INTERNATIONAL POLITICAL IMPLICATIONS OF PUBLIC RELEASE OF SELECTED SATELLITE IMAGERY OR INFORMATION

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SUMMARY AND KEY JUDGMENTS

The reactions of foreign governments to a release of imagery from US reconnaissance satellites will be determined by a complex and variable mix of sometimes contradictory national and international concerns. How these interests and concerns are seen to be affected will depend in large part both on the quality, quantity, timeliness, and coverage of the imagery involved and on the diplomatic and administrative mechanics (including the declared purpose) of its release. So many variables and uncertainties are involved, however, that many of the judgments advanced below are necessarily speculative in nature. (C/NF)

-- The Soviet response to a US release of military reconnaissance satellite imagery would depend on the purpose of release, the method of release, the location of the targets, and to a somewhat lesser extent on the type of target. The USSR is on record as opposing release of high or medium resolution imagery without permission of the imaged state and would be likely to view such action by the US as a misuse of national technical means of verification. The intensity of Moscow's reaction would be heavily influenced by whether it had been consulted in advance, or in the absence of such consultation, whether any imagery of Soviet territory that might be militarily useful to the Chinese was released. (S/NF)

-- The PRC would probably register mild criticism of the US action, particularly if not consulted in advance. However, Peking would be unlikely to object strenuously to the public release of even high quality imagery unless coverage of military or nuclear-related Chinese installations or production facilities were included. (C/NF)

-- Although most of the major Western industrialized countries support unrestricted release of satellite imagery in principle, they are likely to have grave reservations about the release of imagery from US reconnaissance satellites. Their principal

concerns would center on possible compromise of intelligence methods and military secrets and on possible damage to East-West detente. The chances are, however, that solicitation and accommodation of their views in advance would substantially reduce the risk of openly negative reactions. (S/NF).

-- Because of France's unique interests and perspective, Paris would be likely to subject any US initiative that involved release of imagery of another country without that country's prior permission to explicit and possibly strong public criticism. In addition, the French could be expected to attempt to exploit both the fact and nature of any release of US reconnaissance satellite imagery of other countries to win support for their proposal for an International Satellite Verification Agency. (S/NF)

-- The reactions of less developed countries would reflect the interaction of disparate concerns: their interest in acquiring more satellite imagery to support their efforts to promote economic growth and their fear that such imagery might be exploited to their disadvantage by foreign governments or corporations. Most LDCs favor a prior consent regime for the dissemination of satellite imagery and would initially be leery if they felt the US might release high or medium resolution photographs of their territory without their permission. Should the US agree to such prior consent practice, its present policy of open dissemination of satellite imagery from its civil programs would probably become less tenable. (C/NF)

Conclusions as to the longer term implications of foreign reactions to a release of reconnaissance satellite imagery for specific space-related issues and activities of US policy concern are difficult to draw. A host of related and unrelated considerations will influence the manner and extent that the leaders of a given country translate their basic opposition to, or support for, such an initiative into practical action. (C/NF)

-- In the short term, current positions in UN nego-

tiations on establishing principles for remote sensing are unlikely to be greatly affected, although over the longer term, support for a prior consent regime would most likely increase. A fairly widespread negative reaction to the imagery release could also stir up some presently rather quiescent issues (e.g., the right to sense and the right to overfly). (C/NF)

-- The net impact of the imagery release on support for the French proposal for an International Satellite Verification Agency is difficult to gauge. The force of some US arguments against such an agency would be undermined and to the degree that the details of the US initiative proved to be widely controversial, concern about superpower monopoly over high and medium resolution satellite imagery might mount. On the other hand, if the US action was not perceived as potentially threatening, it could lead a number of nations to conclude that an international agency of the sort proposed by Paris was unnecessary. (C/NF)

-- The Soviets have strong incentives for attempting to keep both SALT and MBFR on track and have shown interest in extending the current East-West arms control dialogue to include such additional issues as theater nuclear forces. Hence, unless Moscow were extremely unhappy with the specific course of action with respect to imagery release that was chosen by Washington (or unless other considerations intervened), there would seem to be a good chance that the practical impact of Soviet distress on current and pending negotiations in these three critical areas would be relatively limited. The Soviets might even see the release of reconnaissance satellite imagery of the US as beneficial if they thought it would help ratification of the SALT II agreement by increasing the confidence of the American public in US capabilities to monitor complicance. On balance, however, they would probably prefer no release of imagery at all. (S/NF)

-- In the event the Soviets viewed the course of action chosen by the US as only mildly provocative, its impact on the Anti-Satellite Talks would also

probably be quite limited. However, the Soviets did raise the problem of "unlawful" satellite activities briefly during the first round of ASAT as a genuine concern of theirs that would have to be addressed. Hence, it seems likely that any release of US satellite photography of Soviet territory without Moscow's express consent would prompt the Soviets to return to that issue with considerable vigor. (S/NF)

