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# NATIONAL RECONNAISSANCE OFFICE

14675 Lee Road Chantilly, VA 20151-1715

June 18, 2010

Mr. Steven Aftergood Senior Research Analyst Federation of American Scientists 1725 DeSales St NW, 6<sup>th</sup> Floor Washington, D.C. 20036

Dear Mr. Aftergood:

This is in response to your faxed letter, dated 02 June 2009, received in the Information Management Services Center of the National Reconnaissance Office (NRO) on 03 June 2009. Pursuant to the Freedom of Information Act (FOIA), you requested a copy of "all unclassified portions of the NRO Congressional Budget Justification Book (CBJB) for Fiscal Year 2010."

Your request was processed in accordance with the Freedom of Information Act, 5 U.S.C. § 552, as amended. A thorough search of our files and databases located one record, consisting of 484 pages that is responsive to your request. This record is being released to you in part. Material withheld is denied pursuant to FOIA exemption (b)(3) which applies to information specifically exempt by statute, 50 U.S.C. § 403-1(i) which protects intelligence sources and methods from unauthorized disclosure.

As you are aware, the FOIA authorizes federal agencies to assess fees for record services. Based upon the information provided, you have been placed in the "other" category of requesters, which means that a requester is responsible for charges incurred for the cost of search time exceeding two hours and duplication in excess of the first 100 pages of document reproduction in the processing of this request. In your request, you expressed a willingness to pay fees up to the amount of \$100.00. The costs associated with processing your request include 346 pages at .15 per page which equals \$57.60. In this case, all fees are being waived. You have the right to appeal this determination by addressing your appeal to the NRO Appeal Authority, 14675 Lee Road, Chantilly, VA 20151-1715 within 60 days of the above date. Should you decide to do this, please explain the basis of your appeal.

If you have any questions, please call the Requester Service Center at (703) 227-9326 and reference case number F09-0087.

Sincerely,

Glenn R.

Chief, Information Access And Release Team

Attachment: NRO FY 2010 CBJB (484 pgs)

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Access to the information in this document is restricted to US citizens with active SCI accesses for **COMINT** and **TALENT-KEYHOLE** information.

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National Intelligence Program



# FY 2010 Congressional Budget Justification

**Volume IV** 



National Reconnaissance Program

May 2009

DRV FROM: NCG 6.0, 21 May 2005 DECL ON: 25X1, 20590504 RRG dated July 05

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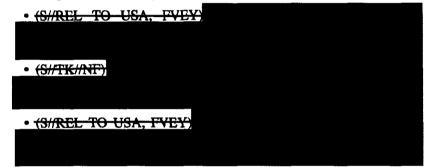
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#### (U) PROGRAM OVERVIEW

#### (U) Description

(U) The NRO brings unique core capabilities to bear in support of national security objectives by:

• (U) Acquiring and operating the most capable set of satellite intelligence collection platforms ever built.



• (U) Providing a variety of special ground processing applications and tools to support the IC and DoD.

(U) The US is arguably more reliant on overhead collection than ever before. To a large extent, satellite reconnaissance is the foundation for global situational awareness, and as such, it is an essential underpinning of the entire US intelligence effort. Space collection provides unique access to otherwise denied areas to provide persistent and responsive collection; and it does so without risk to human collectors or infringing upon the territorial sovereignty of other nations. It also enables users to quickly focus on almost any point on the globe to rapidly respond to emerging situations or to monitor ongoing events. The NRO provides direct support to the war on terrorism, deployed military forces, and other IC and DoD activities requiring near real-time situational awareness and sustained high resolution/high sensitivity collection capability 24-hours-a-day, 7-days-per-week.

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(U) In times of heightened tension, crisis, or even humanitarian or natural disasters, the value of NRO systems is even greater. At this time, NRO systems are not only the first responders of choice for the DoD, IC, or key decisionmakers—they are often the only source of information.

#### (U) Strategic Direction

(U) The 2009 National Reconnaissance Strategic Plan defines a new value model for the NRO: the NRO is now focused as much on what it does with the data it collects as it is on collecting it; and programs must make good business sense as well as good technical sense. In addition to continuing to design and build state-of-the-art satellites that provide unparalleled information advantage for the Nation and our users, the emphasis is on accelerating the delivery of innovative ground capabilities that amplify overhead capabilities and that are more responsive to dynamic and rapidly changing user needs. The NRO is working to implement fully integrated space and ground architectures characterized by synergistic, cross-domain mission management, multi-INT data fusion at the source, common processing, and closer linkages with other IC and DoD technical architectures and functions. The NRO is also leveraging its extensive ability to move data, both on the ground and in space, to enable its mission partners to more effectively execute their missions.

(U) The NRO is moving in new directions while continuing to build on its heritage. The 2009 Strategic Plan establishes the corporate framework for planning and executing the technical initiatives required to achieve the NRO's long-term goals and objectives. It defines overarching corporate imperatives that are fundamental to the organization's success; it establishes investment guidelines for engineering and budget planning; and it defines new corporate technical priorities to guide lower-level program development. Equally significant, it recognizes the most critical element in the NRO's long-term success is its workforce.

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(U) The NRO is reestablishing its reputation for on-time and on-budget delivery. It is also focusing on delivering the best long-term value for the systems it builds. This includes a heightened emphasis on the health of the national security space industrial base that the NRO ultimately depends on for its long-term success. The NRO is also working to improve the protection and survivability posture of its space and ground assets.

(U) To support this ambitious vision, the NRO recently completed a comprehensive realignment of its corporate governance structure as well as a complete reassessment and redefinition of its acquisition management processes and a reorganization of its acquisition and operations-related functions. These initiatives are collectively referred to as the *NRO Transformation* and they fundamentally change the way the NRO manages itself and the way it executes its mission.

(U) The NRO Transformation is arguably the most ambitious organizational, business process, and management realignment in the history of the NRO. The INT-based organizational and management approach that had been the foundation of the NRO's structure for the past 40 years has been replaced with a functionally-based structure that, for the first time, enables us to manage ourselves and our systems as single integrated entity. In addition, all systems engineering and acquisition management functions are now enveloped within a single set of standardized best-practices and performance measures. The *Transformation* also implemented rigorous engineering, programmatic, and management checks and balances at all levels within the organization.

(U) The *Transformation* implements the changes necessary to restore acquisition discipline and accountability. Equally important, it establishes the framework and provides tools to more effectively integrate NRO systems into larger IC architectures and to synergistically align NRO with other collectors.

