reconnaissance activities were accepted by the USSR as a National Technical Means (NTM) of verification. To permit wider use of space derived intelligence, the President relaxed controls on classification of and access to photographic products.

Current U.S. policy is:

- To protect the security and integrity of U.S. intelligence activities in space, the nature, extent, and much of the information collected is controlled in special, compartmented security channels. (24)
- "Economy dictates" the use by the Federal civil community of "imagery and information derived from classified overhead imagery systems that is in support of Congressionally approved programs of the user agency and that is not in violation of applicable laws, including the statutory authority of the user agency, nor inconsistent with the Constitutional and other legal rights of U.S. persons." (20, 21)

<u>Current Practice</u>

The current U.S. practice is that the "fact of" photographic reconnaissance from space is SECRET NOFORN. Access to some photographic products and the resulting intelligence is allowed outside of the special security control system. The fact of SIGINT programs and their products, however, are under compartmented controls defined for both satellite (the TALENI-KEYHOLE system) and SIGINT (the Special Intelligence system) activities. A fraction of the intelligence collection capability of each photographic mission is normally released to satisfy requirements of the civil community. A committee has been established to coordinate these civil activities under security guidelines provided by Director of Central Intelligence (DCI).

TOP SECRET

In a November 1976 memo to the President, the DCI requested authorization to further reduce security restraints to allow wider use of intelligence products, particularly in support of operational military needs.

The DCI recommended:

- a. Downgrading the "fact of" satellite reconnaissance to CONFIDENTIAL/NOFORN and outside the special security control system (without distinction between Imaging and SIGINT);
- b. Using special product controls sparingly and exclusively for materials revealing truly sensitive aspects of the program;
- c. Not changing compartmented security for the operational aspects of the program;
- d. Classifying of all other aspects of satellite intelligence and attributed products in accordance with criteria of E.O. 11652, "Classification and Declassification of National Security Information and Material," and no lower than CONFIDENTIAL/NOFORN;
- e. Developing procedures to eliminate duplicative satellite (TK) and signals intelligence (SI) control systems; and
- f. The DCI would have authority to establish security guidelines and control of information concerning satellite intelligence.

These recommendations define the subissues.

The sensitivity of the activity varies for the photographic, electronic (ELINT), telemetry (TELINT), and communications (COMINT) intelligence missions. For example, COMINT is the most sensitive since the target nation could quickly cut off productive sources if knowledge of U.S. capabilities and methods were known.

There is general agreement that some of the current controls exceed the levels needed to protect the intelligence programs adequately and that today's controls restrict the use of the products by the military and civil communities. There is disagreement on whether the fact of reconnaissance activities should be unclassified.

Major factors bearing on the issue are:

- The fact of U.S. space reconnaissance activities has been openly acknowledged by several Presidents.
- Relaxation of controls would permit wider application to civil and military needs.
- Declassifying the fact that the U.S. is conducting reconnaissance operations could permit the $\underline{\text{U.S.}}$ to take a more

TOP SECRET

facilitate

credible position in international arenas and could facilitate exclusion of national security systems from UN legal restrictions.

- Any change in the security system could be irreversible.
- If the level of public knowledge is raised, nations could feel that they should protect their sovereignty:
 - -- Raising the prospect of a restrictive international legal regime for all forms of sensing
 - -- Possibly increasing the impact of Soviet activities aimed at information denial
 - -- Possibly impacting U.S. overseas space facilities
- Declassifying the fact of reconnaissance is likely to create requests for sensitive details which the U.S. is not prepared to release.
- PRM-29 directed a review of the security classification system and preparation of a new Executive Order to replace E.O. 11652. The 22 July SCC meeting on PRM-29 agreed unanimously that special security controls (i.e., compartments) should be permitted only subject to (1) meeting criteria of demonstrable need, limits on access, and balance between protection and utility; (2) personal approval by heads of departments, or, for intelligence sources and methods, by the DCI; and (3) review and revalidation as necessary at three-year intervals. The decisions arrived at in both PRMs should be consistent.

Four potential solutions exist:

- a. Maintain the Current Situation.
- b. Allow for Selective Relaxation of Security Restrictions. This solution would make non-real-time imagery and operational ELINT available to the military forces and civil users at a useable security level. More sensitive missions would retain the current level of protection. The President would retain control over satellite security policy.