INTERNATIONAL POLITICAL IMPLICATIONS OF PUBLIC RELEASE OF SELECTED SATELLITE IMAGERY OR INFORMATION

INTRODUCTION

The purpose of this paper is to assess the likely foreign reactions to selective or more general public release of reconnaissance satellite imagery to support US foreign policy objectives and for civil applications. The paper does not assess the utility of such release in furthering US policy objectives, except insofar as such an assessment might affect judgments about likely foreign reactions per se. (C/NF)

A complex and variable mix of sometimes contradictory national and international concerns will determine the reaction of individual foreign governments to any public release by the US of reconnaissance satellite imagery or information. In all cases, pragmatic assessment of how such an initiative might, in its specific context, impact directly on national security and economic interests will be an important factor. But the broader international implications of the US action will be weighed as well. (C/NF)

Steady improvement in remote sensing system capabilities, their application to new uses, and the actual or projected entry of new actors into the field have greatly increased the salience and sensitivity of the acquisition and dissemination of satellite imagery as international political issues over the past few years. Subsequent discussion will explore the extent and significance of their current linkage to such questions of widespread concern as:

-- The limits of national sovereignty.

-- LDC aspirations for a new world order.

-- Peaceful use of outer space in general and related US programs (e.g., Landsat) and policies in particular.

-- East-West and Sino-Soviet tensions.

-- The outlook for a number of arms control and disarmament initiatives of global import, including

the French proposal for an International Satellite Verification Agency and the SALT, ASAT, and MBFR negotiations.

The picture is complicated, however, by the fact that the importance (both absolute and relative) attached to these general issue areas varies from country to country. So too will assessments of the potential impact--positive or negative--on each of a public release of US satellite imagery. (C/NF)

Although it is clear that the quality*, quantity, timeliness, and coverage of the imagery involved will--together with the diplomatic and administrative mechanics (including the declared purpose) of its release--generally be the key variables, the uncertainties alluded to above and the gaps in our knowledge of the relevant attitudes, policies, and concerns of many foreign governments make predictions about the likely short and longer term political consequences of alternative courses of action hazardous at best. Hence it must be emphasized that much of the discussion that follows is necessarily speculative in nature. (C/NF)

* A certain amount of confusion can arise from the fact that two different measures of imagery quality are widely used at present. The system most commonly employed in describing the capabilities of multi-spectral scanners on US satellites is instantaneous field of view (IFOV) which indicates the quality of the individual picture elements (pixels). The IFOV yardstick invariably yields more impressive figures than the alternative approach--measurement of equivalent photographic or spatial resolution--that seems to be favored by the Soviets and that has been uniquely defined by them (in the absence of any politaically agreed interpretation) as the smallest size of an object that can still be seen in any given picture. For example, the 40 meter IFOV achieved by the Return Beam Vidicon System on the US Landsat C platform corresponds to a photographic resolution of about 80-100 meters. (U)

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Finally, it bears note that there are a number of potential problem areas that must be kept in mind when assessing the impact that various release options might have on other US policies and interests. In view of their significance, it seems wise to draw attention to at least two of them here. (U)

The first stems from the fact that in many cases the risk of a strongly negative reaction apparently could be eased by prior consultation (including, where applicable, securing the permission of the country concerned for the release of imagery of its territory). Such action might, however, undermine or necessitate a revision of the current US policy of practicing and promoting unrestricted release of remotely sensed data of the earth's environment and natural resources. (C/NF)

The second centers on image quality. Certain US objections might require the release of high quality imagery. At the same time, however, it is clear that under some circumstances, at least, the higher the quality of imagery released, the greater the risk of untoward consequences--albeit some of the latter might be voided or attenuated by recognition of the increased benefits that could be derived from such imagery. (C/NF)

LIKELY FOREIGN REACTIONS

The USSR

If the US were to begin releasing high or medium resolution imagery, the Soviet Union's principal concern would be to prevent the publication of photographs of its own territory, particularly of its military installations. Moscow does not object to the unrestricted dissemination of low-resolution imagery produced by civilian space programs like the US Landsat, but it does not acknowledge the dissemination of medium or high resolution imagery as legitimate except with permission of the sensed state. It would consider unilateral release of reconnaissance satellite imagery without the target country's permission as a form of espionage and betrayal of the trust established in those agreements. (C)

In the early 1960s, the Soviet Union claimed that all forms of satellite reconnaissance were illegal infringements on sovereignty, and Soviet officials regularly denounced US reconnaissance programs as space espionage. Their denunciations

declined after the signing of the Outer Space Treaty in 1967, by which time their own satellite reconnaissance program was underway. In 1972, Moscow implicitly recognized the legitimacy of at least some satellite reconnaissance by pledging in the SALT I agreements not to interfere with "national technical means of verification" (NTM) operating in a manner consistent with international law. Nevertheless, the Soviets have never given a blanket endorsement to satellite reconnaissance or officially acknowledged that their position has changed. They assert that space activities must not violate either national sovereignty or the principle of noninterference in another state's internal affairs, and their public commentaries still refer to US space reconnaissance that is not related to strategic arms limitation verification as espionage. (C)

