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April 8, 1974

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CONTROL SYSTEMTHE NRO AND AIRCRAFT AND DRONE RECONNAISSANCEINTRODUCTION

This paper is divided into two main parts--the first dealing with the operational aspects of air-breathing platforms deployed over denied territories, and the second part with the RDT&E aspects of these systems.

Air-breathing overflight vehicles available today include the U-2 and SR-71 aircraft and 147/154 series drones. New systems under consideration or development represent primarily an extension of present regimes of operation, rather than revolutionary concepts, and are not treated separately here.

The NRO presently "owns" only four aircraft--the U-2Rs assigned to the CIA Office of Special Activities (OSA) and these aircraft will transfer to the Air Force in 1974. Thus the NRO will soon own no air-breathing assets.

AIRCRAFT OPERATIONS

The upper part of the chart at TAB A is intended to show the aircraft and drone overflight process as it is specified in the NRO 1965 Agreement. The blocks in yellow will drop out when the OSA U-2R aircraft are turned over to the Air Force.

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The blocks in red represent activities in which the DNRO has a direct interest or responsibility and require a conscious approval or decision. This baseline case does represent the present situation for the OSA managed IDEALIST TACKLE Chinese peripheral flights and the JRC managed OLYMPIC FIRE Cuban flights. These flights are conducted on a routinely scheduled basis and are relatively noncontroversial. The point can be made for these flights that maintenance of political presence on Taiwan and over Cuba is as important as the intelligence collected. For example, there is no plan for peripheral photography of China following withdrawal of the U-2Rs.

The process for generating, approving and executing overflights in time of crisis or intense national interest is considerably different from the norm. There appears to be no one focal point for all overflight requirements, short of Dr. Kissinger. Specifically, the DNRO has not been included before-the-fact in the approval cycle for any Mid-East overflight in the period from 1969 to the present. The lower part of the chart at TAB A shows several different paths by which overflight requests have been submitted and approvals granted. These are examples of what has occurred; since there is very

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little formal documentation in some of these cases the actual process may have been different than shown.

This situation presents a potentially serious problem. The mechanism leading to 40 Committee approval dates to the unfortunate incident of May 1, 1960, and the subsequent confusion within the U.S. Government on a consistent story for the conduct and control of overflights. Certainly Dr. Kissinger in either his role as Advisor to the President (and therefore Chairman of the 40 Committee) or as Secretary of State can and does establish the requirement for overflights. The operating agencies of the DOD or CIA respond, but when requirements are generated this way the DNRO has historically never been consulted nor asked to give any advice, guidance or direction. And yet the DNRO is charged also with contingency planning.

The NRO is in the aircraft operational business for several reasons:

- because it all started that way--specifically the U-2s searching for Soviet ICBMs.
- because the 1965 charter says so--a "legal" requirement.

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- it permits one agent to present all overflight requests to the 40 Committee.
- functionally concentrates overflights in one organization.
- protects the covert nature of overflights.
- to issue a coordinated U.S. Government contingency plan.
- historically the NRO has developed the platforms, the sensors, the defensive subsystems and the life support systems.

The intelligence collection problem has changed considerably over the years. The vast capabilities of satellites have severely reduced the need for aircraft and drone overflights, and the foreign air defense environment has critically limited our flexibility to fly aircraft or drones when and where desired. In considering whether or not the NRO should retain an aircraft capability, the following points are pertinent:

For:

- satisfies the 1965 charter
- provides a convenient mechanism for aircraft versus satellite collection system trade-offs.

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- provides a convenient place for planning aircraft and satellite coordinated collection activities.
- provides for aircraft and satellite contingency planning by one interdepartmental group.
- the NRO could react quickly to meet overflight needs (recently applied only to U-2 operations).

