One Officer's Perspective: The Decline of the National Reconnaissance Office[1]

By Robert J. Kohler

The National Reconnaissance Office (NRO) was once the benchmark organization for excellence in acquisition and program management. It had a reputation for designing and procuring the most sophisticated unmanned satellite and aircraft reconnaissance systems in history. These acquisitions were mostly accomplished on time and within budget, and they performed as promised. Despite an occasional problem program, the NRO's record of accomplishment was unsurpassed by any organization, considering the high technical risk that goes with developing state-of-the-art systems. A team of dedicated military and civilian personnel stood behind these accomplishments.

Unfortunately, the NRO today is a shadow of its former self. Its once outstanding expertise in system engineering has drastically eroded. This article explores the dissolving relationship between the NRO and the Central Intelligence Agency (CIA), which traditionally supplied a major portion of the organization's technical expertise. It provides a perspective on key issues as the NRO faces tough decisions and an uncertain future.

Post-Cold War Environment

Some would suggest that the NRO's decline resulted from the fall of the Soviet Union, the ensuing budget struggles (the famous "peace dividend"), and the resultant lack of a clear intelligence mission. These almost certainly contributed, but they are far from the whole story. The fall of the Soviet Union triggered a legitimate discussion about how big a military and intelligence structure the country should have, but there was never any doubt that reconnaissance satellites would still be needed.

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Indeed, the end of the Cold War and the ensuing shift in the balance of power might have stimulated a useful national debate about what was required from the space reconnaissance system, and could have produced a vision for the future around which the Executive and Congress might have coalesced. Unfortunately, this did not happen. The then-Director of Central Intelligence (DCI), Robert Gates, did, in fact, recognize that a sea change in the NRO was in order. In 1992, he commissioned a full-scale review of the NRO. The resulting "Woolsey Report"—named for commission chairman James Woolsey, a prominent lawyer and arms control negotiator, made serious recommendations for changes in NRO programs. A unique chance for implementation became possible when President Clinton named Woolsey to be DCI. But this golden opportunity was lost.

DCI Woolsey and the Chairman of the Senate Select Committee on Intelligence, Dennis DeConcini, rapidly became adversaries rather than partners. In addition, Woolsey got locked in a fight with the Department of Defense (DoD) over the use of space systems vs. stealthy reconnaissance aircraft, which distracted attention from the real organizational issues. The new President did not seem much interested in intelligence and the DCI received no support or guidance from the White House.

It took nearly nine months to appoint a new director of the NRO. This was not for lack of trying. All senior executives from industry who were contacted turned the position down, mostly because they did not want to get stuck with onerous conflict-of-interest rules after they had served their term. The ultimate nominee withdrew after the appointment became bogged down for months. Finally, a young, energetic CIA officer was selected, but the Secretary of Defense and the DCI later fired him over an issue not of his making (forward funding). Thus, the NRO had no consistent leadership for over two years.

Concluding that the NRO cost too much, Congress decided that the solution was to shift to smaller, lower cost satellites (known around town as "small sats" or "light sats") A strong argument could have made that small sats would not be able to perform the complicated (and often multiple) missions called for by customers, but NRO management chose instead to stonewall Congress, digging in and claiming that small sats were not relevant and that the current constellation was essentially what was needed. While there were (and are) good points on both sides (and neither side was completely right), the process seriously harmed the trust that had existed between the NRO and congressional staffs. Everything that the NRO said about small sats, funding requirements, and even commercial imagery, was interpreted as protecting its turf.

At the Root of the Problem

These developments since the end of the Cold War exacerbated the fundamental cause of the decline of the NRO, which was the abolition of Programs A, B, and C in

1992 and the consolidation of the Office's components at the Westfields building. This story focuses on Programs A and B, because they were the largest part of the organization in terms of people and budget, and because the competition between these two programs was often seen as the root cause of the problems at NRO.

From its founding in 1962 until the late 1980s, the NRO was characterized by a lean central staff under a part-time director (usually the Under Secretary of the Air Force, later the Assistant Secretary for Space, and recently once again the Under Secretary of the Air Force).