The Soviet position on an international regime to control dissemination of satellite imagery, or other data gained through remote sensing, is consistent with this posture. The Soviets distinguish global data (low-resolution photography of broad areas) from local data (high-resolution photography of small areas), and would prohibit dissemination of local data without the permission of the target country. In a model convention that the USSR and seven of its Comecon partners signed in May of this year, the division between global and local data is placed at 50 meters.* During the past two years, the USSR has announced several earth resources missions of its own and has indicated its willingness to take high or medium resolution photographs for this purpose, but with the data to be provided only to the target country. (U)

The Soviet Union's public posture reserves for it the right to counter satellite reconnaissance over its territory that is not required for verification of the SALT agreements. The US and USSR have never jointly defined what is required for verification or what systems are considered to be NTM. Negotiations since 1972 have revealed that the Soviets favor a narrow interpretation of verification, and hence of what activities are subject to the noninterference pledge. They have not specified how, or under what circumstances, they

* The convention does not specify how resolution is to be defined, but the Soviets have indicated that it is photographic resolution. Such a limit, if adopted worldwide, would permit the continued release of imagery from present and approved Landsat satellites, but not from higher resolution imaging systems. (C)

would interfere with other reconnaissance activities, although on another issue--the use of direct broadcast satellites--Moscow has explicitly claimed a right to take whatever active measures it deems necessary to counter intrusions upon its sovereignty from space. (S)

The Soviet response to a US release of imagery would depend on the purpose of release, the method of release (e.g., whether it was a one-time act or a continuing program), the location of the targets, and to a somewhat lesser extent on the type of target. If the released imagery only covered US territory, or the territory of third countries that had given permission, the Soviets might be concerned that attention would be drawn to their own reconnaissance programs, but would probably make no immediate response if they felt assured that photographs of their own territory would not be released in the future. They might actually see such a US action as beneficial if they thought it would help ratification of the SALT II agreement by increasing the confidence of the American public in US capabilities to monitor compliance. On the other hand, unilateral release of high-quality imagery would be an act of technological one-upsmanship the Soviets would be reluctant to counter because of their stress on secrecy, particularly where intelligence capabilities are involved. Neither would they welcome the public reminder of the difference in openness between our society and theirs. On balance, the Soviets would probably prefer no release of imagery. If consulted beforehand, they would probably respond in a low-key fashion, either recommending that we do not release (on the grounds that satellite reconnaissance is suited to the private verification of arms control agreements, not to public initiatives) or answering that as long as the photography is of our own territory, it is up to us to decide.* (C)

Release of high or medium resolution imagery of a foreign country without that country's permission would be an entirely different matter. Because this would be directly contrary to the Soviets' public position, they would almost certainly express concern and would probably increase pressures to establish a prior consent regime to govern the

* DoD believes that it is unlikely the Soviets would respond by saying that it is up to us to decide, and that it is more likely they would state an objection if imagery to be released is of high or medium resolution. (C/NF)

release of remote sensing data. Such a release might also cause some unease in Moscow because it would establish a precedent that could later be extended (perhaps with the international mood having shifted in favor of freer release of imagery) to photographs of Soviet territory. Privately, the Soviets would disapprove of release. They would lobby LDCs to prevent the growth of international approval of such release and, if such efforts failed, would probably maintain their conservative position. (C)

By far the most severe Soviet reaction would come if photographs of targets in the Soviet bloc, especially the USSR itself, were released without Moscow's consent. The reaction would be particularly sharp if Soviet targets alone were singled out. Even if these targets were part of a broader program of release, however, the Soviets would feel strategically threatened, seriously embarrassed by the dramatization of their apparent inability to prevent "espionage" over their territory, and angered by what they would consider a misuse of NTM. (S)

The Soviet Union is capable of responding with anything from diplomatic initiatives to the unlikely extreme of physical interception of some US satellites. Other possible responses include increased concealment, cover, and deception around sensitive targets; increased efforts to establish a narrow definition of NTM; and interference with satellite operations through electronic means. If the Soviet objective were denial of data alone, deception and/or electronic measures may suffice to achieve it, but Moscow would probably feel that a more visible gesture was needed to make the point that its sovereignty had been violated. (S)

In weighing its options, the Soviet Union would have to consider several possible disadvantages of a response that went beyond diplomatic actions, including the initiation of a large US effort to improve the survivability of its satellites, a large US antisatellite program, or an adverse impact on SALT. Milder responses would probably not appear to have these drawbacks, but they would diminish the prospects for continued US-Soviet cooperation in space (e.g., the projected Shuttle-Salyut cooperative program), which Moscow seems to value highly. By stirring up opposition to US space activities, the USSR would also risk increasing sentiment against all space reconnaissance operations, including its own. (C)

Despite these reservations, the Soviets' pervasive concern with secrecy and their overall attitude toward satellite reconnaissance makes some sort of negative reaction to release of imagery of its own territory a virtual certainty. The chances of active Soviet countermeasures would increase if the released imagery covered Soviet military targets of potential use to a strategic rival other than the US--i.e., China. Moscow would probably consider virtually all military targets within its territory as falling in this category, but it would be especially sensitive about its installations and forces near the Chinese border, above all if the imagery were released on a timely and continuous basis. (C)

