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~~(S)~~ NATIONAL RECONNAISSANCE OFFICE

WASHINGTON, D.C.

14 00075027D

THE NRO STAFF

February 13, 1969

MEMORANDUM FOR DR. FLAX

1. Jim Stewart bootlegged a copy of the attached document this afternoon, and I in turn got this copy from him. Neither of us has received it, officially at this point.

2. I have tended in the past, to simply hold Ivan Selin and his people at arm's length, but now I guess I'm a little more concerned with what I see and believe your staff ought to give to you for your consideration some responsive action that has teeth in it. I believe that a continuation of this type thinking by Selin's office is becoming dangerous.

3. I have asked Paul Worthman to take on such an action role, calling on such stalwarts as Lew Allen, Ralph Ford, Nevin Palley and others as he sees fit to assist. I have asked Paul to keep this as an in-house effort, reporting to you only.

4. Please provide me or Paul any guidance or comment you may have.

Atch
[redacted] memo 12 Feb 69
(BYE 1871-69)

Russell A. Berg
Brigadier General, USAF
Director

Gen Berg: This is an attempt to muster support at the Exdan level for what Enthoven was unable to sell to either Mr Vance or Mr Nitze. I believe your comment should be that my memoranda to Mr Vance and Mr Nitze give reasons which are still valid for not doing what is recommended. Since TOD is mentioned, you might also

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adv[illegible] (Sequence)
on the weakness and dangers
of using the DTOD as a
management tool for the NRP.
Cliff

DISTRIBUTION LIST:

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	Mr. Palley
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OASD(C)	[redacted]
NSA	

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D. C. 20301

BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY

12 February 1969

SYSTEMS ANALYSIS
(Intelligence)

MEMORANDUM FOR DISTRIBUTION LIST

SUBJECT: OSD Management of Intelligence (U)

The enclosed paper analyzes intelligence program management in OSD. It discusses what we believe are the major intelligence program management problems that exist within DoD and it recommends some changes within the Department to rectify some of these problems. The analysis was intentionally restricted as much as possible to OSD; the problems we believe we have, however, preclude constraining the impact of resulting recommendations to OSD. Consequently, some of these recommendations affect the DoD intelligence agencies and, to a much lesser extent, the Director, Central Intelligence Agency, and his staff.

We would like your comments on this paper. We are interested in all your comments and ideas, but it would be helpful to us if you would first point out your agreements and disagreements with the alleged facts and their presentation in the paper. This should, of course, include any relevant omissions you think we have made. Second, please discuss how the facts, as you see them, cause you to arrive at different assessments of the problems and different recommendations than we do, if such is the case.

Our plans are to present a revised version of this paper to the Deputy Secretary of Defense about Monday, February 24, 1969. For your comments to be very helpful, we need them by close of business, February 20, 1969.

I, or Ivan Selin, will be happy to discuss this paper with you if you feel that would be helpful or more convenient.

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Colonel, USAF
Director, Intelligence Division

Enclosure

CORONA DORIAN GAMBIT KEXAGON BYE-7787-69

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INTELLIGENCE MANAGEMENT IN OSD

INTRODUCTION

This paper discusses intelligence program management in DoD. It recommends procedural changes in OSD, but not reorganization, to improve mid-range planning for intelligence programs and to coordinate budgets and programs with plans. The paper discusses neither management of current intelligence operations nor intelligence estimating.

CONCLUSIONS

1. There is now little coordinated mid-range planning (three to five years ahead) for intelligence going on in DoD. That which is occurring is the result of ad hoc efforts.

2. Without such planning, our intelligence decisions are dominated by, first, short term considerations, and, second, by our tendencies to develop options, made available by burgeoning technology, simply because they are available. Our major decisions on intelligence forces should be affected first, by our important future intelligence needs, and, second, by our advancing technology which allows us to do important things we previously could not do and old things less expensively.

3. Conduct of mid-range planning is seriously hampered by the lack of mission-oriented intelligence force structures and by lack of coordination of the several OSD offices with intelligence responsibilities.

4. The beginnings of a mission structure and some of the analytical tools to do useful planning and analysis of intelligence forces are available.

5. The Consolidated Cryptologic Program (CCP) and the National Reconnaissance Program (NRP) present unique but different problems in doing coordinated mid-range planning. In the case of the CCP, we lack basic understanding of the purposes, costs, and effectiveness of the effort involved. Projects of the NRP are now excluded from normal DoD review procedures. This practically denies the OSD staff timely access to cost, technical, and performance data required for such planning and for adequate support of OSD participants in the NRP Executive Committee (EXCOM).

