Source = Requirement to PRM-37 Group. Not Space Policy - 1ST Draft - 27 June 77

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TACTICAL USE OF RECONNAISSANCE SATELLITE ASSETS

25X1 [redacted] The Intelligence and Military Communities have for some time recognized the need for policy guidance on the use of satellite reconnaissance systems in support of military operations. Technological advances have allowed and have resulted in intelligence systems with significant and growing military support capabilities. In attempting to improve intelligence flow from national assets to operating military forces, a number of questions have arisen as to the extent to which national reconnaissance assets in space should be configured and operated to provide tactical intelligence* support to military commanders. Issues arising from tactical use of space satellites are also enmeshed in other subjects addressed in this study related to security and survivability of intelligence collection from satellite systems.

25X1 [redacted] ISSUE: Should national reconnaissance assets in space be configured with an increasing emphasis to providing tactical support to field commanders?

* The term "tactical intelligence" as used herein means that informat or analysis required by the operating forces of the military service to maintain their readiness for combat operations and to support th planning and conduct of operations under combat conditions. For comparison, the term "national intelligence" means information o relating to the national defense, the national security, or the fore policy of the United States which is used primarily by policy mak involved in the formulation and direction of national policy partic foreign policy and national security policy.

25X1 [redacted] 90 While mil recon. caps are being diminished by reduced overseas resources & caps [redacted] 25X1

are increasing due to the potential for [illegible]

in the South Korea area), increasing threats to orbital theater resources, and the increasing need for information from denied territory. Space assets contribute significantly to operational military needs and can improve the effectiveness of strategic and general purpose forces.

25X1 [redacted] Requirements for tactical support are being developed and associated capabilities are being examined and in some cases implemented. In general, information derived from space systems provides a baseline of military intelligence which could be better exploited and would supplement organic military assets. Exercises and studies have already looked at the problem, and more are underway. The U.S. Army in particular has been active in [illegible] concept [illegible] More experience in active support of military operations with intelligence satellites is required to resolve issues on tasking requirements and capabilities.

25X1 [redacted] Within the single national intelligence space program, to optimize usefulness at a reasonable investment, increased tactical support has been supported by the Intelligence Community but with the caveat that increased tactical dependence on space satellites should be approached cautiously due to their vulnerability and the likelihood that

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they would be interfered with in wartime. Where national and tactical needs overlap, the question of increased support to tactical elements is not a significant issue. But the extent to which tactical support requiremer should influence the design, deployment and tasking of these assets is a policy issue and one which has been addressed only piecemeal. As a result of existing procedures and directives tactical intelligence requirem for space collection are transmitted to the NRO via the military chain of command and the appropriate DCI collection committees. In developing and configuring the satellite collection systems, the NRO responds to NSC Policy Review Committee (Intel) program guidance which indicates that interfaces for data and product dissemination into tactical intelligence processing and production centers will be provided for but that solely tactical intelligence collection or processing capabilities will not be programmed. This latter restriction stems from the FY 77 Appropriati Bill where Congress indicated that use of national space satellites on a part-time basis for tactical purposes is appropriate but a total dedicate program should not be initiated without Congressional review and appro The NRO must also justify to Congress in their program recommendati inclusion of capabilities that duplicate tactical assets.

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To date, there has been one case of agreement whereby t national control of an NRO asset in wartime.

Military commanders need responsive intelligence support. This implies that control and tasking be matched in an optimum manner. Currently, military commander relies on national satellite systems that are not subject to his control or direct tasking. The existence of responsive tasking mechanisms, while they would ameliorate the problem to some extent, in no way satisfies the military commander's inherent desire for direct operational control and tasking authority. Perspectives on this problem vary. Given an acceptable cost/benefit ratio, tactical satellites under military control could become part of the military inventory.

Within the context of existing policy on tactical use of space satellites, a number of concerns have arisen on the matter. Some of these are:

- o Increased support of operational military requirements may adversely affect the ability of our overhead reconnaissance inventory to meet all needs (i.e., treaty verification, national intelligence, etc.).
- o Tactical assets might be traded for national systems less capable of supporting the forces in a timely and useable way, and less responsive to the combat commanders in the field.
- o NRO interfaces with tactical intelligence elements could compromise U.S. intelligence satellite capabilities.