Consultation with Moscow prior to release might help to alleviate some unwarranted Soviet concerns raised by a limited program of dissemination, but is unlikely to cause them to alter their public position on the release of imagery. An absence of consultation would surely augment Soviet resentment about the release of NTM data. The Soviet Union would resist being drawn into a detailed discussion of imagery of other countries, however, lest they appear to be associating themselves with a potentially unpopular move by the US or to be contradicting their public posture on dissemination of remote sensing data. It is very unlikely that the Soviets--who, although they have referred to satellite reconnaissance, have not followed the US lead in formally acknowledging it--would agree to any joint program of release of high or medium resolution imagery. (S)

The PRC

The PRC's public position on acquisition and dissemination of satellite imagery is ambiguous. Peking has derided the US and the USSR for using satellites to steal each others' military secrets and to advance their rival quests for global hegemony. It has also suggested that existing "peaceful use" satellites are designed primarily to serve military purposes. At the same time, however, the PRC has given little evidence of concern over legal technicalities relating to violations of national sovereignty by military or civilian remote sensing satellites or the release of information acquired by such satellites to third countries. (It has, in fact, routinely avoided voting on all UN resolutions concerning outer space questions). Moreover, the Chinese have demonstrated a long-term awareness of the significance of US and Soviet satellite reconnaissance efforts and have objectively discussed many facets of remote sensing technology in their scientific literature. (C)

The actions taken by Peking behind the scenes are, in combination, considerably more revealing.

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Given the nature of past Chinese commentary, Peking's desire to appear as a champion of LDC interests, and the PRC's jaundiced views of the SALT process, some relatively

low key criticism of the US initiative would be likely--particularly if the Chinese were not consulted about the move in advance. But the chances seem strong that the PRC would not object strenuously to the public release of even high quality US satellite imagery unless it appeared that photography of Chinese military or nuclear-related installations or production facilities might be included. (C/NF)

Major OECD Members

With the notable exception of France, whose unique position is examined separately below, most of Washington's OECD partners currently tend to support the arguments for unrestricted acquisition and dissemination of remote sensing data that the US has persistently pressed at the UN and in other international forums. If not preceeded--and shaped--by extensive consultations, however, any public release of US reconnaissance satellite imagery of areas outside US borders would almost certainly fragment this consensus. (C/NF)

To the extent that the release of imagery was seen as necessary to enhance the prospects for signature and ratification of SALT II, the US' NATO and non-NATO partners within OECD would probably be sympathetic. But, they would probably have grave reservations on national security grounds if release of high quality photographs of their own territory was planned--particularly so if they did not have a veto over the release of any given item. (C/NF)

Failure to accommodate the above concerns could result in serious strains in US relations with many of its major OECD partners--especially with its principal NATO allies and Japan. The impact of these strains on existing cooperative agreements would, however, be likely to be mitigated by the independent value attached to these arrangements by the countries involved as well as by the interest of these countries in avoiding actions that might jeopardize their

participation in the Landsat program or the viability of their own multilateral and unilateral remote sensing programs.* (C/NF)

OECD-member reaction to the public release of US satellite imagery would also be conditioned by a number of other concerns. Perhaps foremost among these would be apprehension over the potential impact of such an initiative on East-West detente and such related matters of especial regional concern as MBFR. Indeed, some West European officials expressed initial uneasiness about how the Soviets would react to the PRC's large purchases of Landsat photography of the USSR. Clearly, most NATO members would find any prospect of public release of higher quality imagery of Soviet territory much more troubling. Unless they were convinced that the initiative had been thoroughly cleared and orchestrated with Moscow, they would be likely to view its potential impact on verification arrangements for past and pending arms control agreements with the Soviets--and on the toughness of Soviet positions in other East-West negotiations--with considerable alarm. (S/NF)

Most of Washington's NATO allies would probably also be troubled by the implications of even highly selective

* Recent surveys have identified about 170 experimental remote sensing programs in the ten member states of the European Space Agency (ESA: The Federal Republic of Germany, Belgium, Denmark, Spain, France, Italy, the Netherlands, the United Kingdom, Sweden, and Switzerland). In addition to sponsoring and coordinating such significant space-related projects as the French Ariane launch vehicle that is scheduled to place an experimental earth observation satellite in orbit sometime in 1983 or 1984, the ESA has established Earthnet--a network of European ground stations for the acquisition of various types of remote sensing data (including that which will be provided by Spacelab on its first flight in 1980). For their part, Canada and Japan are also active participants in the Landsat program. Although Canada has reserved its position on whether or not the dissemination of satellite imagery should be subject to regulation, Ottawa already operates two Landsat ground stations. The Japanese investment in Landsat has so far been more modest, but Tokyo does have firm plans to build a similar ground station. Japan has also developed (with US assistance) a successful space launch vehicle of its own, but is unlikely to use it to launch a remote sensing platform until more pressing requirements for communications satellites have been met. (U)

declassification of satellite imagery with respect to Washington's determination and ability to protect intelligence sources and methods--especially since the risk of compromise of such information has been one of the arguments that the US has employed against the French International Satellite Verification Agency proposal. [redacted] 25X1