(U) In the aggregate, the Transformation establishes:

• (U) A new corporate governance structure with unambiguous and documented lines of personal responsibility and accountability.

• (U) A new Chief Operating Officer position focused on delivering NRO programs to their established cost, schedule, and performance baselines.

• (U) A new corporate systems engineering function to enable cross-INT trades and enterprise-level planning.

• (U) A new Ground Enterprise Directorate focused on synergistic ground development, the development of integrated tasking capabilities, and the production of fused products.

(U) The *Transformation* also includes a complete reassessment of all acquisition-related policies, processes, and documentation. Where gaps were found, they were addressed; where best practices were found, they were baselined for the entire organization; and where improvements could be made they were made.

(U) Although the management and engineering structures and processes are now in place to facilitate moving into a new era, in the final analysis, the NRO can only be as effective as its workforce. People are our most important asset. The NRO is working hard to recover from the adverse impacts of the acquisition "reform" and "peace dividend" eras of the 1990s. During this era, the NRO essentially lost a generation of project managers and systems engineers. We now have program managers who are superbly well qualified technically, but who lack the hands-on program management experience essential for complete development. This loss, coupled with the retirement surge being experienced by all government agencies, creates a particularly challenging workforce environment for the NRO.

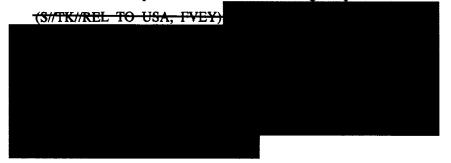
(U) To address these staffing challenges, the NRO is taking the initial steps to establish a separate NRO Career Service to augment existing staffing agreements. The NRO is currently totally reliant on outside organizations to meet its mission-critical staffing requirements. Although our mission partners continue to be supportive, resources are stretched and outside organizational priorities continue to evolve and diverge, putting NRO mission execution at risk. The NRO career service will provide a buffer from these risks. Equally important it will provide some level of management continuity, workforce stability, and the

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ability to recruit, reward, and promote personnel consistent with the NRO's unique mission requirements. Initial funding to support this career service is incorporated into our FY 2010 budget request.



#### (U) Conclusion

(U) The NRP's FY 2010 request, in concert with the FY 2008 Agency Financial Reports provided in November 2008, and the FY 2008 NIP Citizen's Report and NIP Annual Performance Report provided separately in January 2009, meets the requirement for the annual performance and accountability reporting requirement for the IC. The NRP is committed to demonstrating that resources produce measurable results. Relationships between resources, results, and performance are highlighted throughout the request.

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Totals may not add due to rounding

#### (U) Budget Request Highlights



#### (U) New Initiatives:

• (U) The NRO is augmenting its current staffing model with 100 NRO career service employees to provide critical space acquisition skills and experience (engineering, program management, contracting, and program control). These DoD personnel will be added over a three year period (30 in FY 2010, 40 in FY 2011, and 30 in FY 2012). The NRO is currently reliant on external agencies and

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\*Includes OCO funding enacted in the FY 2008 Supplemental Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

services to meet mission critical staffing requirements; however, resource restraints and evolving priorities have resulted in reduced fill rates and shortened tenure in mission critical occupations. (+30 positions)

• (U) As part of the NRO Transformation, the NRO is centralizing system engineering across the organization to improve overall effectiveness. As a result a new, consolidated System Engineering project has been created within the Enterprise Management Expenditure Center, subsuming three legacy projects along with activities and resources from several other NRO budget projects.

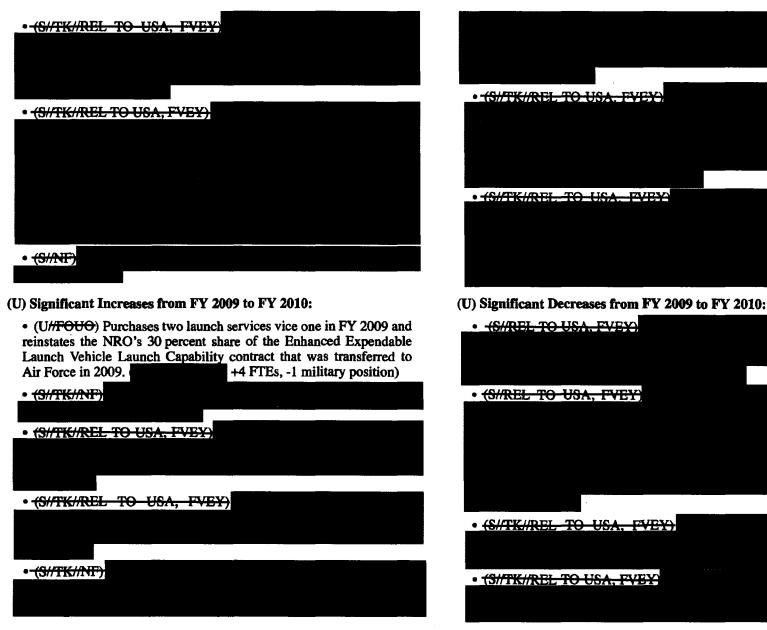


• (U) To improve the flexibility and responsiveness of the R&D portfolio, the NRO has consolidated its three Advanced R&D projects in to a single Research and Technology project.

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#### (U) Management Oversight

(U) Management oversight for the NRO is provided by:

- (U) The Office of Management and Budget.
- (U) The Director of National Intelligence.
- (U) The Secretary of Defense.



#### (U) Funding for National Intelligence Strategy Mission Objectives

(U//FOUO) Four of the MOs – Counterterrorism (CT), WMD Counterproliferation (WMD-CP), Bolster/Sustain Democracy (Democratization), and Anticipate Strategic Threats and Identify Opportunities/Vulnerabilities (Strategic Threats) are closely aligned with the Presidentially-approved National Intelligence Priorities Framework (NIPF). Figure 2 shows funding for the MOs as they relate to the NIPF topics and Figure 3 shows resources for each MO by budget category.

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#### (U) FY 2010 Workforce Highlights

(U) A key initiative for recruitment and staffing is for the NRO to continue its effort to establish its own, distinct career service. This initiative will provide management continuity, workforce stability, long-term perspective, and critical space-acquisition skills and experience (engineering, program management, contracting, budgeting) to execute the NRO mission. The NRO will develop an implementation plan that provides for support and servicing of this new workforce element, as well as the distribution of these positions across the NRO enterprise.

