MEMORANDUM FOR THE RECORD

SUBJECT: Critical Review of the Utility of Various Intelligence Activities

Our current review of the submission of the Program Change Request for the Consolidated Intelligence Program, and the Consolidated Cryptological Program, together with the briefing on peripheral airborne reconnaissance brought to my attention what may be an uncontrolled proliferation and growth of sundry intelligence activities. Attempts to understand the requirements which generate all the activities almost always fail for reasons discussed later. Usually the conclusion is drawn intuitively that there is a great deal of duplication: - that although many activities make some useful contribution, the additional intelligence gained by individual activities has long passed the point of diminishing returns.

The following is a typical breakdown of the flights conducted each month.

RECONNAISSANCE OPERATIONS

ACTIVITY SUMMARY (FEBRUARY 1969)

<table>
<thead>
<tr>
<th>Type</th>
<th>Sorties</th>
<th>Theater Requirements</th>
<th>National Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo</td>
<td>2250</td>
<td>2154 (96%)</td>
<td>96 (4%)</td>
</tr>
<tr>
<td>ELINT</td>
<td>37</td>
<td>27 (73%)</td>
<td>10 (27%)</td>
</tr>
<tr>
<td>COMINT</td>
<td>239</td>
<td>36 (15%)</td>
<td>203 (85%)</td>
</tr>
<tr>
<td>ARDF</td>
<td>951</td>
<td>951 (100%)</td>
<td>-</td>
</tr>
<tr>
<td>Re-Entry</td>
<td>1</td>
<td>-</td>
<td>1 (100%)</td>
</tr>
<tr>
<td>WX Recon/Sampling</td>
<td>868</td>
<td>430 (50%)</td>
<td>438 (50%)</td>
</tr>
<tr>
<td>Avg Weight/Effort</td>
<td>4346</td>
<td>3598 (83%)</td>
<td>748 (17%)</td>
</tr>
</tbody>
</table>
The large number of Southeast Asia photo missions have been frequently questioned. Much more imagery is collected than is interpreted. Millions of feet of film are exposed each month, more than can be examined. Attempts to determine what percentage is exploited properly cannot be answered. It is significant to note that all three services (as well as intelligence agencies) have numerous projects to automate or otherwise improve exploitation of photographic imagery. The justification for these projects always cite the disparity between the huge amount of imagery collected and the relatively small percentage fully exploited. Many study groups have recommended reducing the amount of imagery collected and have indicated there are ways to carry out photographic reconnaissance missions in a more selective manner.

Similar observations have been made about infrared and high resolution radar missions. Several observers have observed that little or no useful information is derived from many of these flights, but they are scheduled on a routine basis.

Analysts have attempted to determine the need for all the missions in Southeast Asia. The missions are planned from target lists drawn up by various agencies and also from requests from many sources for area coverage. Each target and area has a desired frequency of coverage. Users prepare the lists and specify the coverage frequency. The reconnaissance specialist attempts to satisfy these requirements as far as collection is concerned. It is difficult to determine whether intelligence is derived. It is possible that it would be better if, instead of specifying collection, the intelligence desired be specified. At present, the reconnaissance requirements are considered met if a film is exposed over the target.

The users are seldom motivated to reduce the number or frequency coverage of targets reconnoitered. Further each user makes his own list, so that many target decks exist.
Despite the huge collection, the requirements in Southeast Asia are more easily accepted than some of the "national" requirements. Of all the national requirements, photographic requirements are the most easily understood. On the other hand, ELINT requirements (validated by the JCS or DIA) are much more difficult to justify in view of the growing productivity of the KH materials. Individual service requirements for ELINT further complicate the requirements confusion. Most observers reach the conclusion that duplication and marginally productive efforts are prevalent.

The ELINT collection activities show a huge growth, most of it in the NRO. There has been no indication of cutbacks elsewhere or has there been any real, hard-nosed look at the utility of all the ELINT programs, whether within the NRO, the CIA or the services.

COMINT requirements are also not clear, generating uncomfortable feelings that the area is not well controlled or managed. The difficulty in identifying the need for the [redacted] is an example. The national agency and the JCS did not have identical aims nor identical understandings.
The large number of weather reconnaissance flights appear excessive. Attempts to find the justification for them end up in statements of requirements and validations by various agencies, agencies not responsible for funding or managing the acquisition process. Weather reconnaissance is typical of other areas. The requirements are generated by users who have no programming or operating responsibility, are validated by a higher echelon of users or managers and finally are usually satisfied by a third party whose measure of success is frequently how large a program he manages.