Together with Canada, then, most of Washington's European OECD partners would probably see many more disadvantages than advantages in the public release of reconnaissance satellite imagery. If their views were solicited--and at least partially accommodated--in advance they would be likely to exercise considerable restraint in voicing official criticism of such a move. Their reactions in the event that Washington acted without or against their counsel could be severe, but even in such a case there would seem to be a strong chance that their behavior would be tempered by a desire not to compound the damage already done. (S/NF)

The French, however, would view the public release of US reconnaissance satellite imagery from a somewhat different perspective--and they would be likely to act accordingly. Paris is on record (most notably, in documents submitted both unilaterally and jointly with the USSR to the Legal Subcommittee of the UNGA Committee on the Peaceful Uses of Outer Space in 1974) as favoring a consensual regime for publication or transfer to a third party of satellite imagery. Even though the French appear to have become more flexible on this score in recent years, their sensitivity to perceived superpower infringements of the sovereignty of other nations remains as strong as ever. Hence they would be likely to subject any US initiative that involved release of high or medium resolution imagery of another country without that country's prior permission to explicit and possibly strong public criticism. Moreover, Paris could be expected to attempt to exploit both the fact and nature of

such a US initiative to win support for--and undermine US arguments against--its proposal for an International Satellite Verification Agency.* (S/NF)

For its part, Japan has yet to establish a well articulated policy regarding legal space activity. Tokyo's few pronouncements on this score suggest that the Japanese, who collaborate closely with the US and various Western European countries on space development, would in principle be inclined to support any peaceful space-related activity that seemed to serve commonly-held international goals. In addition, the Japanese have demonstrated a keen interest in the economic utility of satellite imagery and thus would be likely to view the prospect of acquiring better imagery than in the past as fundamentally attractive. Nonetheless, given Toyko's direct security interests in the status of the Sino-Soviet dispute, the Japanese would undoubtedly be very sensitive to the potential impact of US release of reconnaissance satellite imagery on both Moscow and Peking. Hence, failure of the US to consult the Japanese in advance of taking such action could result in considerable alarm and resentment--albeit even under these circumstances the importance that the Japanese attach to their pervasive and complex ties to the US would make a strong public stand by Tokyo fairly unlikely.

Less Developed Countries

The LDCs' attitude toward dissemination of satellite imagery has two disparate elements: (1) a desire to increase their own use of remote sensing data, particularly in the management of their natural resources; and (2) a concern that imagery of their territory might be used to their disadvantage by foreign governments or corporations. Most LDCs probably believe that the US routinely photographs their territory already, but they realize they can do nothing to prevent this, and it is convenient for them to ignore it as long as the imagery is not published. Their fears of being exploited would be engaged only if they thought that the imagery were being provided to their military or economic rivals. (C)

* See the concluding section of this paper for further discussion of how the extent of international support for this French initiative might be affected by US release of reconnaissance satellite imagery.

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Because the LDCs tend to be highly dependent on agriculture or the exploitation of mineral resources, many of them have found the Landsat imagery to be useful in such tasks as geological surveys and the monitoring of crops. Iran and Brazil operate ground stations for receiving Landsat transmissions directly from the satellite, with Brazil becoming a source of both data and expertise for the rest of Latin America. Argentina, Chile, India, Romania, and Thailand are constructing stations or have plans for one, and several other LDCs are actively studying the possibility of following suit. Many more purchase Landsat data, and the World Bank is proposing a major expansion of the use of imagery in mineral surveys. India is building its own earth resources satellite, which will be launched by a Soviet booster, probably sometime in 1979. The demand among LDCs for assistance in photo interpretation and digital processing of satellite data is being partially met through regional remote sensing centers supported by the US, other Western governments, and UN bodies. Such centers operate in Nairobi and Ouagadougou, and two more are to be established, one in Bangkok and the other somewhere in Latin America. (S)

The LDCs' concern about foreign use of imagery is both military and economic. Militarily, some states fear that a hostile neighbor could glean valuable intelligence on installations or forces from photographs of its territory. Economically, the fear is that a multinational corporation or a government of an industrialized state, either of which presumably would be better able to interpret the imagery, would use the information to drive harder bargains or take effective control of resources away from the LDC.* On both counts, dissemination of recent imagery (e.g., this week's troop dispositions, this year's crop) would cause the most unease, but even older data--which could provide insights into mineral deposits or permanent military installations--would raise the same concerns. (C)

* In one respect, however, the dissemination of high or medium resolution imagery might lessen this fear; because it is easier to interpret, it is more amenable than low-resolution imagery to processing by a large number of interpreters having only minimal skills. Nevertheless, dissemination would still tend to raise concerns about neighboring LDCs using the information in an adverse fashion.