#### (U) Summary of Planned Workforce Changes



This table is classified SECRET//NOFORN

#### (U) NRO Civilian Employment Plan

(U) The Consolidated Employment Plan concept currently focuses on civilian positions and personnel funded by each agency. Innovative human resource programs are needed to support the NRO's "cradle-to-grave" approach to space systems management. It is imperative for the NRO to have a workforce that is both conversant with the satellite life-cycle and available for longer assignments. The NRO workforce utilization requires fluid human resource processes and programs that are uncharacteristic of most federal organizations. Initiatives are underway that will provide a comprehensive and mission-focused corporate strategy to ensure the NRO has the right workforce to meet its evolving mission. The following paragraphs address the initiatives in greater detail. (U) Implement a Corporate Approach to Workforce Analysis and Planning Aligned to Mission Imperatives: The NRO will conduct workforce analysis of the NRO core mission occupations. The workforce will be assessed along occupational lines, taking into account parent agency demographics, trends and workforce initiatives. The end result will be workforce planning that is coordinated and integrated by occupation across the parent agencies. Furthermore, the NRO will promote a consistent approach toward developing an acquisition workforce that is highly trained, capable, and meets certification requirements established by each parent agency. In order to accomplish this, the NRO established an NRO Acquisition Workforce Development Board that will serve as the NRO focal point for developing, promoting, and overseeing coherent policies and processes across the NRO to proactively recruit, develop, and retain its acquisition personnel.

(U) Acquire the diverse, high-quality workforce required to meet NRO mission imperatives: A key initiative for recruitment and staffing is the proposal to augment NRO staffing with 100 NRO career service employees. This initiative will provide management continuity. workforce stability, long-term perspective, and critical space-acquisition skills/experience (engineering, program management, contracting, budgeting) to execute the NRO mission. In addition, the NRO will implement a corporate, integrated Strategic Staffing Strategy to ensure the organization is staffed with high-caliber technical, non-technical, and support personnel. The Strategic Staffing Strategy will align staffing with business goals, calculating costs, defining requirements, and measuring the effectiveness of decisions. It provides for aggressive "marketing" initiatives to expand DoD and IC awareness of the NRO mission and career opportunities. These initiatives will help identify a diverse pool of individuals with specific talents and skill sets to fill current and projected NRO mission requirements.

(U) Lead and develop the workforce to achieve peak performance: The NRO must ensure that its employees receive training, education, and development opportunities directly relevant to NRO's mission, and must consider the development of its transient workforce as future leaders and employees of the IC. The NRO will design, develop, and deliver leadership and professional-development programs to meet the needs of its workforce and align to leadership and discipline competencies published by the ODNI. Therefore, the NRO will engage with parent elements in developing the workforce through

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the Talent Management Initiative. We will sustain an Air Force-NRO Assignment Planning Board to assess Air Force officers at the two-year point for internal moves that are intended to complement career progression. The NRO will continue to use the Workforce Management Board to oversee the CIA workforce that ensures equitable distribution of CIA employees/positions to fill high-priority mission requirements.

(U) Sustain and retain a peak-performing workforce committed to the mission: In the coming years, the NRO is implementing and maintaining compensation and performance management systems that are specific to each parent agency (Defense Civilian Intelligence Personnel System, National Security Personnel System, CIA, DNI, etc). Tailored training courses on each pay-for-performance system are under development to prepare managers and supervisors for managing and developing each segment of the workforce in a manner that maintains the integrity of the systems. The NRO will also provide transformation support to senior managers through a leadership development program that will give them the requisite skills to be successful change agents in a changing environment.

#### (U) NRO Employment Demographics

(U) Grade Distribution by Age: The NRO grade distribution is a reflection of the technical expertise required to achieve its space mission with a majority of the workforce residing in the senior grades: GS-13 thru senior executives. Furthermore, the NRO average age is consistent with the trend in the federal government with NRO employees in the late-40's to mid-50's bracket holding senior ranking positions with 15 plus years of service.

(U) Retirement: As is the case in many federal organizations, the number of new employees, in terms of occupation experience, and the number of experienced officers eligible or approaching eligibility for retirement are growing. Of the NRO current workforce, 53 percent are eligible or will become eligible to retire in the next 10 years; and 30 percent have five years or less experience with their parent agencies. Each mission area could be impacted if retirement-eligible government civilians were to retire *en masse*.

(U) Workforce Positions: The NRO is requesting authorization for 100 additional NRO DoD FTE to establish a separate NRO civilian career service and to improve the execution of its mission. These personnel will support the hiring and long-term development of personnel for the mission critical occupations—engineering, program management, contracting, and budgeting. The 100 FTE will be phased in over the course of three fiscal years beginning in FY 2010.

(U) NRP Workforce Positions by Budget Category: The NRO workforce distribution reflects the primary role that acquisition plays in the NRO mission. A majority of civilian employees work in mission support occupations and the remaining civilians work in core mission areas: research and development, engineering, information technology, and operations. Forty-seven percent of the NRO total positions are aligned under the Enterprise Management and Support budget category which includes acquisition professionals.

(U) Staffing and Demographic Trends: NRO fill rates have declined over the period FY 2005 – FY 2008 from an annual average of 86 percent to 85 percent for civilian positions and 88 percent to 82 percent for military positions. Fill rates vary by parent agency and occupation and reflect parent agency workforce initiatives and capacity to maintain pace with NRO position growth. Even though the NRO budgets for position growth, the ability to fill new positions depends on whether the parent agencies can support increased personnel demand.

(U) In the past, Air Force military assignments were four year tours exempt from deployment. Due to policy changes and organizational restructuring of Air Force personnel assigned to the NRO, military tours are no longer exempt from deployments and the historical 100 percent fill rate policy has been impacted by more stringent guidelines for Air Force assignments. Given that the Air Force military personnel account for significant portions of NRO mission critical occupations (i.e., 34 percent of acquisitions and engineers, 55 percent of operations, and 78 percent of information technology), any decrease in manning rates will impact NRO's mission capabilities.

(U) The NRO government civilian population consists primarily of technical occupations. As such, the NRO grade distribution is appropriate for the experience and education level required for technical occupations. The civilian population within GS-12 and above grades

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(77 percent) has an average of seven years of NRO service. The more senior positions (GS-14s and above) have a greater average length of service at the NRO. However, new arrivals to the NRO from FY 2003 - FY 2008 have less experience with their parent agencies in contrast to those who arrived between FY 1997 - FY 2002.