## Against:

- the DNRO has been bypassed in practice for any recent, critically important operation.
- the NRO (SOC) is not properly manned to support aircraft operations.
- NRO does not control or task DOD support resources, which are by far the greatest part of overflight operations.
- chances of conducting a truly covert mission over any territory we are vitally interested in is minimal:
  - only the U.S. owns U-2s, SR-71s, and 147 drones, and the world knows it.
  - detection is virtually certain.
- there will be little NRO interest when all assets are turned over to the DOD.

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- without owning aircraft assets, there is no apparent contribution which the NRO makes to overflight operations which the DOD cannot do at least as well.

Some of the factors which are presently unfavorable could be corrected. For example:

- the provisions of the 1965 charter could be re-applied, but it would require reaffirmation at the highest levels--and it is presently these same levels from which the recent requests have originated and are approved outside of NRO cognizance (see lower part of TAB A).

- the SOC could be strengthened to include an aircraft mission planning function. But it would still appear logical to task DOD elements through the long-established JRC channels.

What would be necessary if the NRO were to divorce itself totally from aircraft overflight operations?

- recognize the change to the 1965 Agreement. This would require the concurrence of the ExCom, the Deputy Secretary of Defense (as the office of signature on the 1965 Agreement) and notice to the PFIAB (they obtained the President's direction for the 1965 charter).

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- formally transfer the operational responsibility to the JCS.
- transfer the aircraft contingency planning function from the NRO to the JCS for aircraft overflights. The NRO would retain the satellite contingency planning function only, and would not need to be represented on the aircraft committee.
- provide a mechanism, such as an NRO-JCS agreement, for coordinating satellite and aircraft coverage.

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CONTROL SYSTEMRESEARCH, DEVELOPMENT, TEST AND EVALUATION

The NRO has evolved and used streamlined management techniques for air breathing system development which date to the early days of the U-2 program, and which have been used for the U-2R, OXCART (and SR-71), and TAGBOARD programs, as well as for system studies.

Some of the major features of this management method are:

- Very direct lines of decision making and resource allocation, from the ExCom through the DNRO to the Program Director. The normal DOD planning, programming and budgeting process is completely bypassed.
- Covert contracting techniques. While the basic provisions of law are adhered to, the Air Force implementing management documents are waived and normal audits and inspections are precluded. Instead, the NRP is audited and inspected internally.
- Compartmented security controls. These keep all except people with a need-to-know from becoming involved in the program or its management.

The NRO normally has developed not only collection platforms, but also the associated optical and electronic sensors, defensive subsystems, and life support systems. The 1965

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Agreement implies that the NRO has this development responsibility, it is not specific as it is in the case of spacecraft. The Program D Charter, at TAB B, is more explicit.

The TAGBOARD drone was the last NRO airframe acquisition program, and recently only sensors, defensive subsystems, and some life support developments have been pursued. For example, Program D is developing the 70 inch optical bar camera. Defensive subsystem work for all U-2 aircraft, both NRO and USAF, is being performed for OSA by the CIA Office of ELINT, although starting in FY 75 all funds for this work will come from the Air Force budget. The SR-71 SPO at Wright-Patterson AFB has been establishing requirements and funding SR-71 development work for some time, although contracting functions are being carried out through Program D resources.

Recently Program D has acted as a contracting agent for conducting Air Force drone studies, using Air Force provided funds but covert contracting techniques. While this has probably resulted in more useful work being performed for the money, it does not support an NRO need, and if the Air Force concludes that a new drone is required the actual system development test and acquisition would need to be performed by the Air Force through non-covert means.

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The absence of an NRO air-breathing system development can perhaps be attributed to one of two main factors -- either fiscal pressures to keep the NRP budget down, or perhaps that there is no compelling reason for these vehicles to collect intelligence through overflight. The latter factor could in turn be attributed to several reasons:

- satellites perform the intelligence collection requirement well enough.
- political reasons for overflights are more important than their intelligence value.
- since overflights can rarely be considered really covert, it matters little what agency carries them out.
- finally, there are both aircraft and drone assets available in the Air Force inventory which can be called upon to fly missions when needed.