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- o A visible military support role for reconnaissance satellites may increase the likelihood that they will become targets at certain levels of crises or conflicts.
- o Some operational requirements (e.g., ocean surveillance and over-the-horizon targeting) can only or most efficiently be satisfied by satellite collection (under geographic and other scenario-related constraints). If national assets do not satisfy these needs, should "tactical satellites" be considered? Should they be configured to supply national intelligence in peacetime?
- o Should the policy of a single integrated intelligence space program be maintained? If a distinction is to be made between national and tactical satellite systems; there could be a considerable impact on the efficiency of central management, budgets, and tasking. What satellite systems should be considered as primarily national or primarily tactical, e.g., [redacted] etc.?

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- o Increased military reliance on space systems must be evaluat in the context of a potential "tit-for-tat" space war.
- o Adjustments in current security controls to facilitate support tactical applications need to be evaluated.
- o Current NRP collected information of value to presently deplo

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In principle, the range of possibilities for space reconissance runs from a single national security space program to meet telligence and military support needs in peace and war; to two separate ograms, one configured for peacetime, another for war. Numerous termediate possibilities also exist. To illustrate these various alter-

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tives, consideration is required of:

Requirements: During combat operations, military commanders need support for the timely intelligence assessment of damage om ground, naval and air operations, and location, identification and escription of potential military targets to support operational planning id decisions. During peacetime, timely intelligence is required on the omposition, readiness and movement of foreign naval, ground and air orces to support war planning, force posturing and decisions for active eacetime operations. In addition, timely reporting of new deployments f strategic offensive and defensive forces and weapons is required to upport contingency and force structure planning for strategic nuclear perations. The bulk of these intelligence needs (e.g., missile, ground, aval and air order of battle) are also required to produce national intelligence studies and estimates on foreign military capabilities. However, he tactical intelligence needs call for more volume, more selective, and isually more discrete levels of information, and more demanding periolicity and timeliness of reporting. In general, intelligence space systems

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provide significant support to these requirements covering areas where attrition of organic assets which if utilized would be prohibitive, beyond range, capabilities or authority of organic assets, and covert collection is desired.

25X1 [redacted] Satellite Capabilities: In meeting the needs of military commanders, space satellite systems vary in effectiveness. It is clear that most intelligence satellite collection systems capabilities lack the full flexibility required to support the rapidly changing and unpredictable elements of tactical situations. It also should be recognized that some space reconnaissance products of value to the military commander 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.

25X1 [redacted] System Control & Tasking: An important provision of existing agreements is that operational control and tasking of intelligence space satellites is vested in the NRO and DCI. There is no major concern within the Intelligence Community with respect to the question of control in peacetime. Some concern has been expressed that systems capable of support to military operations may not be responsive to military commander in times of need. The capabilities of NRP systems are being explored and applied to the extent feasible to current military needs. The ability to rapidly develop and transmit intelligence requirements through the military

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chain of command into the COMIREX/SIGINT Committee arena is viewed by some as unwieldy and inappropriate in a blitzkrieg war environment where the tactical commander's requirements are satisfied without resorting to a formal bureaucratic process. Others, however, point out that the DIA and Service elements provide 24-hour a day support to tactical and national intelligence needs of military commanders and defense officials, and provide interface with the DCI collection committee staffs, which provide a 24-hour a day capability to act immediately on urgent requirements. Concern is still expressed that tasking priorities applied to these requirements at intermediate levels might not reflect the tactical commanders' needs when the requirements eventually reach the NRO. This matter is currently being addressed through the medium of military exercises.

25X1 [redacted] Product Dissemination/Communications: During crises and war the United States has experienced communications overload in supporting the needs of military commanders. Whereas transmission of intelligence requirements from the theaters to Washington generates only a minor impact on communication, dissemination of collected data to the military elements uses a significant part of the communications capabilities. Alternatives such as downlinking and processing intelligence data in-theater are feasible and tests are being conducted in this area. There will remain, however, a significant need for long-haul communications to transmit [redacted] 25X1 25X1

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to a theater command. Exercise experience is providing the basis for solving some of these problems.