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#### (U) Workforce Infrastructure and Support



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• (U) Complete deployment of Phase II of e-Trip, the travel management software for all NRO government employees, fully incorporating financial "fast pay" and automated statistical sampling program for domestic travel vouchers.

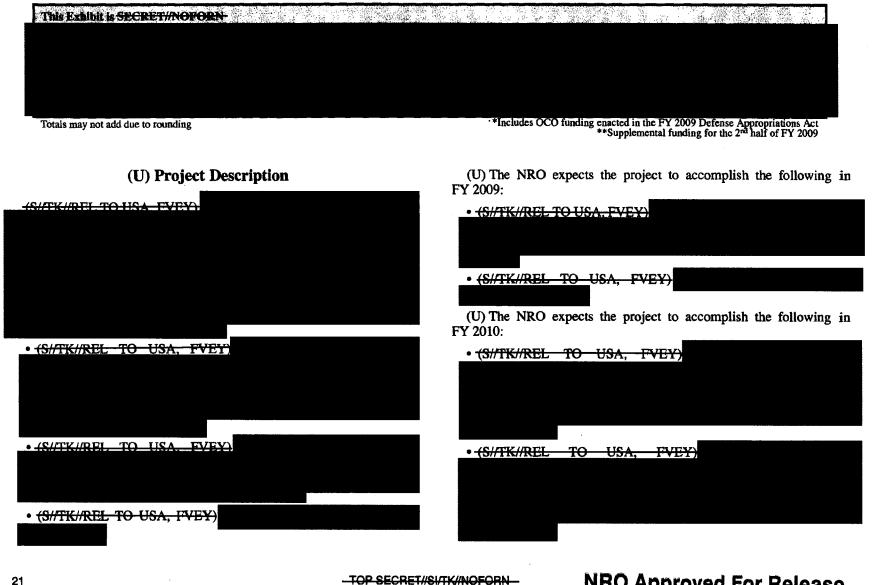
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#### (U) ENHANCED IMAGERY SYSTEM



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#### (U) Significant Increases from FY 2009 to FY 2010:

(U) There are no significant increases in this project for FY 2010.

(U) Significant Decreases from FY 2009 to FY 2010:

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#### (U) NEXT GENERATION EO



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(U) Project Description

• (U) Ground system integration.

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

• (U) Associated systems engineering activities; Contracted Advisory and Assistance Services/System Engineering and Technical Analysis (CAAS/SETA); FFRDC support; and trade studies and analyses.

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(U) The NRO expects the project to accomplish the following in FY 2009:

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• (U) Prepare for and conduct milestone A and begin phase A.

(U) The NRO expects the project to accomplish the following in FY 2010-continue risk reduction, long lead procurement, and development for NGEO space and ground.

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#### (U) Significant Increases from FY 2009 to FY 2010:

(U) There are no significant increases in this project for FY 2010.

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#### (U) Significant Decreases from FY 2009 to FY 2010:



Project Budget Chart
FY 2010 Budget Request by Appropriation Account
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\* (U) Appropriation detail lines may not add due to rounding.

(U) All personnel dollars are incorporated in the Enterprise Management EC, Human Resources project.

(U) MilPers funding is within the applicable military department budget.

(U) CIAP personnel are detailed to the NRO but authorized and budgeted within the CIAP.

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#### (U) EO INTEGRATION & SUPPORT



Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

#### (U) Project Description

(S//REL TO USA, FVEY)

- (U) System trade studies.
- (U) Requirements analysis.
- (U) Prime contractor design evaluation.
- (U) Modeling and simulation.
- (U) Program and business management support.
- (U) Integration and test support.
- (U) Acquisition support activities such as engineering change proposals and acquisition planning.

(U) The NRO expects the project to accomplish the following in FY 2009:

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• (S//TK//REL TO USA, FVEY)

(U) The NRO expects the project to accomplish the following in FY 2010:

• (S//TK//REL TO USA, FVEY

• (S//TK//REL-TO-USA, FVEY)

(U) Significant Increases from FY 2009 to FY 2010:

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- (U) Significant Decreases from FY 2009 to FY 2010:
  - (U) There are no significant decreases in this project for FY 2010.

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#### **(U) GEOINT RADAR SUSTAINMENT**

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#### (U) Project Description

(U) Resources in the GEOINT Radar Sustainment project will be used to support concept development, pre-acquisition activities and initial development of a GEOINT follow-on radar system. Funds in this project are used to:

- (U) Develop initial design concepts, CONOPs and requirements for a multi-mission GEOINT radar satellite system.
- (S//TK//REL TO USA, FVEY)

• (U) Perform risk reduction activities to include technology maturity assessments, key enabling technology development, component testing and qualification, and advanced algorithm and processing development.

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Initiate requirements definition, CONOPS development, analyses and trade studies and risk reduction activities.

• (U) Support development of an independent cost estimate for a multi-mission satellite system.

#### (U) Significant Increases from FY 2009 to FY 2010:

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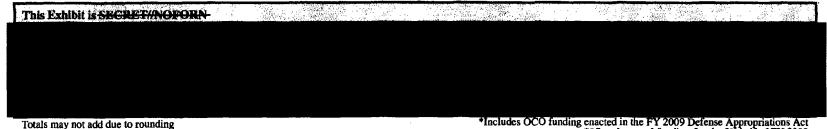
- (U) Significant Decreases from FY 2009 to FY 2010:
  - (U) There are no significant decreases in this project for FY 2010.

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#### (U) Project Description

#### (S//REL TO USA. FVEY)

#### • (U) System trade studies.

- (U) Requirements analysis.
- (U) Prime contractor design evaluation.
- (U) Modeling and simulation.
- (U) Transition planning/coordination.
- (U) Operations planning/coordination.
- (U) Program and business management support.
- (U) Acquisition support activities, such as engineering change proposals, acquisition planning, and factory support.

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

• (U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Support completion of spacecraft thermal vacuum phase 1B.

• (U) Support the delivery of the flight LPE units to space vehicle integration.

• (U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Support completion of spacecraft thermal vacuum phase 2.

#### • (S//TK//REL TO USA, FVEY)

#### (U) Significant Increases from FY 2009 to FY 2010:

(U) There are no significant increases in this project for FY 2010.