These fears lie behind the widespread support among LDCs, particularly the Latin American states, for restricting the dissemination of remotely sensed data. The extreme position, embodied in a draft treaty proposed by Argentina and Brazil in 1974, is to prohibit remote sensing without the consent of the target state. This proposal has little support at present, but virtually all LDCs favor prohibiting the dissemination of at least some kinds of remote sensing data and information derived therefrom without the permission of the sensed state. (U)

Given these various motivations, it is difficult to estimate the response of most LDCs to the release of higher resolution imagery. On one hand, they may welcome the willingness of the United States to make some of its best imagery available for civil use in developed countries. If the release were selective, such a positive response might even lead to a demand for release of still more imagery, either of higher resolution or of more targets. On the other hand, fears about sensitive military or economic targets could stimulate some states to harden their line on issues involving the peaceful use of outer space. Those issues are discussed in the concluding section of this paper. (C)

Two recent episodes suggest that the LDCs' tolerance for unrestricted dissemination of imagery is greater than their rhetoric at the UN would indicate, and that, given assurances about sensitive targets within their territories, most of them would welcome the dissemination of more satellite imagery than is available through existing civil programs (even though they would probably continue to press for a prior consent regime). One was the release, albeit on a one-time basis, of all imagery from the US Skylab missions. This included photographs with resolution of 10-20 meters--much better than what is available from Landsat. Even though the consent of target states was not obtained, the release provoked no protests. To the contrary: many LDCs expressed their interest in receiving imagery of comparable or better resolution on a regular basis. (S)

The other episode is Brazil's differences with NASA regarding the terms of its participation in the Landsat program. Brazil clearly demonstrates the split mind with which most LDCs approach the issue of dissemination of imagery, because it has been one of the strongest advocates

in the UN Outer Space Committee of restrictions upon the dissemination of imagery but also the most important LDC participant in the Landsat program, which operates on the principle of unrestricted dissemination. Brazil at first failed to adhere to this principle after its Landsat terminal went into operation in 1973, and when its agreement with NASA came up for renewal in 1975, it was forced to choose between accepting NASA's policy or dropping out of the program. Brasilia chose the former, and is now reviewing its international policy on remote sensing. Like other Landsat participants, Brazil has preserved its future options by distinguishing the present "experimental" phase of the program from any permanent arrangements that may later be agreed upon, thus retaining its freedom to insist upon a strict consent regime in the future. (C)

US civilian agencies have found distinct uses for the high and medium resolution, intermittently acquired imagery from reconnaissance satellites, which complements low-resolution imagery in many applications. However, most LDCs have no experience in using this higher resolution photography, and many of them may be slow to appreciate its usefulness. Their reaction to release would depend in large part on whether the increase in their appreciation outpaced any heightening of their suspicions. An initial release of photographs of targets in the US--an action carrying no particular drawbacks from the LDCs' viewpoint--might convince them of the value of high and medium resolution imagery, particularly if it demonstrated its application to a specific mission like disaster relief. (S)

Prior consultation would be important in shaping LDCs' reactions if the targets concerned were in their own territories. A release of high or medium resolution imagery of even nonmilitary targets without the target state's consent would probably provoke complaints and talk of the dangers of revealing more sensitive targets, although the long-term response may be more positive if fears failed to be realized and new applications became apparent. Release only with permission of the target state would be wholly consistent with the LDCs' posture on remote sensing, should generate no significant negative reactions, and would probably also serve to increase interest in civil applications of imagery from reconnaissance satellites. (S)

Sensitivity regarding military targets would probably keep most LDCs from ever agreeing to dissemination of all imagery from reconnaissance satellites. Their economic concerns might lessen over time as they became more confident in their own ability to exploit the imagery. These concerns may be sustained, however, if the LDCs suspected that US corporations or US allies were receiving preferential treatment in the dissemination of market-sensitive information. This suspicion might be enhanced if release were highly selective, or appeared to be less than complete because of exaggerated notions of the coverage of US reconnaissance satellites. (S)

SPECIFIC IMPLICATIONS

The longer term implications of a public release of reconnaissance satellite imagery for specific space-related issues and activities of US policy concern are more difficult to gauge than the immediate reactions of key foreign governments. A host of related and unrelated considerations will influence the manner and extent that the leaders of a given country translate their basic opposition to, or support for, such a US initiative into practical action. Nonetheless, some general observations and conclusions can be offered with respect to the problem areas discussed below. (C/NF)

Multilateral Issues Concerning the Peaceful Use of Outer Space

Remote sensing from space has been a priority topic for discussion at the UN, particularly in the Outer Space Committee and its subcommittees, since 1974. This attention has resulted mainly from the LDCs' concern with maintaining control over their natural resources, an objective which many of them believe requires limiting access to information on those resources. The principal issue, and the one that would be raised directly by a unilateral release of imagery of other countries without permission, is whether dissemination of remote sensing data should require the consent of the sensed state. (U)