6. Some of the problems in intelligence planning are similar to problems we have met and partially solved in planning our military forces. Similar solutions can be applied within OSD to our intelligence planning problems without reorganizing OSD intelligence management or doing away now with existing mechanisms such as the Consolidated Cryptologic Program and Consolidated Intelligence Program reviews. Changes in the CCP and CIP, and in the review of these, might be considered after a trial period of revised intelligence administration in OSD.

RECOMMENDATIONS

1. Portions of the Target Oriented Display (TOD) (discussed below) should be used as a DoD Five Year Intelligence Plan (FYIP). The FYIP would be a mission-oriented display of the DoD intelligence forces and financial programs in Program III of the Five Year Defense Plan (FYDP). The FYIP would supplement, not replace, the FYDP for intelligence.

2. An annual cycle of coordinated mid-range planning for intelligence should be started in OSD for CY 69. OSD activities should be supported by studies performed by the major DoD intelligence agencies. This planning should be mission-oriented like the FYIP and should serve to maintain the FYIP current. This planning cycle would result in an intelligence planning memorandum in late spring. The purpose of this memorandum would be to inform all interested parties of the tentative results of the planning exercises. It would also focus issues and stimulate discussion of these issues, the techniques for their analysis, the mission structure, program costs, effectiveness criteria, and other aspects of intelligence planning. After review and discussion by all agencies concerned, this planning would provide the basis for programming and budgeting during the late summer and fall.

3. The major intelligence agencies and OSD should be canvassed for major issues for this year's mid-range planning cycle.

4. Such standard practices as use of Program Change Requests (PCRs), Program Change Decisions (PCDs), and Development Concept Papers (DCPs) should be applied to the National Reconnaissance Program (NRP). These are already used for the CIP and CCP. Such changes would have to be worked out with CIA. These changes would provide to the OSD staff information needed for mid-range planning and to support the OSD participants in the NRP Executive Committee.

5. Additional BYEMAN billets should be authorized for OSD cost analysts, programming and procurement people (in OASD(SA), OASD(C) and OASD(I&L)) in sufficient numbers to permit adequate review and analyses of the NRP. No more than 10-20 billets would be needed in addition to those we already have. Similar access is already available to the CIP and CCP.

The net result of implementing these recommendations would be to make intelligence program management in OSD similar to our management of the military forces program.

BACKGROUND

Department of Defense intelligence efforts can be divided into two broad classes: national and "tactical" intelligence programs. There is no clear dividing line between these two classes of intelligence efforts,

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but in general the national programs are those which support the needs of the highest echelons of the government, and many of the needs of the Strategic Air Command. The tactical programs are those which support the needs of other military commands. In addition, the national efforts are generally tasked by the United States Intelligence Board (USIB); the tactical efforts, by military commanders in the field. This paper addresses the way we plan for the national programs within DoD.

DoD's national intelligence efforts are in four major programs: the National Reconnaissance Program, the Consolidated Cryptologic Program (CCP), the Consolidated Intelligence Program (CIP), and the Manned Orbiting Laboratory Program (MOL). There are some other projects, e.g., the SR-71s, which probably should be considered with these four programs. The table below shows the expected costs of these programs in FY 69 and FY 70 and the executive agency for each. The fifth major program, the

Program		Executive Agency
NRP		National Reconnaissance Office
CCP		National Security Agency
CIP		Defense Intelligence Agency
MOL		MOL Program Office, USAF
Total		

DoD oversees these programs in different ways with different results.

OSD MANAGEMENT OF THE FOUR NATIONAL INTELLIGENCE PROGRAMS

The National Reconnaissance Program (NRP). The NRP is managed by the Assistant Secretary of the Air Force for Research and Development in his covert capacity as Director, National Reconnaissance Office (DNRO). The NRP was established to integrate and coordinate Air Force and CIA overhead reconnaissance projects. The Executive Committee of the NRP, chaired by the Deputy Secretary of Defense, with the Director, CIA, and the President's Scientific Advisor as members, was set up to control the NRP and to institutionalize CIA's participation in this control. The Director, Bureau of the Budget; Director, Defense Research and Engineering; Assistant Secretary of Defense (Comptroller); and DNRO also participate in EXCOM meetings.

