



ASSESSMENT OF THE CONFRONTATION RISK

The very great dependence of the intelligence community on the products of the National Reconnaissance Program make it ^Fimpeative that we assess the likelihood of a future political confrontation on the satellite reconnaissance issue, and estimate the kinds of circumstances which could bring such a confrontation about.

I. Background of the National Reconnaissance Organization

The U-2 episode of May 1960, with the international political ^{that} furor that developed in its aftermath, made it inevitable that/valuable source of intelligence would be lost, at least insofar as the Soviet Union was concerned. The outlook for satellite reconnaissance coverage to replace the U-2 photography was bleak. In the spring of 1960, opinions on CORONA ranged from troubled uncertainty to open hostility. In more than a year of trying, the program had failed to ~~return~~ return a single capsule safely, much less to provide reconnaissance information. The situation with respect to the Air Force SAMOS program was equally bad. A high level judgment prevailed that the Air Force was mismanaging SAMOS and that it was extremely costly and technically weak. Four years of effort at a cost of nearly \$750 million had produced little cause for optimism. Moreover, the Air Force had ^{so} completely relaxed its earlier strictures on SAMOS publicity that the objectives, general time

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scale, and broad capabilities of the developmental systems were widely known. It was obvious that the international tensions which had built up over the U-2 affair could not be relaxed by publicizing a new overflight technique to replace a covert operation which had been discredited.

In June 1960, President Eisenhower ~~intra/bb/~~ instructed Secretary of Defense Gates to conduct an intensive analysis of the "scope, basis and feasibility of our reconnaissance satellite projects." The National Security Council, Eisenhower added, would be concerned with the technical aspects and the process for establishing requirements, the requirements themselves and the "effectiveness of control over the scope and characteristics of the operational system." It was obvious that international political repercussions, as well as financial considerations, would be among the topics discussed.

This review of the satellite reconnaissance program proved to be the beginning of a series of steps which led to the establishment of the National Reconnaissance Office, and the elevation of management of the SAMOS project, as well as the Air Force part of the CORONA project, to the Secretarial level and away from the ~~informal~~ uniformed Air Force. This action was confirmed at the National Security Council meeting of 25 August 1960. Dr. Charyk, then Under Secretary of the Air Force, briefed the President and the members of the Council on the SAMOS project and the Council decided that the program would be ^amanaged

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henceforth by the Secretary of the Air Force, with actual project directorship vested in a West Coast office, which was ^{already} ~~then~~ established under Brig Gen Greer. It is most significant that a major element of the decision to exclude SAMOS management from any control by customary Air Force agencies was the premise that the program would be conducted most circumspectly under a special management structure and procedures. A key factor in this policy change was the fact that a week earlier the first successful recovery of a CORONA payload had been accomplished. It demonstrated very vividly the vital importance of satellite reconnaissance photography.

As a result of the National ~~Secre~~ Security Council decision, SAMOS was removed completely from normal channels, with responsibility for development and operation assigned to the West Coast office which had a direct command line to the Secretary of the Air Force ^{and} ~~with~~ no intermediate levels of supervision or review. A small staff of seven officers was established within the Office of the Secretary to accomplish all Washington staff work for the project.

The revised SAMOS project procedures also stipulated that it be responsive solely to requirements of the USIB and ⁶ ~~ex~~cluded any overt association of SAMOS with any military operational command.

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Immediately after establishment of the new SAMOS management structure in September 1960, the Under Secretary of the Air Force placed management of the CORONA and ARGON projects within the special SAMOS management structure, insofar as Air Force actions and authority were concerned. In addition, he established direct liaison with the responsible CIA official at that time, the Deputy Director for Plans (DD/P), resulting in a greatly improved arrangement for these covert projects.

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To increase management effectiveness and security over these vitally important satellite reconnaissance programs, discussions were held in the summer of 1961 between DOD and CIA officials to formalize the arrangements discussed above. These discussions led to the establishment of the National Reconnaissance Office through a CIA-DOD Agreement of 6 Sept 61, which designated the Under Secretary of the Air Force and the CIA DD/P as co-directors. The concept of divided management was rejected almost immediately by the NSC 5412 Group, and some seven months later, on 2 May 1962, a single Director for the NRO was established responsible directly to the DCI and the Secretary of Defense. Two subsequent agreements evolved, the 13 Mar 63 Gilpatric-McCone treaty, and the last, the 11 Aug 65 agreement between Mr. Vance and Adm Raborn.