Three entities managed the programs assigned by the director: Air Force-Program A; CIA-Program B; and Navy-Program C. The NRO had no positions/slots of its own. It "borrowed" people for its staff from the military services and the CIA, and sometimes from the National Security Agency (NSA) and the Defense Intelligence Agency (DIA). Programs A/B/C were completely staffed at the discretion of the parent organizations. The director of the NRO (DNRO) had some control over Program A personnel, but little authority over the selection or careers of the CIA or Navy personnel. In fairness, all three agencies supported the Office extremely well, in terms of positions allocated, quality of people assigned, and management of their employees' careers. DNRO was more akin to a Chief Executive Officer (CEO), with the directors of Programs A/B/C performing as Chief Operations Officers (COOs), holding the real management control over the programs.

The NRO's organizational structure encouraged competition, and the main contest was between Programs A and B. The competitive atmosphere fostered different technical solutions to each intelligence problem and forced the NRO director (and often the Secretary of Defense and the DCI) to choose between different approaches. While this process proved highly beneficial during the Cold War by stimulating valuable technical innovation, it did produce winners and losers, which sowed discontent.

Program A was envious of the access that Program B had to the DCI. Indeed, Program B used that access more than once either to overturn DNRO preferences or to influence the DCI on a particular NRO-related decision. Program B saw this as an appropriate role for a CIA entity responsible ultimately to the DCI. Program A considered such access unfair in the competitive environment in which the two programs existed. Program A clearly had one boss (DNRO), while the director of Program B was a CIA employee who owed his first loyalty to the DCI, even though he also worked for DNRO. This dual allegiance irritated many an NRO director as well, but they did not have the power to tighten control.

In the mid 1980s, Program A/B competition came to a head in a serious confrontation over the future of large-aperture signal intelligence (SIGINT) systems. The budget crunch was just getting underway and DNRO wanted one last big start. Since every major program decision on his watch had gone in favor of Program B (with his support),

he was inclined this time to let Program A win one. He made his position clear to Program B. The new program, however, was not needed—the requirements foundation was weak and Program B thought it would cost considerably more than necessary. Program B concluded that enhancing one of its existing programs would be more cost effective and could be done in an incremental way allowing a flexible response to requirements over time. DCI William Casey bought Program B's arguments and overruled DNRO's recommendation for a Program A start. This triggered a series of events that resulted in the NRO that exists today.

Controlling Competition

DNRO decided that Program A/B competition and Program B's ability to influence the DCI had to stop. Collocation of the NRO's three main programs became one part of a solution. Program A was told to move from Los Angeles to the Washington, DC, area, where Program B was housed in CIA facilities and Program C was located at the Naval Research Laboratories.

Meanwhile, DCI Casey had passed away and Robert Gates was Acting DCI. Gates had always had reservations about the NRO—he considered it too expensive (gold-plated, in his view) and thought that Program B had undue influence. Setting out to remedy these "faults," he established the "Fuhrman Panel"—chaired by Robert Fuhrman, former CEO of Lockheed—to recommend changes to the NRO structure. The Fuhrman Panel recommended realigning responsibilities to consolidate imagery programs in one directorate and SIGINT programs in another, in effect breaking up Programs A and B and eliminating competition.

To this day it is not clear that the competition that existed between the two NRO programs was anything but positive. In most instances, the program that emerged from the competitive process was the right program for the country. Had there been no competition, it is not clear that the right program would have resulted. The same type of constructive rivalry exists between CIA, National Security Agency (NSA), and Defense Intelligence Agency (DIA)—it is healthy and produces better intelligence products.

Dramatic Reorganization

The Fuhrman Panel recommendations led to the abolition of Programs A/B/C and started the real downturn of the NRO. Apparently to show the true integration of the programs, NRO management adopted the principle that anybody could run anything, regardless of skill, background, or experience. People were shuffled around so that any semblance of loyalty to their parent organizations was lost; career planning fell by the wayside; and experience as a criterion in the position assignment process was discarded. Navy admirals who once were directly tied to NRO support of the tactical Navy mission now have jobs of no particular interest to the Navy. CIA SIS officers who once viewed

themselves as intelligence professionals and saw their job as supporting the NRO from inside CIA, now feel disconnected from and unsupported by CIA. Air Force generals who once were leaders in Air Force space technology are now sent no particular requirement that they be "space cadets" or understand the mission of the NRO. In the past, the leaders of Programs A/B/C were people who had spent years in the business, having come up through the ranks. Now they no longer need that kind of experience to be senior officers in the NRO. The CIA no longer sees development of future civilian leaders in this business as its responsibility. The current crop of experienced SIS officers at the NRO is retiring and no replacements with comparable talent and dedication are being actively developed.