Reasons for the NRO to be involved in air-breathing system developments appear to be largely based on historical precedence:

- the U-2, OXCART and TAGBOARD were all developed in the covert world, using streamlined management methods.
- the 1965 Agreement implied an NRO responsibility.
- functionally concentrated all overflight systems development in one agency.

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- permitted covert development of platforms for covert flights.

Today there does not appear to be any compelling reasons for the NRO to maintain an aircraft or drone development capability. There are, however, several factors to be considered in this decision:

For retaining a capability:

- it represents a well-established, effective streamlined management development capability.
- keeping an in-being resource is perhaps more efficient than terminating and re-establishing it if needed in the future.
- it can continue to serve to support the U-2 and SR-71 fleets.
- can serve as a streamlined management vehicle for non-BYEMAN studies for the Air Force.

Factors against retaining a capability:

- there is no pressing need today to develop a new overflight system.
- development of air-breathing overflight vehicles and subsystems by covert methods is a dubious requirement.
- aircraft development, operations, and support funding has been deleted from the NRP.

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- maintenance of a capability for unidentified future contingencies is wasteful; it will tend to be used for marginally justifiable reasons.

What would be required to terminate NRO aircraft and drone activities? Major items include:

- since there are no platform developments under way, no action is required here.

- defensive subsystem developments will all be funded by the Air Force effective July 1, 1974. Future contract actions could be accomplished through non-covert channels. Provisions would need to be made for the Air Force to assume all U-2 and SR-71 management functions.

- the ExCom should be informed of the action.

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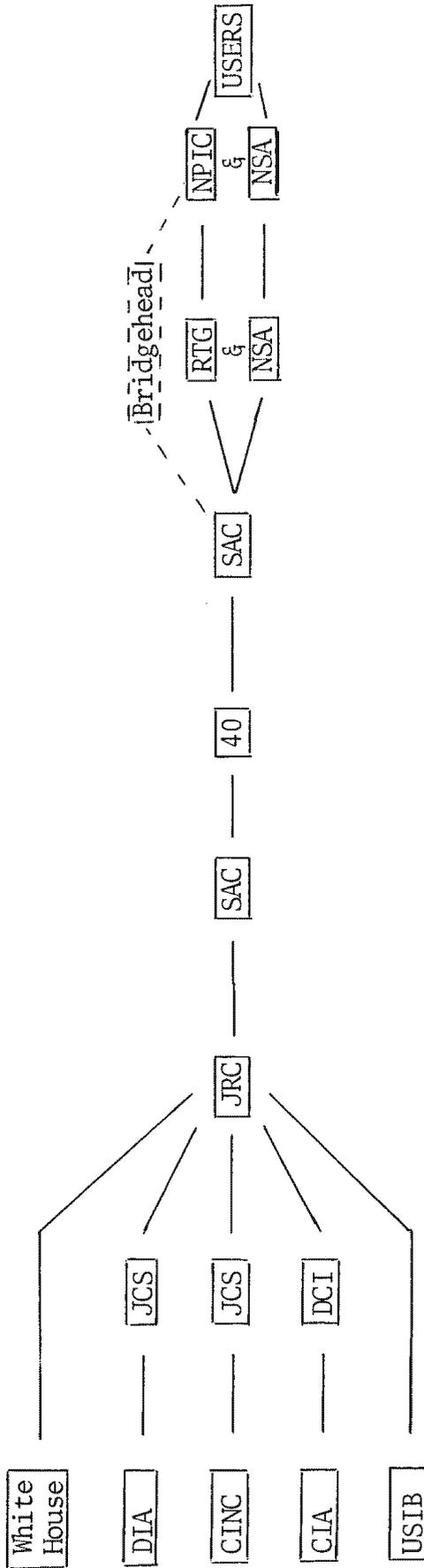
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