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The terms of the Agreements are far less important to the confrontation issue than one of the underlying theses which led to the formation of ~~such~~ a national organization for reconnaissance of denied areas. This was simply the overriding need for the tightest possible security to prevent public exposure of these activities. The U-2 loss in May 1960 over the Soviet Union demonstrated for all to see the extreme political sensitivity of such operations and it became clear that the greatest chance to continue reconnaissance without political challenge would be through total official silence regarding reconnaissance operations and the products derived therefrom.

II. National Policy on Satellite Reconnaissance

By early 1962, the need for a definite statement of U.S. policy on outer space and satellite reconnaissance had become increasingly clear and compelling. Various elements of the government were at odds, or were making conflicting statements concerning the ^{policy and} security requirements for satellite reconnaissance. For example, in late 1960 and early 1961, the SAMOS program was being conducted openly; one successful launching and two failures had been publicly announced. Then-Senator Humphrey addressed the European-American Assembly at Burgenstock, Switzerland, in July 1961 and said "The development of the reconnaissance satellite --

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the SAMOS -- is a momentous step into the space age." The UN General Assembly, ⁱⁿ December 1961, ~~AA~~ with participation by the State Department, called upon all States to register space launchings with the UN, exchange space information on a voluntary basis, cooperate in meteorological and communications satellites, etc., all without State Department regard or coordination with the DOD or the CIA as to how this agreement might affect the National Reconnaissance Program. Strong concern was expressed by Dr. Charyk, the Under Secretary of the Air Force, and Mr. Bissell, the CIA Deputy Director for Plans, over the lack of a coordinated, national position on the uses of space.

In March 1962, the State Department was still pressing for more openness on SAMOS --type satellites. In April, the Under Secretary of the Air Force developed a very comprehensive position paper on "National Policy on Satellite Reconnaissance." Its main points:

1. Satellite reconnaissance is:

Legal and non-aggressive

Military

Conducted in accordance with international law

Consistent with UN/US policies on peaceful uses of outer space

No threat to any nation

Publicly acknowledged

Classified; no results will be published

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2. Security will be very tight
3. Public information will be closely controlled

During this period, the Soviets were pressing hard for a ban on reconnaissance satellites. This issue came up several times during meetings between Dr. Dryden, NASA, and Soviet Academician Blagonravov, and in conversations between Ambassador Stevenson and Soviet representatives Timerbaev and Saitzev. These Soviet statements ~~sh~~ reflected a general Soviet pre-occupation with U.S. reconnaissance satellites and a prevailing Soviet view that aerial photo reconnaissance ~~was~~ outlawed by international convention, therefore photo reconnaissance from outer space must be ~~regulated~~ regarded as equally illegal. They sought, during this period of time, both in the UN Outer Space Committee and its Legal Subcommittee, to define "principles" of peaceful uses of outer space which would ~~ex~~clude reconnaissance and other military uses. These efforts were successfully resisted.

Foreseeing possible difficulties in forthcoming discussions in the UN and at Geneva on outer space cooperation, Dr. Killian, of the President's Foreign Intelligence Advisory Board, expressed in a memorandum to the President on 16 May 1962 the Board's concern that such discussions could create situations in the reconnaissance area which might be difficult and embarrassing for the President. He urged ~~firm~~ U.S.

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policies with respect to the relationship of our satellite reconnaissance programs & to discussions involving peaceful uses of outer space."

This led to National Security Action Memorandum 156 sent to the DOD, State Department, CIA, NASA and ACDA, which cited the fact that the U.S. was engaged in negotiations on disarmament and the peaceful uses of outer space, noted that the discussions raised the problem of what constituted the legitimate use of outer space, and in particular, the question of satellite reconnaissance, and directed the State Department to formulate a U.S. Position which would avoid the danger of restricting ourselves, compromising highly classified programs, providing assistance of significant military value to the USSR, and, at the same time, permitting us to work for disarmament and international cooperat^oin in space.

This action resulted in the formation of an Ad Hoc Committee under Ambassador U. Alexis Johnson with representatives from DOD, CIA, NASA and ACDA, to define the U.S. policy on the political and informational aspects of satellite reconnaissance. The Committee, known informally as the "156 Committee" (it ~~was~~ never had a formal name) provided 18 recommendations to the President and the National Security Council which were adopted and promulgated in NSAM 2454 in *Jul 1962*.