#### (U) Significant Decreases from FY 2009 to FY 2010:

(U) There are no significant decreases in this project for FY 2010.

# **NRO Approved For Release**

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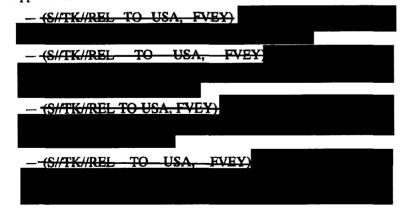
#### (U) LOW ALTITUDE INTEGRATION & SUPPORT



#### (U) Project Description

(U) The Low Altitude Integration and Support project provides resources for engineering and technical assistance for SIGINT LEO, echelon 2 (E2) maintenance, travel, awards, and training. Resources in this project are used for:

• (U) Contracted Advisory and Assistance Services (CAAS), non-CAAS, and FFRDC engineering, acquisition, and technical assistance resources to support the Low Altitude Integration and Support efforts which include:



\*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

- (U) Performing technical reviews of contractor acquisition performance, and providing analyses and recommendations to the Program Manager.

- (U) Evaluating the command and control segment development, and special studies and analyses of system upgrade proposals.

- (U) Conducting acquisition planning and RCRPA activities.

- (S//TK//REL TO USA. FVEY)

- (U) Assisting in the review and maintenance of key program documentation, including the segment specifications, contractual baselines, and internal segment interface control documents.

• (U) Supporting adaptive and corrective E2 maintenance and anomaly activities, which include:

- (U) Maintaining and operating space vehicle simulators configured in support of operational spacecraft and prioritizing the use of engineering development units for payload software development, check out, rework, and anomaly resolution.

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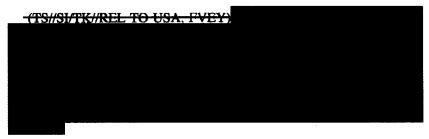
#### (S//TK//REL TO USA, FVEY)



Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

#### (U) Project Description



• (U) Procurement of a Commercial COMSAT-based solution with a ten year design life.

• (S//TK//REL TO USA, FVEY)

• (U) This acquisition uses a firm fixed price contract with performance-based provisions using commercial space product assurance practices and US commercial launch vehicle and launch services.

(U) The NRO expects the project to accomplish the following in FY 2009:

# (S//TK//REL\_TO\_USA, FVEY) (U) Complete spacecraft-level integration and test. (S//TK//REL\_TO\_USA, FVEY) (S//TK//REL\_TO\_USA, FVEY)

#### (U) Significant Increases from FY 2009 to FY 2010:

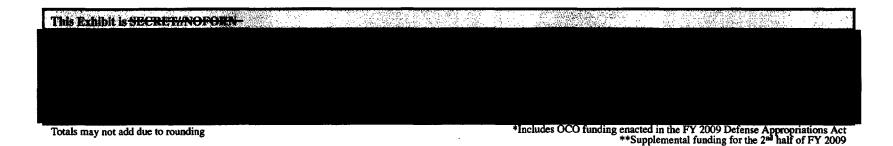
(S//TK//NF)

- (U) Significant Decreases from FY 2009 to FY 2010:
  - (U) There are no significant decreases in FY 2010.

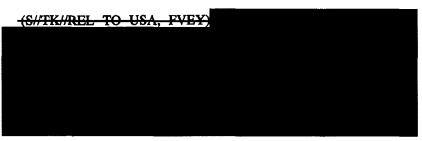
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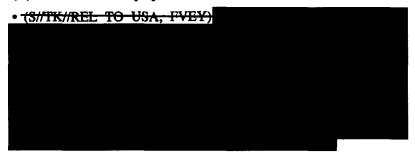
#### (U) HIGH-ALTITUDE INTEGRATION & SUPPORT



(U) Project Description



(U) Resources in this project are used for:



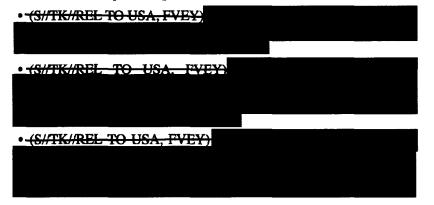
• (U) CAAS and FFRDC support to all of the SIGINT High EC spacecraft programs. CAAS and FFRDC support is jointly funded between NRO MIP and NRP.

-(S//TK//REL TO USA, FVEY)

• (U) Government personnel travel and training in support of the mission.

• (U) Personnel PCS in support of the mission and provides awards in recognition of outstanding performance to deserving government personnel.

• (U) Trade studies, analyses, and reviews of prime contractor and subcontractor acquisition performance.



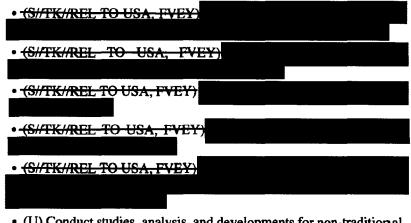
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(U) The NRO expects the project to accomplish the following in FY 2009:

• (S//TK//REL TO USA, FVEY)
• <del>(S//TK//REL_TO_USA, FVEY)</del>
• <del>(S//TK//REL_TO_USA, FVEY)</del>
• <del>(S//TK//REL TO USA, FVEY)</del>
• <del>·(S//TK//REL_TO_USAFVEY)</del>
• <del>(S//TK//REL TO USA, FVEY)</del>

• (U) Conduct studies, analysis, and developments for non-traditional systems

(U) The NRO expects the project to accomplish the following in FY 2010:



• (U) Conduct studies, analysis, and developments for non-traditional systems

#### (U) Significant Increases from FY 2009 to FY 2010:

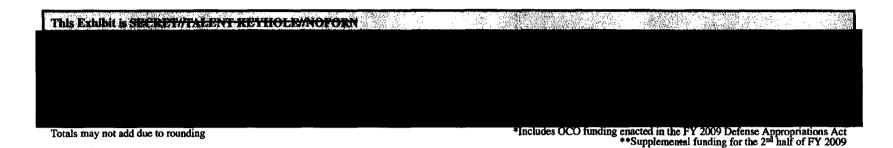
(U) There are no significant increases in FY 2010.

#### (U) Significant Decreases from FY 2009 to FY 2010:

(U) There are no significant decreases in FY 2010.