Duplicative space (TK) and COMINT control channels would be eliminated. The fact of ELINT and non-real-time photographic reconnaissance would be CONFIDENTIAL and the operational products not compartmented. Compartmented controls for the fact of and product of real-time imagery and other SIGINT missions and for operational details would continue.

TOP SECRET

10

- Above. This solution would enlarge the potential for broad use of satelTite data by both military and civil users. Authority would be delegated
 to the DCI to change security policy for space programs as needed to
 adopt to changing circumstances (e.g., controls for real-time imagery,
 TELINT and COMINT could either be kept compartmented, or not, as the
 Intelligence Community needs dictate). Some agencies are concerned that
 the DCI's security recommendations are not specific enough concerning
 SIGINT operations.
- d. Allow for Broad Relaxation of Security Restrictions. This is an extension which could be applied to options b. and c. above. It is consistent with recent Presidential statements and would make non-real-time imagery and ELINT products available to the military forces and civil users at a more useable security level. This solution represents a major change in existing policy. The "fact of" non-real-time photographic and operational ELINT missions would be unclassified. The product of photographic missions would be classified if the resolution is better than the threshold established for control of civil imagery. The ELINT product would not be compartmented.

25X1

19

3. ISSUE: What policy should be applied to the use of intelligence and civil space systems for National Defense needs in peace and war?

A need is emerging to insure that the mission architectures which involve space systems are founded on a realistic assessment of operational military support requirements, particularly in wartime. The basic policy question is whether systems should be configured to exploit fully the peacetime environment with wartime capabilities secondary, or whether realistic wartime operating modes should be assured. There are two basic considerations:

- a. Should national reconnaissance support of operational military requirements be increased?
- b. Should critical civil systems be configured to support National Defense needs in times of emergency?

National Reconnaissance Support

Technological advances have allowed and have resulted in intelligence systems with significant and growing capabilities to provide near-real-time data that can be used to support operational military requirements. The growth in these capabilities has been accompanied by efforts to improve tasking responsiveness, product dissemination and communications and operational capabilities for product utilization. To optimize use-fulness at a reasonable investment, increased support for operational military requirements has been supported by the Intelligence Community (IC), with the caveat that increased tactical dependence on space satellites should be approached cautiously because of vulnerability and performance limitations compared to some organic military field assets. The decision to increase operational military support could have effects on the capability of the program to meet other national security requirements, in both peace and war.

Current U.S. Policy is:

- The provision on intelligence and its utilization must enhance the formation of the foreign, military, and economic policies of the USG and the planning for and conduct of military operations by U.S. forces. (26)
- [within House Armed Services Committee oversight requirements]... "the Committee would have no objection to continued experimentation in this area, and would, in fact, encourage such experimentation since other means of obtaining tactical intelligence may become less tenable if the political sensitivity of other governments to U.S. intelligence activities in foreign countries continues." (27)

25X1

20

Current Practice

Under current practice the national intelligence program provides limited support for operational military needs depending upon the system and other national requirements. Requirements, tasking, and evaluation for tactical intelligence from space systems are transmitted to the NRO via military channels and then through appropriate DCI collection committees. In developing and configuring the satellite collection systems, the NRO responds to NSC Policy Review Committee (Intelligence) program guidance. Processing and dissemination is performed by the NRO based on guidance from the DCI collection committees. The operational military community feels it has a limited input to this process. Questions to be resolved include:

- Should the role of the operational military community in this process be strengthened?
- Should the Services be permitted to develop (and operate) dedicated tactical reconnaissance satellites?

Major factors bearing on the problem are:

Requirements: The bulk of operational intelligence needs (e.g., missile, ground, naval and air order of battle) are also required to produce national intelligence studies and estimates on foreign military capabilities. However, the tactical intelligence needs call for more selective and discrete levels of information, potentially a greater volume of data, and more demanding frequency and timeliness of reporting. In general, intelligence space systems provide support to these requirements in areas where wartime attrition of organic assets would be high or where covert collection is desired.

Satellite Capabilities: Most intelligence satellite collection capabilities lack the full flexibility required to support the rapidly changing elements of tactical situations. Some space reconnaissance products are not now being used because we have been unable to satisfactorily effect either rapid dissemination of data to military elements, or to conduct the desired levels of exploitation and operational use when the data is disseminated or to identify capabilities to field commanders due to security restrictions.