The EXCOM meets during the year to consider specific matters usually placed on the agenda by DNRO. At one of these meetings in the late fall the NRP budget is presented.

The NRP budget document is published about two weeks prior to this meeting. This document presents the budget, broken down by projects and activities; the document also includes discussions of issues in the NRP which the EXCOM then addresses. Various options for each issue are presented and the pros and cons of these are discussed. The document presents very little detail which permits analysis of how the budget figures were arrived at. Also, the budget is not placed in the broader context of a five-year plan for the NRP, nor is the NRP part of a community-wide Five Year Intelligence Plan (FYIP).

NRP projects are excluded from "normal Department of Defense staff review" by DoD Directive TS-5105.23, "National Reconnaissance Office (NRO)". As a result of this exclusion, such documents as Development Concept Papers (DCPs) and Program Change Requests (PCRs) are not prepared for NRP projects. Also, NRP projects are in the BYEMAN control system. Very few OSD procurement, cost, and programming specialists have BYEMAN access.

In sum, OSD support of DoD EXCOM members is seriously hampered by the following factors:

1. The NRP is not analyzed as part of a Five Year Intelligence Plan.

2. The NRP budget is submitted late. This, coupled with the lack of detail and the inaccessibility of the budget to OSD cost, procurement and program analysts, prevents adequate review of the budget and the issues presented in it.

3. The exclusion of the NRP from routine procedures in DoD denies some parts of the OSD staff, essential to planning and support of OSD EXCOM participants, an opportunity to see the initiatives being taken and the data needed to address NRP issues.

4. There are no routine periodic planning activities outside the NRO which create an effective dialogue between the OSD staff and the NRO. As a consequence, this avenue for understanding and overseeing the NRP is also practically cut off.

The Consolidated Cryptologic Program (CCP). The CCP is documented in great detail and submitted to OSD for review in late spring. The CCP receives two reviews in OSD. The first occurs soon after its submission and is done by a review group chaired by the Assistant Director, Defense Research and Engineering (Special Intelligence). This review group consists, in addition, of representatives of the DCI, DIA BoB, NSA, ASD(C), and ASD(SA). The CCP review group concentrates on a large number of relatively small issues such as addition of individual positions at various stations, manpower levels, NSA's computer capabilities, and similar matters. Larger operational problems such as station consolidations are also considered. The CCP is prepared by NSA and the Service Cryptologic Agencies from about January to June. No doubt much of this time is

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given up, too, to detailed reviews by the Services and NSA. Finally, in the fall, a budget review is held by ASD(C) and BoB, with participation as needed by people from ODDR&E, OASD(A), NSA, and OASD(SA).

The CCP presents some fundamental problems. First, we do not really know how the efforts in the CCP contribute to our broader intelligence goals. Second, we do not have measures of effectiveness for the collection and processing systems in the CCP; in fact, we have not yet succeeded in defining the collection systems and their associated processing activities in such a way that very much of the money in the CCP can be associated directly with the "production process" of collecting and processing foreign signal intelligence. In effect, we know neither the marginal costs nor the marginal productivities of various physical assets in the CCP, and the CCP appears to be mostly overhead.

In sum, OSD is largely ineffective in mid-range planning for the CCP for at least the following reasons:

1. We do not understand how CCP projects contribute to broader national intelligence goals.

2. We have neither measures of effectiveness nor effectiveness models which relate NSA's output to financial inputs.

3. We do not know the direct costs of discrete collection and processing efforts at NSA.

4. Even if the problems above did not exist, our reviews of the CCP tend to be very short range, Also, the CCP, the NRP, and the CIP are never reviewed together.

The Consolidated Intelligence Program (CIP). The CIP is handled much like the CCP except that the review group is chaired by DIA. In other respects, the nature of the review is much like the CCP review. We know more about the CIP, more about how it contributes to our intelligence efforts and its costs. In other respects, however, the criticisms of our handling of the CCP apply to the CIP.

Manned Orbiting Laboratory (MOL). The MOL should, by nature, be part of the NRP; however, it has been kept separate. MOL has been subjected to superficially routine handling in OSD with theAssistant Director (Space Technology), ODDR&E, being the main action office. For example, DCPs were written for MOL in early 1968 and again in late 1968, but neither of these were reviewed by all the OSD staff offices concerned. The MOL program is in fact receiving very little review in OSD.