To make matters more complicated, many of the users who write specific collection requirements (and the validators as well) do not have knowledge of KH capabilities. They specify non-satellite collectors although the need is already being satisfied by KH material.

Mapping, charting and geodesy is another illustration of the loose links between the requirement writer, the validator, and the collector. It also illustrates the duplication possible when users, validators, and collectors do not know about KH capabilities.

Attempts by knowledgeable observers to question the requirements always reach a blind end. If the requirements are validated by the JCS, or by the DIA, the search by persons in the services is ended since these requirements come from agencies at a higher organizational level than the services. If the requirements are generated by the national agencies, no one is in a position to question them. Sometimes the requirements are generated by the user who is also the validator and finally the system developer. The rationale for this type of requirement is most difficult to discover.
A recent example in the mapping charting and geodesy area is our recent attempt to find whether the requirement for the SI camera was worth $90M. It had been justified at a $30M level. The requirement was based on the need for large scale maps, the scale desired being 1/50,000. It was clear that these maps were necessary. To make these maps, good detail is necessary. The KH-9 panoramic camera could furnish all the detail - in fact, it can furnish the detail for the 1/25,000 maps they prepare. The panoramic camera would not give high metric accuracy, however, but the requirement for high metric accuracy could not be pinned down. Conversations with knowledgeable observers indicate they are skeptical whether the high metric accuracy made possible by the 12" SI camera is necessary. Further, the issue is not confined to mapping projects since if we need to improve accuracy of artillery fire, tactical air strike and ballistic missiles by means other than maps (always subject to human error) we should be working on these alternatives.

Human intelligence, or HUMINT is another area where observers have stated our efforts are ineffective and duplicative. The CIA has a large staff and is doing a fairly creditable job according to these observers. A few service organizations also produce intelligence, however the bulk of them are not productive. They send out questionnaires to Government laboratories and some commercial organizations requesting them to state what information concerning foreign technology is needed. The scientists fill out the form and do not receive any feedback until the next year when new requests for desired information are sent out. The reasons for the failure of the system are known, however the remedy is difficult.

Clear Sky,

Persons with more objectivity than the DIA panel (who are proponents) should look at these efforts and the Vela Program.
Intelligence production, including the Intelligence Data Handling System is larger than $100M in the Air Force alone and may be approaching, or even exceeding, one half billion dollars among all Government agencies. The requirements and the efforts appear duplicative. Attempts to reduce them always encounter the understandable desire for each organization to perform its own intelligence production. We should permit a certain amount of this, but economies by concerted effort appear possible and necessary.

Scientific and technical intelligence may not be as confused as other areas but there are duplicative efforts which could stand examination.

There have been several attempts by groups at high level to bring order to what may be a chaotic situation. They have not been effective because they did not attempt to probe deep enough. Instead they attempted to remedy the situation by management adjustments. Management changes can help, but not too much. In fact, management changes may boomerang if one believes Parkinson, or Murphy, or whatever author claims for himself the discovery of the inexorable process of bureaucracy.

What can we do? First we should not jump to conclusions without facts. So we must gather facts.

First we should plot the ten year cost and manpower growth of each of the elements in the CCP, CIP, NRO and other agencies. We should break these down into the various types of collection, processing, dissemination and usages. The charting of the elements should show whether they are managed by the Army, Navy, Air Force, NSA, DIA, NRO, CIA or other agencies. Another chart should show how the costs are distributed according to the source of the requirement. Another should break the costs versus year plot by element according to the validator.

After this information is gathered, knowledgeable experts should be asked to investigate intelligence requirements, validation systems to determine the utility, possible duplication and cost-effectiveness of all the activity. The
experts should be assembled in groups. A group of ELINT experts could consist of persons like Professor Rambo, Stanford University, Dr. Fubini, consultant, or Mr. Brown of PSAC. COMINT experts could be men like Dr. Sheingold, Dr. Lauterdale, Mr. Frank Lehan and Dr. Fletcher, President, University of Utah. Photo experts could be Dr. McDonald, Dr. B. Billings, Mr. Katz of Rand, and Dr. Augenstein of Rand.

HUMINT and scientific and technical intelligence experts could be assembled from various sources. Dr. Zirkind of Polytechnic Institute of Brooklyn, Dr. Koslov and some members of the Library of Congress are candidates.

Intelligence production experts could be assembled from several sources. Dr. Ruth Davis of the Department of Health, Education and Welfare, could recommend experts.

Before the groups are called or assembled, we should carefully prepare material and an agenda. We should organize an overall group to monitor the entire exercise. They could call together several panels of experts for each individual area in intelligence collection, processing, dissemination and utilization.