25X1 [redacted] Security: Current security controls inhibit effective tactical use of satellite-collected information. For example, the minimum classification of SECRET NOFORN on satellite imagery and derived information limits use by lower echelons and by Allies; some imagery and derived information is still compartmented further limiting use; and satellite SIGINT is under multiple compartmentation.

25X1 [redacted] As previously discussed, the DCI recommended in November 1976 that the security of satellite data be controlled according to content sensitivity. Failure to adopt the DCI's administrative recommendations will impact adversely on utility of satellite data for supporting military operations.

25X1 [redacted] Vulnerability: National intelligence space systems have gained international legitimacy for monitoring compliance with strategic arms agreements, under the euphemism "National Technical Means." Noninterference with these means has been written into arms agreements, but the implications of Soviet perception of tactical use of these same systems are not clearly understood.

25X1 [redacted] Some assert that tactical use may make the systems more provocative and may have political implications. Efforts to make the systems less vulnerable have been proposed through survivability

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measures, but no action other than routine protection of command links and installation of a limited number of attack indicators has been taken. A Soviet capability to interfere with or destroy some of our intelligence space systems presently exists and is likely to be employed under certain conflict conditions. Thus, the matter is dependent on system and situation variations. This subject is treated as a separate issue under the heading Space System Survivability Enhancement.

25X1 [redacted] Costs: Substantial amounts of money are involved in configuring existing space programs to support the needs of military commanders, and in transmitting, processing and exploiting data of potential military value.

25X1 [redacted] A budgetary issue is that dollars used in the NFIP to collect, process and exploit tactical intelligence collected from space are at the expense of dollars which might be spent on purely tactical systems. Also, the potential overlap of satellite and aircraft systems in collecting the same general kind of intelligence information must also be analyzed in terms of cost/benefit factors. Another significant cost factor that could be attributable to tactical use hinges on the scope of the survivability program, i.e., if a decision is made to protect some intelligence space systems more extensively because they are capable of providing tactical intelligence to a field commander.

25X1 [redacted] The issues can be summarized as follows:

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- There are no major issues concerning tactical requirements and existing NRP capabilities to satisfy those requirements. Exercises and studies have and continue to examine the problem, and should resolve any residual questions. There is an issue, however, concerning the extent to which design of future NRP capabilities should be influenced by tactical requirements and whether the military should be able to develop their own systems independent of the NRO should the need arise.

- There are no major issues concerning the current centralized control by NRO of national intelligence satellite systems. However, there is an issue concerning the extent and timing of increased military involvement in tasking national intelligence satellites to support military needs.

- There remains the issue of the extent to which satellite collected data should be downlinked directly to support military commanders or disseminated indirectly from centralized processing sites in the U. S. The related issue of security (i. e., restricted tactical use) versus vulnerability (i. e., increasing ASAT target potential through association with broader tactical uses) is no longer as serious as once believed, since it is likely the USSR will assume the U. S. would support its military commanders with satellite data just as the Soviets do with their own systems.

Possible Actions

25X1 [redacted] On the issue of configuring NRP assets, one approach is to

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of impairment of NRP assets primary capability as an acceptable trade-off to achieve significant improvement in military support. A third approach would be maximum satisfaction of both peacetime and wartime requirements through NRP systems designed primarily for either tactical support or technical intelligence collection but with capabilities for both.

25X1 [redacted] On tasking procedures for NRP satellites, one approach would be to continue current practices while on occasion requiring increased military involvement in establishing tasking priorities for NRP systems. A second approach would be to remove the tasking of current and future assets from exclusive control of intelligence organizations and insure direct military tasking in wartime situations.

25X1 [redacted] As to whether the U. S. should permit military development of reconnaissance capabilities that are not operated by the NRO, one approach is to continue current practices. A second approach would take the approach that 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. 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.

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