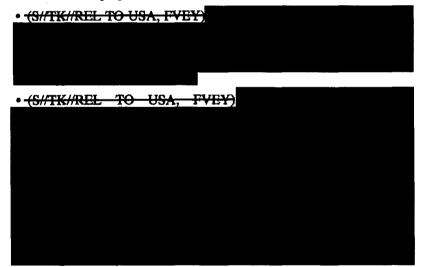
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#### (U) SPACE OPERATIONS DEVELOPMENT SEGMENT



# (U) Project Description

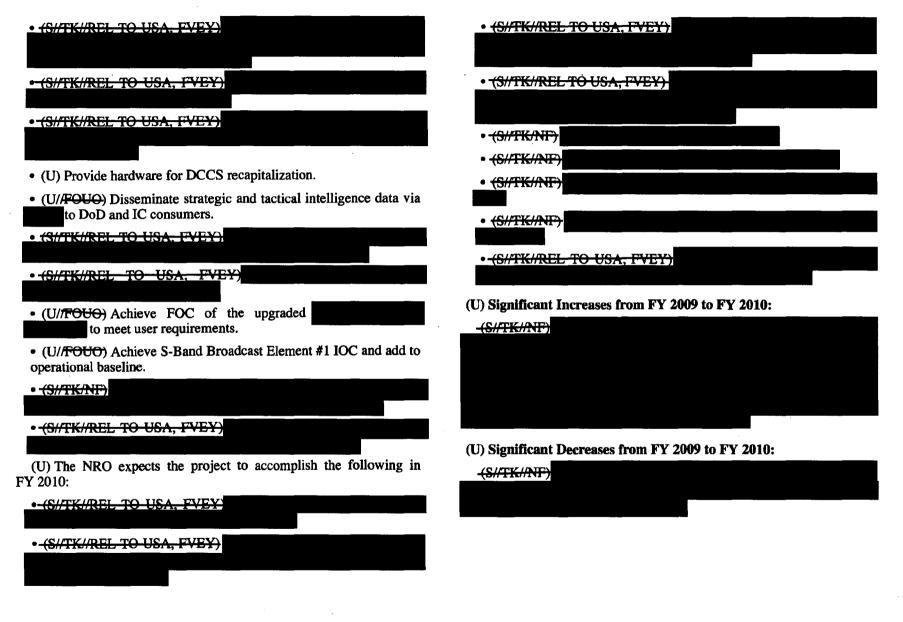
(U) The Space Operations Development Segment project provides funding for ground activities supporting command and control (C&C) and data dissemination for space-based communications systems. Resources in this project are used for:



• <del>(S//TK//REL_TO_USAFVEY)</del>
• <del>(S//TK//NF)</del>
• <del>(S//TK//REL_TO_USA, FVEY)</del>

(U) The NRO expects the project to accomplish the following in FY 2009:

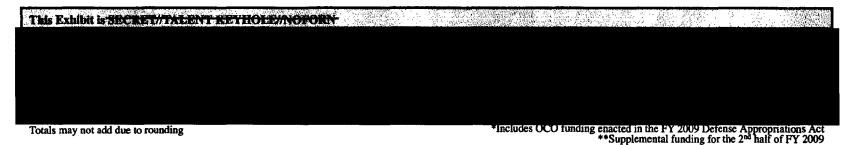
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#### (U) RELAY READINESS & LAUNCH



#### **(U) Project Description**

(S//TK//REL TO USA, FVEY)

- (U) Maintain and monitor vehicles for health and safety functions.
- (U) Maintain all required test and ground equipment at factory and launch sites.
- (U) Perform all planning for spacecraft integration for launch.

• (U) Perform all systems engineering required to support launch planning, rework, and anomalies.

• (U) Perform all required test activities for call-up or readiness activities.

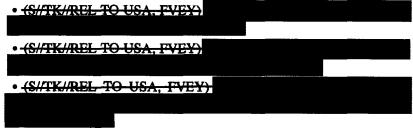
• (U) Perform all required rework resulting from latent problems or defects from the development contract identified after vehicle sell-off.

• (U//FOUO) Upgrade aging subsystem test equipment and perform necessary rework.

• (U) Replenish component parts inventory to accommodate vehicle call-up.

• (U) Support satellite shipments to launch site, launch vehicle system integration, and final preparation through launch of the spacecraft, both in the factory and at the launch base.

(U) The NRO expects the project to accomplish the following in FY 2009:



(U) The NRO expects the project to accomplish the following in FY 2010:

• (S//TK//REL TO USA, FVEY)

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#### TOP SECRET//SI/TK//NOFORN

#### (U) SPACE COMMUNICATIONS INTEGRATION & SUPPORT



Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

#### (U) Project Description

-(S//TK//REL TO USA, FVEY)

• (U) Requirements and CONOPS development.

- (U) Architecture development.
- (U) Independent verification and validation.
- (U) Transition to operations.
- (U) Lifecycle readiness.
- (U) Configuration, risk, and schedule management.
- (U) Technology planning and insertion.
- (U) Performance assessment.
- (U) Acquisition support activities.
- (U) Support to launch flow, readiness and initialization activities.

• <del>(S//TK//REL TO USA, FVEY)</del>

(U) The NRO expects the project to accomplish the following in FY 2010:

• - (S//TK//REL - TO- USA, -- FVEY)

• (SI/TK//REL TO USA, FVEY)

• (S//TK//REL TO USA, FVEY)

• (U) Provide analysis to optimize the constellation's global access.

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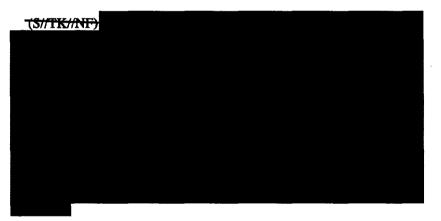
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#### (U) MISSION SYSTEM ENCRYPTION



<sup>\*</sup>Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

#### (U) Project Description



(U) Resources in this project are used to:

• (U) Enable enterprise information assurance architectures, standards, and solutions through information systems security engineering services, information assurance research, and engineering for integration and implementation into the NRO communications capabilities to support NRO missions and programs.

• (U) Conduct analysis of vulnerabilities and capabilities of future communications for both space and terrestrial applications to forecast future information assurance technologies to include cryptographic security requirements.

• <del>(S//TK//NF</del>				
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(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Complete design and analysis phase of cryptographic core processor.

• (U//FOUO) Complete first production of the framer/mapper application-specific integrated circuit design, and initiate preliminary testing.