Such a release of imagery would surely increase interest in this issue, but whether the tone of the debates shifted in favor of, or against, greater restrictions on dissemination would depend on all of the considerations facing individual states that were discussed above. Those favoring a consent regime would continue to do so, although in some cases with more vigor. The West Europeans might waver in their support of unrestricted dissemination, although initially they would probably express any second thoughts about Washington's position through channels other than a UN committee. In the short term, then, positions are unlikely to change markedly. In the longer term, however, the US may find that support for its position had eroded. (C)

It is possible, but unlikely, that a release of high or medium resolution imagery would appreciably increase the sentiment in favor of restricting low-resolution imagery from Landsat or other civil programs. Selective release of imagery from reconnaissance satellites would lower the

credibility of the US argument that completely open dissemination of data is the best safeguard against its misuse by foreign organizations. Landsat already has a large constituency, however, which would be reluctant to risk losing the benefits of the program. About forty states participate directly, with private users in many more countries also purchasing imagery. Several countries have made sizable investments in ground stations, technical training, and domestic programs that are dependent on a continuing flow of data. (C)

If this support for Landsat were accompanied by opposition to dissemination of higher resolution imagery, sentiment may develop in favor of establishing a distinction between global and local data, as found in the Comecon convention. The Soviets have thus far not garnered a great deal of support for a 50 meter photographic resolution limit, perhaps because the Skylab photography, which falls below that limit, has already been released and widely accepted as not causing economic or military harm. Some countries, however, might campaign for a limit near the best resolution of the Skylab photographs (e.g., 10 meters photographic). Nevertheless, anyone attempting to restrict dissemination of data declassified by the US would tend to be deterred by the fact that the US Freedom of Information Act provides for disclosure of unclassified data on request. Consequently, foreign governments or private organizations could obtain such data anyway. (S)

The release of imagery from US reconnaissance satellites could also influence the debates on several related issues concerning the peaceful use of outer space. On one hand, foreign governments that were upset by release might take a more anti-US line on those other issues, either to challenge the legitimacy of US satellite programs or simply to retaliate for a perceived infringement of sovereignty. On the other hand, positive reactions to release would tend to make debates on the related issues more benign. These other issues, beginning with those most closely related to the dissemination of remote sensing data, are the following: (S)

a. Dissemination of Information Based on Imagery. The Comecon convention on remote sensing, besides establishing the 50-meter limit for freely disseminated imagery, also requires prior consent to disclose "information" on another country's natural resources or economic potential that is derived from remote sensing data.

"Information" is broadly defined as the "end-product of the analytical process" of exploiting this data in combination with data from other sources. This would seem to include any book or article that makes even slight use of satellite imagery. Most LDCs have supported this sort of sweeping restriction in UN debates on remote sensing principles. If their concerns about dissemination of imagery were stimulated by the specifics of a US initiative, this support would be likely to intensify--at least over the short term. The longer term consequences would depend on their perceptions of the net gains or losses to them of Washington's course of action. (C)

b. Right to Sense. The issue of prior consent for remote sensing has recently been quiescent. The 1974 Argentine-Brazilian draft agreement requiring prior consent is still on the table, however, and the countries most sensitive about release of imagery could make it a live issue once again. As far as civil systems are concerned, this would be a gesture of protest with little practical effect intended: few countries would want to lose completely the benefits of the Landsat program and most agree that it would be neither practical nor advantageous to attempt to turn the imaging equipment on and off as it crosses political boundaries. Some may attempt to restrict sensing by reconnaissance satellites alone, probably on the grounds that this is a violation of sovereignty. (C)

c. Right to Overfly. There is general acceptance of the right to overfly another state's territory by satellite, with Article II of the Outer Space Treaty prohibiting any national appropriation of outer space by claims of sovereignty. The lack of an agreed definition of outer space means, however, that the door is still open to national claims. The nations currently most inclined to make them are those on the equator, i.e., those that because of their location are most intrigued by the "scarce resource" attributes of the limited (because of radiointerference problems) space in the 22,000 mile-high geosynchronous orbit. Most of the equatorial countries have claimed some sort of preferential rights for use of this orbit. At a 1976 meeting in Bogota, eight of them declared their intention to pursue the question of claiming the part of the geosynchronous orbit above their countries as national territory. Any ill will generated by release

of imagery could stimulate them to move further on this issue, but they would have only limited support from other LDCs, and none at all from the USSR. Another possible initiative, however, would be to push for a general definition of outer space that placed its lower limit above the orbits of many remote sensing satellites (e.g., 200 miles). This would have more widespread LDC support, although the USSR would still oppose it. (C)

d. Direct Broadcast Satellites. Like remote sensing, this issue arouses concerns about control over information. It is another area for possible agitation by governments displeased by release of imagery, but most non-Western states already take an anti-US line on the issue anyway by insisting on the prior consent of the receiving state. (C)

e. Liability. It is possible, but extremely unlikely, that some states may endeavor to intercept the 1972 Convention on International Liability for Damage Caused by Space Objects as applying to economic or military losses resulting from release of imagery of their territories. (U)