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Certain key provisions were:

1. Outer space is free, like the high seas
 2. The U.S. should avoid any position implying that space reconnaissance activities are not legitimate, or that such activities are not peaceful
 3. We should avoid the public use of the term "reconnaissance satellites," substituting more innocuous terms ^{such} as "observation" or "photographic,"
 4. The practice of not identifying individual military space launchings by missions or purpose is sound
 5. The U.S. should not publicly disclose the status, extent, effectiveness or operational characteristics of its reconnaissance program
- These ^{of NSAM 2454,} provisions, ~~however,~~ known ~~in 1961~~ as the "18 Points", still prevail as the bedrock of U.S. policy regarding the National Reconnaissance Program. They form the basis for the ~~strict~~ security controls applicable to the program and for the U.S. position taken in international forums, primarily ⁱⁿ the U.N., in discussions of outer space matters. The U.S. has consistently taken a position that the use of observation satellites is not an aggressive or illegal act and such use cannot be construed as a threat or the use of force, which is expressly prohibited by the UN charter. Observation from space, as from the high seas, is not a violation

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of international law and there is nothing in international law or accepted rules of international behavior that casts doubt on the legitimacy of this kind of observation.

In brief, then, our policy has been (1) to maintain maximum official silence about the scope and nature of all military satellites, and (2) when pressed in international forums, to maintain that outer space is free and observation from space is legal, non-aggressive and peaceful, and in fact, helps to stabilize the peace.

It is noteworthy that Soviet pressures for a ban on reconnaissance satellites, expressed to U.S. representatives and in UN forums at various times during the early 1960s, faded ^{substantially} ~~almost entirely~~ from view as the Soviets were ~~in~~ unsuccessful in mounting their own satellite reconnaissance program. Thus, we have found ourselves largely in accord with the Soviets in recent meetings of the UN Legal, and Scientific and Technical Subcommittees, when such issues as ~~formulating~~ ^{formulating} a definition for the demarcation line of outer space arose. Both the US and USSR have been opposed to such a definition as unnecessary and technically impracticable. Those who have been pressing for such action, notably the French, supported by the Egyptians and Belgians, ^{would be} ~~are~~ likely to follow up any future agreed definition with a proposal to

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"catalog," and then attempt to impose UN regulations on activities conducted in outer space for whatever purpose. They have made express references to "observation satellites" as among those requiring regulation and control. The implications of such action to the National Reconnaissance Program, with possible loss of this ^{vital} ~~initially~~ important intelligence source, are obvious, and the DOD has taken a consistent stand against any attempt to define the boundary between air space and outer space, or even to define "space object." Agreements already reached like the registration of space vehicles, ^{the} ~~on~~ ^{ban} ~~placing~~ weapons in orbit, or the agreement to assist astronauts in distress and return them to authorities of the launching state, pose no threat to the satellite reconnaissance program. We ^{now} ~~have~~ ^{have}, in effect, an unspoken status quo arrangement between the US and USSR regarding satellite reconnaissance. Neither side publicly admits to carrying out such a program and neither side, at least at present, wants to rock the boat on this issue. The pressures building up for regulation of such activities ^{are} ~~is~~ now coming from third countries, notably the French. However, we must be mindful that the Soviet attitude on the reconnaissance issue has been based squarely on their own capability in this area. As their satellite reconnaissance ^{program} ~~proved~~ successful, their interest is regulating reconnaissance satellites waned. If their national interest should dictate

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a reversal of this policy, we must be in no doubt that they can, and will, agitate this issue again. It may be important for the future that, as late as mid-1966, a Soviet UN delegate ^{stated} in a private conversation ~~stated~~ that the Soviets, and the neutrals, could not accept reconnaissance as a peaceful use of outer space.

Our policy ~~of~~ ^{surrounding} our reconnaissance satellite program with exceptionally rigid security has not prevented some leakage ^{to} ~~of~~ the press. Moreover, our early public announcements concerning the SAMOS programs have contributed to a fairly wide ~~ack~~ public awareness that these kinds of activities are being carried out by both the US and the USSR. However, we must not be misled into believing that this kind of general and rather vague public understanding, and tacit acquiescence, would stand the test of explicit disclosures concerning the scope and effectiveness of satellite reconnaissance. There is no question that emotional reactions exist in some quarters as to the propriety, and legality, of reconnaissance by whatever means, and explicit awareness of the capabilities of space-borne camera systems could well backfire to the detriment of the National Reconnaissance Program, and through it, to our national security itself in a very real sense.

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III. The Effect of the Proposed Earth Resources Satellite Program on the Risk of Confrontation

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It is against the touchy/national political situation existent now with respect to satellite reconnaissance, described above in Part II, that NASA's plan for "remote sensing of the earth" by satellites must be viewed, and the probable impact on the international political situation judged.