SOME ADDITIONAL OBSERVATIONS

There are informative parallels in DoD intelligence management and military planning and programming.

1. In intelligence we have four major program , three of which (CCP, NRP, MOL) are built around specific collection technologies. The CIP is, in effect, "all other". This parallels the division of our military forces by sea, air and land warfare.

2. The major innovation in planning and programming our military forces was the adoption of a mission-oriented structure for these forces rather than a service-oriented structure. We have not yet taken this step in intelligence, even though we know enough about most of our intelligence forces and missions to start moving in this direction. It is clear, however, that packaging and planning for intelligence forces by their outputs is more difficult and complex than doing the same for military forces.

3. Technology is tending to determine what we do in intelligence rather than our future needs for intelligence. As in other fields, available options exceed our needs. We therefore find ourselves developing systems for intelligence which are either marginal improvements to existing systems or systems for which there is, at best, a questionable need. This results in large part from the mid-range planning deficiencies cited earlier. This problem parallels what was occurring in the late 1950s and early 1960s with such programs as SKYBOLT, the B-70, NAVAHO, and DYNASOAR.

4. There is now no coordinated relatively disinterested statement of future intelligence needs. This is much like the situation that existed in strategic forces prior to the development of the National Intelligence Projections for Planning about 1963. The lack of such projections of the future inhibit our ability to plan ahead.

SOME CORRECTIVE ACTIONS

1. Establish an output oriented Five Year Intelligence Plan.

2. Start annual coordinated mid-range planning activities in OSD.

3. Normalize OSD administration of the NRP.

A Five-Year Intelligence Plan. The Target Oriented Display, Phase II, to be completed in late May, 1969, will result in a display of intelligence forces and financial programs by a set of intelligence missions. The forces will be for eight years, the finances for five, just as in the FYDP. The missions into which nearly all DoD intelligence forces will fall are:

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Search - Search of earth's surface for things of intelligence interest-generally this will include overhead systems such as CORONA (KH-4) and HEXAGON (KH-9).

Forces Intelligence - Surveillance to determine order of battle--Signal Intelligence (SIGINT), KH-4, KH-9, and GAMBIT (KH-8) typify the systems that will be found in this mission package.

Weapon Systems Characteristics - Scientific and technical intelligence on foreign weapons--here will be the GAMBIT-3 (KH-8) and the Manned Orbiting Laboratory (KH-10); [redacted], a future electronic intelligence satellite; the Atomic Energy Detection System, etc. It is likely that this package will break down into several smaller ones.

Tactical Warning - Warning of imminent military actions--systems are the Ballistic Missile Early Warning System, System 949, a warning satellite, SIGINT, over-the-horizon radars, etc.

Contingency Intelligence - Quick reaction manned and unmanned reconnaissance--mainly SR-71s, drones, U-2s, etc.

Counter Intelligence - Mainly investigative activities and some counter espionage.

Mapping, Charting and Geodesy - Self-explanatory.

Processing Support - Processing program elements which contribute to more than one of the missions above.

Production - Production program elements generally cannot be mission-oriented. This package would include these elements.

General Support - Overhead.

Much of the CCP effort will not fit into this mission structure. We are currently trying, as part of the TOD exercise, to develop a better understanding of the role of CCP activities. It is likely that a "strategic warning" or "indications" mission for these forces will be identified. These packages may change, and no doubt we will find problems with some of them (we are uneasy about the Forces Intelligence and Weapon Systems Characteristics Packages, especially), but we believe these missions are reasonable for starting a mission-oriented approach to program management of intelligence.

Mid-Range Planning Activities. Many of our collection systems have lead times of several years. Because of this, we need to plan ahead to be sure we have what we need in the future. We do this for our military forces with the Joint Strategic Objectives Plan (JSOP) and the DPMs. The JSOP is prepared by the Joint Chiefs of Staff, the DPMs by Systems Analysis. There is no military staff for intelligence corresponding to

the Joint Staff for military programs. Consequently, there is no JSOP for intelligence. (The Joint Staff prepares an intelligence annex to the JSOP, but it is only a very general statement of intelligence needs.) Similarly, there is no DPM for intelligence. Such a DPM was proposed in April, 1968, but the Deputy Secretary of Defense chose not to initiate such a document then, with its supporting planning activities, because of other pending decisions. We understand these decisions had to do with reorganizing the OSD staff for intelligence.