International Satellite Verification Agency

Earlier this year, France proposed the creation of an international agency that would use satellite technology to monitor and verify disarmament agreements and other measures designed to reduce the chance of armed attack. The UN General Assembly recently adopted, over US objections, a resolution calling for an experts' study on the subject, to be completed before the Assembly reconvenes in September 1979. A unilateral release of imagery by the US could affect the degree of support for the French proposal by influencing perceptions of: (1) the need for such an agency; (2) its practicability; and (3) the chances that the US might reverse its opposition to it. The net effect on this support is difficult to gauge, however, and would depend on how governments with no prior access to the imagery came to appreciate the process of interpreting it. This, in turn, would largely depend on which imagery was chosen for release. (C)

A fairly comprehensive release of imagery from US reconnaissance satellites might make the proposed agency appear superfluous by demonstrating that, even without it, the US would provide its best reconnaissance products to the international community. Any US release would not, however, necessarily preclude other countries from continuing to urge establishment of an international agency that operated under a prior consent regime. Furthermore, if targets for US satellites continue to be chosen according to US intelligence requirements, many states would no doubt argue that such selection was one-sided and no substitute for targeting decisions reached by an international body. The argument would be made even more forcefully if the US acknowledged that it was withholding some of its imagery. Release might also demonstrate to many governments that photo interpretation is difficult, leading them to conclude that an international agency with skilled, "impartial" photo interpreters would still be necessary to avoid reliance on the US for interpretation. (C)

Although release may leave many states convinced that an international verification agency was laudable in principle, it might also persuade them that it would be unworkable in practice. Controversies would probably arise over the meaning of particular pieces of imagery, and this would support the US contention that photo interpretation is not only difficult but also fraught with political implications and highly dependent on collateral information. There may then be little confidence that any photo interpreter could be "impartial." (S)

Unilateral release of imagery would probably raise hopes, not least of all among the French, that the US was backing down from its opposition to the proposal. At a minimum, it would seriously undermine some of the arguments that the US has lodged against it, suggesting that we were not really as concerned as we had professed to be about the security of our intelligence capabilities or the hazards of letting the public look at raw data. US absence from the UN experts' group would, however, keep these hopes from increasing very much. (C)

Specific East-West Arms Control Negotiations

The extent to which the level of Soviet concern about public release of US military reconnaissance satellite imagery might be affected by various aspects of a specific US initiative along those lines (e.g., the nature of the

imagery released and whether or not Moscow was consulted beforehand) has already been explored. But it must be emphasized that the degree of Soviet unhappiness would also be likely to be either reinforced or attenuated by other concurrent trends and developments affecting the overall state of US-Soviet relations. Similarly, the venue and nature of any Soviet response would depend upon a host of concrete and nebulous variables. Hence while broad generalizations about the likely impact of the release of US military reconnaissance satellite imagery on specific East-West arms control negotiations are possible, in the absence of detailed scenarios, more precise predictions about probable thresholds of Soviet tolerance or about US moves that might trigger particular Soviet responses are not. (C/NF)

The MBFR negotiations are no less vulnerable to disruption than SALT should satellite imagery released by the US provide Moscow with grounds for charging that Washington was using NTM for espionage missions in addition to their legitimate treaty monitoring role. At the same time, however, the Soviets have strong incentives for keeping both SALT and MBFR on track, and have shown interest in extending the current East-West arms control dialogue to include such additional issues as theater nuclear forces. Hence there would seem to be a good chance that unless Moscow were extremely unhappy with the specific course of action chosen by Washington (or unless other considerations intervened), the practical impact of Soviet distress on current and pending negotiations in these three critical areas would be rather limited. The Soviets have other ways of signalling their displeasure. Thus they might lecture and otherwise complicate the talks for awhile, but on balance it seems unlikely that they would risk taking any action that might seriously jeopardize the negotiating process. (S/NF)

Similarly, the impact on the Anti-Satellite Talks of a US course of action with respect to release of satellite imagery that the Soviets considered only mildly provocative would probably be quite limited. For political reasons, the Soviets would almost certainly consider SALT--especially the SCC discussions--to be the most suitable arms control negotiating forum for registering severe irritation over any perceived US "misuse" of NTM, and they would probably be inclined to air lesser grievances there first as well. Nonetheless, the Soviets did raise the general problem of "unlawful" satellite activities during the opening round of

ASAT. They subsequently indicated that while none of their concerns on this score were offered as justification for having an antisatellite system, these concerns were real and would have to be addressed. Hence it seems likely that any release of US reconnaissance satellite imagery of Soviet territory without Moscow's express consent would prompt the Soviets to return to the issue of illegal satellites with considerable vigor within the ASAT context and, in addition, to use this agitation at ASAT to strengthen their position on the remote sensing issues under negotiation at the UN. In fact, under some circumstances (including those involving no more than mid-level Soviet concern), Moscow might be particularly attracted by the fact that ASAT is a less politically visible forum than SALT and thus could be used to express protest with less risk to overall Soviet-US relations. (S/NF)