To combat weaknesses in its ranks, the NRO has embraced several processes to "protect" program managers from having to make decisions that in some cases they are no longer qualified to make. Examples include: the NRO Acquisition Manual that observes DoD contracting practices vice DCI authorities; over reliance on Earned Value Management and similar tools; a flawed Independent Cost Estimating Process (ICE); and an incredibly inefficient requirements process. The NRO has incorporated DoD acquisition reform practices such as Cost as an Independent Variable (CAIV) and Total System Integration Responsibility (TSIR), which puts program decision making in the hands of the prime contractors.

Today, no single person can realistically be held accountable for the performance of a program because so many people have their hands in the process. In the days of Programs A/B/C, program managers were kings. They controlled costs, schedules, and performance, and had the ability to trade those variables to make the program work. Support people worked for the program manager. Now, contracting officers, the financial oversight staff, and the Community Management Staff are the major power brokers in most of the NRO program offices, instead of the program managers.

The three dynamic, supportive, and different cultures that existed in Programs A/B/C were destroyed by the integration of the NRO and have not been replaced with a new culture. By the process of osmosis, the organization has adopted pieces of those cultures, usually the least common denominator, to the dismay of the people in the organization.

The declassification of the existence of the NRO added to its downturn. In the early 1990s, Secretary of Defense Richard Cheney declassified the "fact of" the National Reconnaissance Office. Subsequently, DCI Woolsey implemented a series of security-related changes that made the organization more open, including eliminating the "special access" requirements for each of its programs. These steps resulted, for example, in the first public awareness of the NRO's early imaging program, CORONA.

Openness brought pressure for the NRO to look more like a normal government organization. This entailed greater oversight by Congress—the NRO is now micromanaged, just like DoD. The NRO Inspector General's staff grew; the financial oversight

staff (Resource Oversight and Management or ROM) expanded to over 100 employees; and a policy staff was added. What was once an organization with a small central staff and three Programs (A/B/C), whose technically qualified managers focused on executing projects, is now an organization dominated by large staffs not involved in the major accountability of the NRO: the acquisition, development, and operation of satellite intelligence collection systems.

Organizational structures in and of themselves are neither good nor bad. Usually, they are deemed effective or ineffective depending on how the people in the organization make them work. Clearly the old Program A/B/C structure was strange by Washington standards since it grew out of a compromise among the early innovators in the space reconnaissance business—the CIA, Air Force, and Navy. Yet it was an effective structure and served the country well. The current structure is more attuned to the "jointness" model preferred by DoD, but it is certainly less effective than the old model. It is pushing the organization on a downward slide toward mediocrity that the country cannot afford.

Mediocrity in the NRO will result in less innovation and risk taking, more reliance on contractors who are less accountable than government staff, and more cost overruns and schedule delays. Acquisition cycles will be longer. It will become harder and harder to attract the high caliber people needed to keep this a "first in class" organization. Evidence of these problems is already surfacing.

Impact on the CIA

Among NRO components, the slide toward mediocrity is having the most damaging effect on the CIA's mission and people. At this juncture, it is likely that the CIA will withdraw from the organization. If this occurs, the demise of the NRO will be complete. To understand the current dynamic, it is important to start at the top.

The original charter of the NRO assigned responsibility for managing the programs to the Secretary of Defense (hence a director from DoD) and the responsibility for establishing requirements for the programs to the DCI. For years, an executive committee (EXCOM)—comprising the Secretary of Defense, the DCI, and a Presidential appointee (usually, the President's Science Advisor)—exercised oversight of the NRO. Until its demise in 1976, the EXCOM protected the NRO from bureaucratic interference as well as managed the "high level" requirements process. In addition, the DCI orchestrated the Intelligence Community's requirements process through the SIGINT Committee, for signals intelligence, and the Committee on Imagery Requirements and Exploitation, COMIREX, for imagery.

With the eventual abolition of these committees, the DCI gave up significant control over the establishment of NRO requirements and bureaucratic interference increased.