Product Dissemination/Communications: During past crises and war the United States had experienced communications overload in supporting the needs of military commanders. Alternatives such as downlinking and processing intelligence data in-theater may be feasible. However, satellite modifications may be required. Tests are being conducted with unmodified satellites.

25X1

21

Security: Current security controls inhibit effective tactical use of satellite-collected information. The decision on security controls (Issue 1) will impact this issue.

Vulnerability: Survivability measures to make the systems less vulnerable have been proposed (Issue 4), but little action has been taken.

Costs: Substantial amounts of money could be involved in configuring and adding survivability to existing space programs to support the needs of military commanders, and in transmitting, processing and exploiting data of potential military value. The potential overlap of satellite and aircraft systems in collecting the same general kind of intelligence information must also be analyzed.

Potential solutions of this issue are:

- Maintain the Current Philosophy with Minor Improvements in Implementation. This solution would endorse the concept of support for operational requirements as one of the primary NRP missions. It would call for the configuration of NRP assets, at this time, to improve support to deployed operational forces, as long as the primary mission capability of the NRP asset is not impaired, so as to provide maximum satisfaction of both peacetime and wartime requirements. The need for increased military involvement in tasking national intelligence satellites to support military needs will be established pending evaluation of current and future operational exercises. After review with the NRO, space reconnaissance systems which are considered by the military as essential to their tactical needs, but which are not planned under the NRP, would be conceptually studied by the Services under appropriate security constraints. The concepts would be reviewed by an equitably represented military/ intelligence group and a decision made on whether development and operation should occur under the aegis of the military or fall under the NRP. In either case, the system would be funded and justified by the military. Cost increases over the current program could be incurred.
- Military Requirements. This solution would accept some degree of impairment of NRP assets primary capability as an acceptable trade-off to achieve significant improvement in military support. It also directs a program for systematic evaluation of the potential utility of candidate systems compared with the impact of implementing the necessary preparation, capabilities, and interfaces. Consideration is given to a program of increased operational involvement in tasking national intelligence satellites at levels of increasing conflict. Substantial costs could be incurred. Military development and operation of reconnaissance systems would be permitted as described in solution a.

25X1

Civil System Support

The civil space program is oriented toward peacetime activities, and only limited policies, capabilities and procedures exist for wartime. In times of emergency, there is a potential need for mobilizing certain civil systems, particularly communications systems, while denying their use to adversaries. For example, only limited communications may be available in a jamming environment, yet the U.S. might have considerable additional capability available if there were plans to use civil systems. Effective augmentation of military capabilities by civil systems requires a program to identify appropriate systems, establish desired operating modes and necessary interface capabilities, and integrate the systems into military operational plans and exercises.

Current U.S. Policy is:

- To prevent a hostile nation from gaining control of civil weather satellites and to deny a hostile nation direct access to data transmitted from the satellites when such actions are determined to be in the interests of national security. (18)
- The U.S. has agreed that INTELSAT satellites shall not be used directly for military communications purposes. (28) However, indirect military use through common carriers is substantial.

Current Practice

Under current practice, plans for civil sector support to national defense have been generally limited. Currently, if a national emergency should arise, the military has no way to deny the enemy the use of civil satellites except through destruction of the satellite (by spin-up). Alternate means of denial while retaining exclusive U.S. use could be established. Many domestic commercial satellites are used by the military; however, no agreements have been developed for emergency control of these assets.

Major Factors Bearing on the Problem

The major argument in favor of increased civil sector utilization is that this could provide a cost effective, back-up military capability. The major arguments against such usage is the limited survivability of these systems and potential adverse foreign reaction if the potential military use of these systems becomes known.

The involved agencies agree that increased military use of civil systems can be implemented. Provisions must be made to protect the civil sector's peaceful international activities by classifying information about the military use of these systems and the military funding for incremental costs.

25X1

Sanitized Copy Approved for Release 2009/11/03 : CIA-RDP83M00171R001000190002-5

TOP SECRET

23

Therefore, the U.S. should endorse a policy of military use of civil space systems in emergencies. United States space systems would, as appropriate, be designed to permit denial of their capabilities to enemies in time of national emergency while still providing these capabilities to the United States; appropriate federal civil systems and domestic commercial systems will be developed and operated to the extent practicable to meet emergency military requirements as well as those of the civil sector.

25X1

STAT