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#### -TOP SEGRET//SI/TK//NOFORN-

• (U//FOUO) Initiate phase II of technology risk reduction and integration demonstration of key technologies for net-centric cryptographic solutions.

#### • <del>(S//TK/NF)</del>

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Initiate prototype development for the cryptographic core processor.

• (U//FOUO) Complete testing and initiate re-spin of framer/mapper application-specific integrated circuit design to incorporate corrections identified from first phase testing.

and the second sec

• (U//<del>FOUO)</del> Complete phase II of technology risk reduction and integration demonstration of key technologies.

#### • <u>(S//TK//NF)</u>

- (U) Significant Increases from FY 2009 to FY 2010:
  - (U) There are no significant increases in this project for FY 2010.
- (U) Significant Decreases from FY 2009 to FY 2010:



#### -TOP SECRET//SI/TK/NOFORN-

#### **(U) LAUNCH VEHICLES**

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 Totals may not add due to rounding

 \*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act

(U) Project Description

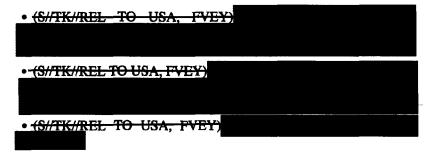
(U) The primary purpose of this project is to procure Evolved Expendable Launch Vehicles (EELV) and conduct integration activities for NRO satellites. The NRO procures standard EELV hardware on a fixed price basis, fully funded two years prior to launch. Well-defined mission unique hardware plus integration efforts are incrementally funded beginning up to five years in advance of the launch date. The structure of the EELV contracts allows separate funding and accounting for NRO missions. The NRO has procuring contracting officer and contracting officer's technical representative authority for all NRO delivery orders on the Air Force EELV contracts.

(U) Schedules for launch vehicles are as follows:

• <del>(S//TK//REL TO USA, FVEY)</del> • <del>(S//REL TO USA, FVEY)</del> • <del>(S//TK//REL TO USA, FVEY)</del> • <del>(S//TK//REL TO USA, FVEY)</del> • <del>(S//REL TO USA, FVEY)</del> \*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

- <del>(S//TK//REL TO USA, FVEY)</del>
- (S//TK//REL TO USA, FVEY)
- (S//REL TO USA, FVEY)
- (S//TK//REL TO USA, FVEY)
- -(S//REL TO USA, FVEY)
- <del>(S//TK//REL TO USA, FVEY)</del>
- <del>(S//REL TO USA, FVEY)</del>
- <del>(S//TK//REL TO USA, FVEY</del> • <del>(S//TK//REL TO USA, FVEY)</del>

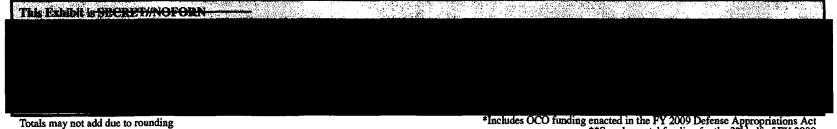
(U) The NRO expects the project to accomplish the following in FY 2009:



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#### -TOP SECRET//SI/TK/NOFORN

#### (U) LAUNCH CAPABILITY INFRASTRUCTURE



(U) Project Description

(U) This project funds the EELV Launch Capability (ELC) contract to maintain the capability to launch government missions. It is separate from launch vehicle hardware, which is funded by the EELV Launch Services contracts. This contract arrangement is necessary because the robust commercial market envisioned in the original EELV construct in 1998 never materialized and the government is now the primary EELV customer. The funds in this project support retention of critical skills at the EELV contractor facilities and at the launch sites, and maintain proficiency of the booster contractor workforce.

(U) The landscape of US launch infrastructure changed significantly in December 2006 when the United Launch Alliance (ULA) was officially established to merge the launch processes of both Lockheed-Martin and Boeing into a single joint venture. ULA maintains both launch vehicle families, Atlas and Delta EELV, in order to strengthen assured access to space and to provide optimum flexibility for meeting required lift capabilities.

(U) The NRO and the Air Force are full partners in ensuring EELV launch capability for the nation. The funding request for this project represents the NRO's 30 percent share of the EELV ELC contract. It is imperative that this funding remain in the NRO budget in order to maintain its influence and involvement in essential launch processes and \*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

activities required for launch assurance. NRO's fiscal contribution to ELC fosters partnership with the USAF, enables insight into USAF launch investment and infrastructure planning, provides the NRO a voice in award fee boards, and affords NRO some control of the nation's launch capability.

(U) The NRO expects the project to accomplish the following in FY 2010:

• (S//TK//REL-TO USA: TEYE)

• (U) Perform EELV launch and range site proficiency training.

• (U) Maintain prime and supplier contractor critical skills.

• (U) Maintain critical booster engineering skills at the booster manufacturing facilities.

• (U) Perform systems engineering and launch activities including the resolution of any and all fleet-wide launch issues.

• (U) Maintain launch capability through maintenance and operations of the launch pads and facilities, depreciation and amortization of capital equipment and tooling.

• (U) Maintain supplier readiness and subcontractor support for critical EELV launch systems (NRP\_00715, 00716).

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### (U) LAUNCH OPERATIONS AND ENGINEERING

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Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

### (U) Project Description

(U) The Launch Operations and Engineering project provides launch related support for all NRO satellite programs.

(U) Resources in this project are used to:

• (U) Operate and maintain the NRO Payload Transportation System which provides secure transportation from factory to launch base, Vandenberg Air Force Base (VAFB) or Cape Canaveral Air Force Station (CCAFS), and throughout launch base processing for all NRO satellites using NRO launch base facilities.

• (U) Equip forklifts, tractors, trailers, and other mechanical hardware for satellite vehicle (SV) electrical aerospace ground equipment and SV mechanical aerospace ground equipment.

• (U) Support SV and mission documentation requirements, including those required by the National Environmental Policy Act, and occupational safety and health regulations.

• (U) Support Eastern and Western Range.

• (U) Perform NRO Operations Squadron (NOPS) launch support, downrange/ascent telemetry capture, and processing operations for NRO launches.

• (U) Fund Contracted Advisory and Assistance Services, Systems Engineering and Technical Analysis, and System Integration support.

• (U) Perform independent validation and verification (IV&V) of launch contractor mission design parameters.

• (U) Operate and maintain NRO launch base administrative facilities.

• (U) Provide NRO mission unique (secure) communication at the launch sites (e.g., secure launch pad communications for NRO payloads).