The process for deriving the requirements for the new imagery architecture (FIA)[2] took two years and makes the point about the DCI's diminished power clear. DoD and the Joint Requirements Oversight Council (JROC) played key roles in the FIA requirements process; now DoD essentially controls all major NRO requirements. The DCI and the CIA have let DoD significantly erode what should be the DCI's major responsibility: the arbitration, consolidation, and establishment of national intelligence requirements.

The closing down of Program B complicates the ability of the CIA to carry out its NRO responsibilities. The CIA officer who ran Program B was an informal but powerful counterbalance to DoD influence. The Deputy Director for Science and Technology (DDS&T), who has daily access to the DCI, was usually double-hatted as the Director of Program B. Senior officers in the Directorate of Intelligence and the DS&T's Office of Development and Engineering (OD&E) worked together to develop the CIA's needs and, when appropriate, presented these to the DCI. This ensured that the strategic intelligence view was always available to the DCI. The current structure of the NRO, with CIA personnel assigned mostly at random, makes this very difficult.

Certain personalities on the CIA side made the situation worse than it needed to be. In the past, Program B was fortunate to have a number of DCIs and DDCIs who both understood and protected the role of the CIA component in the NRO—John McCone, William Rayburn, Richard Helms, George Bush, John McMahon, and William Casey come to mind. Support has not been as strong in recent years. DCI Gates started the slide and DCI Woolsey did nothing to stop it. John Deutch, the most technical DCI in memory, paid almost no attention to the NRO, and his hand-picked Executive Director totally failed to understand the CIA's role at NRO. DCI Deutch appointed a DDS&T who made no attempt to hide her dislike for OD&E, the CIA's main technical link to the NRO. OD&E managers, in return, made no effort to mask their dislike for the DDS&T.

Importance of a Civilian Component

Over the years, the majority of the highly innovative NRO programs came from Program B. They did not come out of an arduous requirements process, but, instead, resulted from CIA experts knowing the needs of the Intelligence Community, imagining what technology could do, and offering decision makers a solution to a need, sometimes before they knew they had a need. This was possible because Program B attracted top-notch talent and was able to keep that talent in the business for years as part of CIA. Moreover, the streamlined acquisition process that Program B was famous for came from DCI authorities that exist only in CIA. The military never liked the CIA's participation in the satellite business; however, this dislike was tempered by the respect that the nation's leaders (including DoD) had for the creativity and risk-taking

[2] Future Imagery Architecture

ability of the CIA contingent. Collection systems that the military heavily relies on today came out of Program B.

For the NRO to retain some semblance of its unique character that proved so successful, it needs a strong civilian element. The CIA can bring stability and experience to the organization. Civilian staff members can work years—many of us spent our entire careers on NRO programs—building an expertise in technology, organization, and management that simply cannot be duplicated by a "come and go" military element. It is not a matter of "smarts"—the military has people just as smart as any CIA officer. But military careers are built on rotations to different assignments. Today, even the military staff is not as stable as it was in the Program A days. More than ever, military assignees tend to see the NRO as just one more block to be checked in their career progression.

Among those involved, the DCI has the most to lose from the degeneration of the National Reconnaissance Office. The NRO consumes the single largest part of the DCI's budget. It is the only asset that the DCI has that can provide intelligence information worldwide, 24 hours a day, seven days a week. If the CIA walks away—by not bringing OD&E up to strength and not developing the talents and promoting the career aspirations of the CIA personnel assigned to the NRO—the rationale for the title "National" Reconnaissance Office would become much less clear. "Rational heads" in Washington might conclude that the NRO belongs, after all, in DoD, and any semblance of DCI influence and control would be lost.

Current CIA/NRO management did not create this situation—they inherited it. Indeed, DNRO Keith Hall initiated a much needed restructuring of the imaging architecture, undertook initiatives aimed at providing new and exciting capabilities, and, during part of his tenure, endured an adversarial DDS&T. Congress and DoD are responsible for imposing much of the current micromanagement. Furthermore, the creation of the National Imagery and Mapping Agency[3] in 1997, and the artificial interfaces created between the NRO and NIMA[4] have taken system responsibility in the imaging business away from the NRO and left it floundering, a situation that complicates the job of both sides of the interface.