NASA's cooperative efforts with the Department of Agriculture and Interior toward developing an earth sensing capability from space have been well publicized. The Department of the Interior, in particular, has been especially aggressive in publicizing its interest in an earth resources satellite program -- EROS -- through a press release in September 1966. Many articles also have appeared in the press and in trade journals. NASA bears primary responsibility for research and development of remote sensing satellites and for accommodating and coordinating the requirements of the user agencies. In the summer of 1967, to help develop a scientific and economic rationale for an earth resources program, NASA sponsored^{ed} well-attended symposium of scientists at Woods Hole, Massachusetts, to study the value of satellite remote sensing to a wide variety of scientific disciplines, such as agriculture, forestry, oceanography, ~~good~~ geology, mapping and charting, etc., thus generating wide interest in the U.S. scientific community -- and no doubt a very significant amount in other countries --

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in the value of such data. In February 1968, several NASA-sponsored contractors (GE, TRW and RCA) made presentations to the House Subcommittee on Space Science and Applications on their proposals for developing space hardware to do the job of earth sensing. Based on the presentations, it would appear that 1969 would be about the earliest that a sensor system could be launched. Concurrently with these efforts, NASA is ^{now} in the process of negotiating bilateral agreements with Brazil and Mexico to use remote sensors for resource surveys in those countries.

Political reaction to these publicized U.S. efforts to develop an earth resource satellite observation program have to date been relatively muted. The Brazilians, for example, seem pleased with the opportunity offered them and are going ahead with plans to develop, in cooperation with NASA, aircraft earth sensing techniques before proceeding to space applications. Some opposition was expressed in the Brazilian Chamber of Deputies in June 1967 to the photo-mapping agreement, but was effectively countered. The Mexicans, on the other hand, are reportedly divided on the issue of whether or not they should cooperate and apparently have some concern regarding "U-2" overtones. Their sensitivity certainly appears to be closer to the surface than that of the Brazilians.

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Other national sensitivities have been exhibited that are of even more concern. While photography made by Mercury ^(copy) and Gemini ^(copy) astronauts in general resulted in little or no unfavorable reactions, the Chinese Communists chose to ~~to~~ issue ~~a~~ public statement that the flights were "obviously for the purpose of military reconnaissance." This ~~then~~ ^{there} was not taken up by other countries. However, it has been a standard working practice that all ~~such~~ photography taken by the astronauts be carefully screened at the National Photographic Intelligence Center by NRO and other members of the intelligence community prior to release. If all such photography had been ^erelased without ~~such~~ screening, international political sensitivities would almost certainly have been exposed to a far greater degree. For example, among the photographs withheld were those illustrating the capability to show airfields. One of these was a photograph of Bergstrom Air Force Base at a resolution of about 20-30 feet; it was possible to identify and count the B52 aircraft present.

The Soviet attitude on the space reconnaissance issue is also troublesome. While the tempo of their official statements on the space reconnaissance issue has subsided in recent ~~years~~ ^{years}, particularly since their own satellite reconnaissance program became operational,

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they still periodically raise "spy-in-the-sky" satellite charges in articles in the Red Star and elsewhere. Statements made several years ago by Khrushchev and his son-in-law, Adzhubei, admitting such activities on the part of the Soviets, have never been printed in the Soviet press or acknowledged as official. Even though they have stopped insisting in the UN that space reconnaissance be branded as illegal and non-peaceful, they have privately stated that this remains their official view. Thus, while Soviet political reaction to our satellite program may not be an immediate issue, the Soviets have retained the option of raising strong political objections to space reconnaissance at any time they should decide it is in their interest to do so.

To date, the gradually increasing public awareness of the existence of US and Soviet military space reconnaissance, discussed earlier, has not prompted undue concern in other countries for their own political or military security interests. Tight security control over these programs has undoubtedly been largely responsible for such press leaks as have occurred have been largely speculative and inaccurate. However, it must be anticipated that disclosure of U.S. surveillance capabilities, even in the non-military context of an earth resources satellite program, will create new interest, and, almost certainly, concern on the part of some overflown countries, for they will then have a much wider and deeper awareness of the capabilities of space reconnaissance. Even the disclosure of *relatively* poor quality imagery would present a problem for it would not obscure the fact to many

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people that a superior capability ^{was} ~~is~~ being concealed.

The proposed NASA space flights for earth resources surveys are programmed for ^{initially} orbital flight inclinations up to 48 degrees. These flights, from an intelligence viewpoint, ^{would} ~~will~~ cover some of the most significant areas in the Soviet Union. Later flights planned for polar orbits ^{would} ~~will~~ provide global coverage of all countries, including all denied areas.