We believe that rectifying mid-range planning needs in intelligence management are independent of the organizational structure. For example, if an Assistant Secretary of Defense (Intelligence) (ASD(I)) were to be established (one of the more radical reorganization proposals), he would need to do mid-range planning and therefore would need a document like a DPM to report the outcomes of this planning; to write such a document, he would need to work with a mission-oriented Five Year Intelligence Plan. Such a plan is even more important without the centralized staffing an ASD(I) would provide.

Intelligence planning should address major issues by mission packages so that decisions on these can be made early enough to affect the FY 71 budget. The basic approach to such planning should be to explore the adequacy of the mission packages to meet future intelligence needs. The planning process should also present to the decision makers the costs and benefits of satisfying various levels of intelligence needs so that the resource implications of future intelligence requirements as well as the benefits of fulfilling these can be treated explicitly.

Initiating such activity in OSD need not replace for now any of the reviews conducted of the four programs. The proposed activities would not replace the EXCOM or anything of that sort. Rather, an intelligence planning cycle should result in a clearer presentation of issues and an improved environment within which to conduct these reviews; hence, initiating mid-range planning now offers potential gains without risking the existing system of review. After such a planning and programming cycle, some changes in the existing activities might be desirable, but that can and should be left until results of a normalized cycle are in.

Normalization of OSD Administration of the NRP. The OSD staff should have two obligations relating to the NRP. The first is to include it in mid-range planning. The second is to do that staff work needed to support OSD participants in the EXCOM. Both of these obligations require early routine access to virtually all facets of the NRP. The best way to achieve such access is to get OSD and the NRO working together cooperatively on such documents as Development Concept Papers for developmental NRP projects, Program Change Requests and Program Change Decisions. These documents, if properly used, would also give access to the CIA staff in support of the Director, Central Intelligence Agency. Through these mechanisms, both CIA and OSD representatives to the EXCOM could be much better supported.

Obviously, because of the CIA's role in the NRP, the details of such changes would have to be worked out with CIA.

It should be emphasized, also, that a change in the role of EXCOM is not being proposed, but only that OSD participants in EXCOM be supported better.

ANALYTIC CAPABILITIES TO SUPPORT MID-RANGE INTELLIGENCE PLANNING

Quantitative analysis of intelligence can be broken down into three main problems. First, we need to be able to determine the value of given pieces or classes of intelligence information. Second, we need to be able to estimate the intelligence forces needed and the costs to acquire such information. Third, we need to be able to determine optimum forces (that is, minimum cost forces) to acquire such information.

We are able to solve the problem of intelligence value only in some very limited cases. If the intelligence involved is useful mainly for our strategic forces, our ability to analyze the value of information tends to be better done. Designing intelligence forces to meet specified requirements can be done in a number of cases, notably in the search package and the contingency intelligence package. In these cases, too, we can usually find the minimum cost forces to satisfy given requirements. In other mission packages we have not yet demonstrated a comparable quantitative ability.

Useful work can be done on the other mission packages and it is likely that some of this can be quantitative; however, the nature of the uses of intelligence and the nature of intelligence systems will preclude quantitative analyses of the elegance of those done for strategic forces. These quantitative analytical difficulties are, however, insufficient reasons not to go ahead with a mission-oriented approach to intelligence planning. Displays of mission-related forces, the discussions of mission objectives and performance criteria, the structuring of future intelligence requirements by mission, and the refocussing of our attention from the near future to the more distant future will all help to sharpen issues. Even qualitative analyses are improved if they are properly structured.

A POSSIBLE INTELLIGENCE PLANNING CYCLE

If we instituted an annual planning cycle as being proposed here, it might proceed as follows:

1. December and January - Define major issues and initiate studies of these.

2. February through May - Study the major issues.

3. May through June - Complete the studies and draft the intelligence planning memorandum.

4. July and August - All agencies review the intelligence planning memorandum and comment on it. Revised memorandum published in late July. PCRs submitted to make programs conform to revised planning. Reclama PCRs also submitted as required. PCDs completed by late August.

5. September - Final version of intelligence planning memorandum published.

6. October through November - Receive and review the budget submissions.

The intelligence planning memorandum would result in resolution of major issues; the PCRs, PCDs, and EXCOM actions would implement these resolutions in our programs, and the budget review would provide a last detailed examination of these programs in the current and budget years just before commitment to the budget. This is the approach now used for military forces planning, programming and budgeting.

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