Potential Solutions

Going back to the past—recreating Programs A/B/C—is not the answer. The three programs have been replaced by five stovepipes—signals intelligence, imagery intelligence, communications, advanced systems and technology, and management—which are referred to by everybody as the "towers." These stovepipes have fostered a lack of communication and cross-INT system engineering, hampering the NRO in its drive for

[3] In 2003 NIMA became the National Geospatial-Intelligence Agency or NGA.

[4] NGA.

a "system of systems" architecture. I propose a framework for a solution that might be palatable to both the military and the CIA. The intent is to apportion responsibility more in line with their individual cultures, experience, and expertise.

The NRO currently exists in two worlds. One is semi-secret (gray) and the other is really secret (black). Some programs are in a routine mode, requiring continuing purchases of the same systems and conducting routine operations. At the same time, the organization is developing technologies and programs that could provide revolutionary intelligence capabilities from space. These programs are often very risky and require tight security. This suggests a natural split of responsibilities.

First, I propose that the NRO be reorganized so that all programs "in continuation" are assigned to the military component, under the direction of DNRO. Military assignees would oversee existing systems, making decisions on acquisitions, conducting operations of these systems, and concentrating on relations with the military.

Second, I propose that all advanced system and technology development efforts, along with all new programs of high risk, advanced technology, or tight security, be assigned to CIA/OD&E, also under the direction of DNRO. Civilian experts can best provide the continuity that is required in the development of technology. Moreover, the CIA is the best component to work requirements with the national community (and the DCI) for programs that require radical new collection capabilities. This group could go back to truly streamlined program management (using DCI authorities) and hopefully receive less oversight and micromanagement than at present.

In January 2001, the NRO director commissioned a study of the state of system engineering. The commission's recommendations included a call for the appointment of a Deputy Director for System Engineering (DDSE). The position was established and is currently filled by a CIA SIS officer. The study also recommended that OD&E be affirmed as the "institutional holder" of system engineering in the NRO. It acknowledged that it takes long-term career development to produce top quality system engineers and that the civilian component in the organization was in the best position to accomplish that task. Both DNRO and the DDS&T accepted this assessment—it became codified in the same NRO directive that established the DDSE position. However, nearly a year later OD&E has not yet stepped up to this responsibility.

To this end, the OD&E staff needs significant additional technical positions. The component is less than half its former size, despite the fact that the number of NRO programs and activities that it manages has not dropped. While all organizations took position cuts during the post-Cold War defense downsizing, OD&E was hit particularly hard because of the interpersonal frictions discussed above. As a result of the decline in civilian personnel, the NRO looks "bluer" than ever before, which further dilutes the CIA's influence within this national organization. The DCI should work with Congress to add at least 100 technical positions to the OD&E contingent in the NRO.

Finally, I urge DNRO to work hard to cut the size of the central staff to reduce the amount of micromanagement and non-value-added processing and balance the influence of DoD in the requirements process. For this, the director will need the strong support of both the Secretary of Defense and the DCI.

Solid measures, conviction, and action are needed to re-create a strong, creative, and effective NRO. A structure such as I suggest would make better use of the talents of the contributing organizations. It would allow the CIA element to focus on activities for which it is best qualified, restore morale by giving the Agency component a role that it could "own," and go a long way toward re-establishing OD&E as an important CIA entity. Reinvigorating that relationship is critical to the NRO, and also to the DCI, if he is to retain influence in the area of satellite reconnaissance.

If the CIA does not get behind the NRO and give its full support, the Air Force is poised to take over. The reestablishing of the Undersecretary of the Air Force as the director in 2001, with a charter to more fully integrate "white and black" space, imposes additional pressure to clarify the CIA's role. The new charter raises the specter of the NRO becoming a wholly DoD organization. If that is to be the case, the CIA should go its own way in the space business, as it was prepared to do in the early 1960s. The counter argument, however, is that the country still needs a "national" reconnaissance organization and that the effort to integrate "white and black" space makes it more critical than ever to have a strong and well-defined CIA presence.

In the final analysis, DNRO needs to recognize the unique position he holds and that his dual responsibilities, in this function, top both the Secretary of Defense and the DCI. From the perspective of what is best for national reconnaissance, the recreation of the EXCOM would be a step in the right direction, ensuring that the NRO remains suspended between DoD and the CIA. In particular, however, the CIA needs to recognize the importance of the NRO to its responsibility as the Central Intelligence Organization.

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