While the reaction of individual countries cannot ^{be} assessed with precision, it is difficult to believe that at least some will not object ^{to such} ~~to such~~ ^{stomach} ~~to such~~ ^{only conducted} ~~over-~~ flights. The fact that we have bilateral agreements with Countries A, B, and C to conduct such flights is ^{by no means} ~~not~~ a guarantee that Countries X and Y ^{could} ~~can~~ be convinced that we are not also opening our cameras over their areas. With the tenseness prevailing in the Middle East, ^{for example,} and between India and Pakistan, it would be most unlikely that these countries ~~would~~ view ^{with} ~~with~~ equanimity the fact that our spacecraft were flowing ^{opening} ~~opening~~ above their national ~~territories~~ ^{territories}.

Resolution of the imagery obtained by earth resources satellites would almost certainly have a very decided influence on the countries being overflown. The 60 foot resolution limit applicable to NASA's program can obtain a great deal of military and economic intelligence information of much value to countries other than the overflown nations participating in the program. The first photography ^{obtained} ~~retrieved~~ by the CORONA system in August 1960, at a resolution of approximately 60 feet,

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produced vitally important information on Soviet military installations, including missile sites and airfields. Even photography at a resolution of about 100 feet can produce important information of intelligence value. This has been demonstrated by the 3" stellar index camera currently used in the NRP. Airfields are clearly seen, ^{and} even aircraft can be counted ^{" "} as blobs although not identified. Missile installations are identifiable. It seems quite clear that imagery obtained by earth resources satellites ^{would} ~~will~~ inevitably contain much information of potential intelligence value, either in a military or an economic sense, and ^{would} ~~will~~ demonstrate by inference the much greater capability possessed by reconnaissance platforms of the NRO.

It is also inevitable that resolutions of 60 feet ^{would} ~~will~~ not eternally satisfy the well-known scientific appetite for better data. Pressure for better data could in the long run lead to a situation in which uncontrolled disclosure of the NRP capability could not be feasibly prevented. There will always be contractors available who ^{would} ~~will~~ be more than willing, and able, to provide a better system to do the job and the scientists from the countries participating in the program ^{would} ~~will~~ naturally gravitate toward better data for their purposes. Such a slide down the road to a better capability for the earth resources satellite program would inevitably have an adverse effect on the NRP and would likely be a source of political provocation internationally, particularly in those countries not participating in the program.

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From the foregoing, it must be concluded that the risks of confrontation are likely to be ^{increased} ~~enhanced~~ by the proposed earth resources satellite program. It is possible that these risks can be reduced somewhat by a very careful public information policy concerning these programs and by an extremely careful operational procedure for obtaining imagery and an equally circumspect screening process before public release of such imagery. However, the risks are real and several possible ways in which they could evolve are:

1. The stimulation ^{of public} ~~of~~ discussion of space reconnaissance activities -- whether military or civil -- in the international arena could produce unfavorable reactions from hostile (e.g. China), neutral (e.g. Egypt) or even friendly countries. Such a world reaction might make it politically advantageous for the Soviet Union, and others, such as France, to take a hard line in the UN on observation satellites with the objective of regulating them out of existence. The Soviets could be motivated to do this on the assumption that the US is much more dependent on satellite reconnaissance data than is the USSR and that they could gain some military advantage ^{even a temporary one,} in the process. The very adverse effect such a result would have on our national security is obvious.

2. The use of orbits which would overfly many countries, and in the case in polar orbits, all of the nations of the world would be likely

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to evoke adverse reaction from some countries. It is almost certain, on the basis of past performance, that the Chinese Communists would object. Some others, like the Egyptians and the ~~Palest~~/ Pakistanis, would likely follow suit.

3. The ^erelease of imagery at resolution levels approaching 60 feet would make it exceedingly clear to all nations that the military and economic intelligence value of reconnaissance photography is high. Reactions could be expected to vary from outright demands by some nations that these activities be stopped to requests on the part of participating nations for better quality data. In both cases, the NRP would be threatened.

4. The increasing awareness of the quality and capability of space borne sensors could lead to responses from nations being overflowed to cover and camouflage certain of their activities. The Soviets have already experimented with such techniques and other countries ^{on} from which we obtain space reconnaissance-derived intelligence data could be expected to follow suit. With increasing awareness of the very high resolutions possible from reconnaissance platforms, such camouflage efforts could deny us important technical intelligence data ~~on~~ and largely nullify our very costly NRP platforms.

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5. It is possible that technologically advanced nations such as the USSR might undertake active countermeasures to nullify our reconnaissance efforts, thus confronting us with a very dangerous political situation. Such a ^{more} ~~situation~~ could be brought about by the ^{increasing} awareness of ^{vital} how much ^{is being} intelligence ~~can be~~ derived from space sensors as an earth resources satellite program would become more refined downstream and the true capabilities of space sensors became ^{widely} known.

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