• (U) Support engineering activities affecting multiple satellite missions on one or multiple launch systems.

• (U) Perform early investigation and analyses of advanced launch systems for potential NRO application.

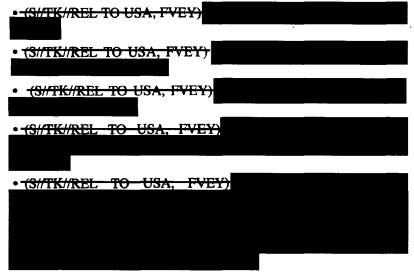
• (U) Perform early integration of NRO systems on new launch vehicles.

• (U) Perform launch vehicle performance and acquisition trades for new research and development programs.

• (U) Analyze other innovative space lift concepts for potential launch of NRO payloads, including reusable launch vehicles.

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• (U) The NRO expects the project to accomplish the following in FY 2009:



• (U) Perform over 48,000 satellite support contacts from NOPS.

(U) The NRO expects the project to accomplish the following in FY 2010:

• <del>(S//TK//REL TO USA, FVEY)</del> • <del>(S//TK//REL TO USA, FVEY)</del> • <del>(S//TK//REL TO USA, FVEY)</del> • (S//TK//REL\_TO\_USA, FVEY)
• (U) Perform over 48,000 satellite support contacts from NOPS.
• (S//TK//REL\_TO\_USA, FVEY)

(U) Significant Increases from FY 2009 to FY 2010:

• <del>(S//NE)</del>		
• <del>-(S//NF)</del>		
• <del>- (S//NF)</del>		

• (U//FOUO) Increase due to additional personnel requirements in the OSL Contracts Office and NRO Cape. (+2 FTE, O&M, AF; +1 FTE, CIAP)

### (U) Significant Decreases from FY 2009 to FY 2010:

(U) There are no significant decreases in FY 2010.

#### -TOP SECRET//SI/TK/NOFORN-

### (U) UGA GROUND DEVELOPMENT

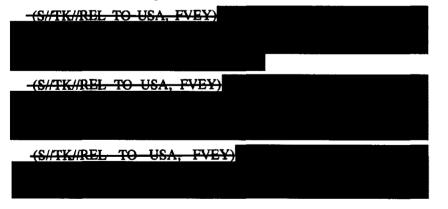


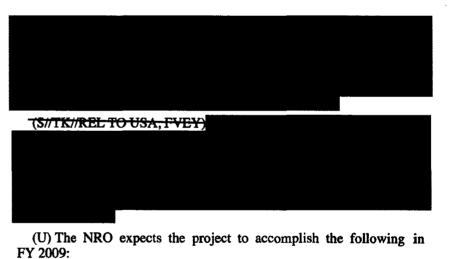
\*\*Supplemental funding request for the 2nd half of FY 2009 \*\*\*Funds and Government FTEs/Positions requested in the GEOINT and SIGINT Ground Development projects

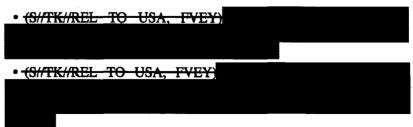
### (U) Project Description

(U) The Unified Ground Architecture (UGA) Ground Development project develops and maintains capabilities that enable planning, scheduling, and resource control of GEOINT and SIGINT collection, processing, and information sharing systems. These systems provide a key interface with the mission partners (NGA and NSA) to receive their overhead collection requirements, build joint collection strategies, and assess mission performance.

(U) Resources in this project are used to:







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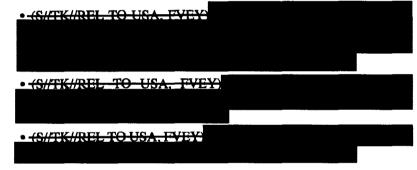
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• (U) Complete testing, factory system integration test and shipment of all operational equipment for initial DAR Recap delivery. Continue hardware, firmware, and software design and development test for final DAR Recap upgrades.

• (U) Deliver the initial prototype of Enterprise Ephemeris Service. This provides mission planners and processors at SIGINT and GEOINT mission ground stations (MGS) access to regularly updated replicated ephemeris data and services.

• -(S//TK//NE)

(U) The NRO expects the project to accomplish the following in FY 2010:



• (U) Complete site installation and operational transition for initial DAR Recap wideband data formatting components supporting GEOINT missions.

• (U) Complete detailed design, development and initial production of remaining custom chassis for DAR Recap supporting both GEOINT and SIGINT missions

• (U) Deliver additional framework services, including the GEOINT Enterprise Telemetry Service to provide operators access to vehicle telemetry.

• (S//TK//REL TO USA. FVEY)

### (U) Significant Increases from FY 2009 to FY 2010:

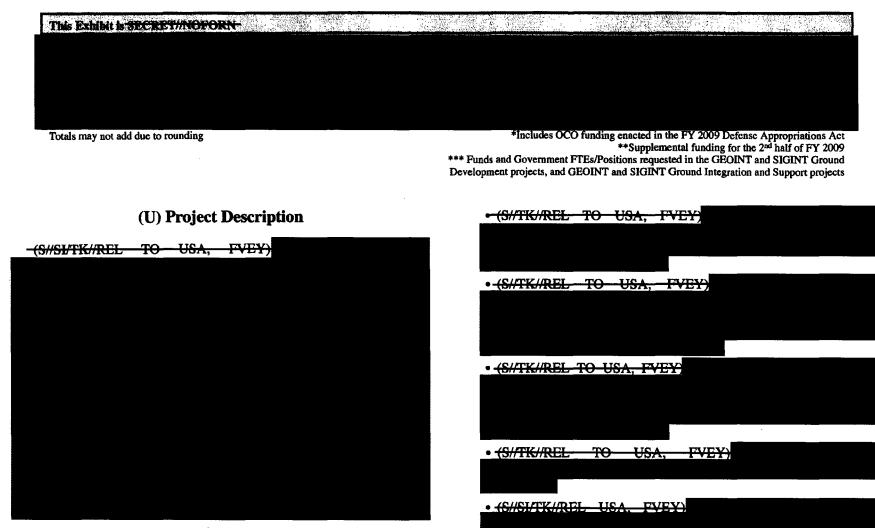
(U) There are no significant increases in FY 2010.

(U) Significant Decreases from FY 2009 to FY 2010:

(U) There are no significant decreases in FY 2010.

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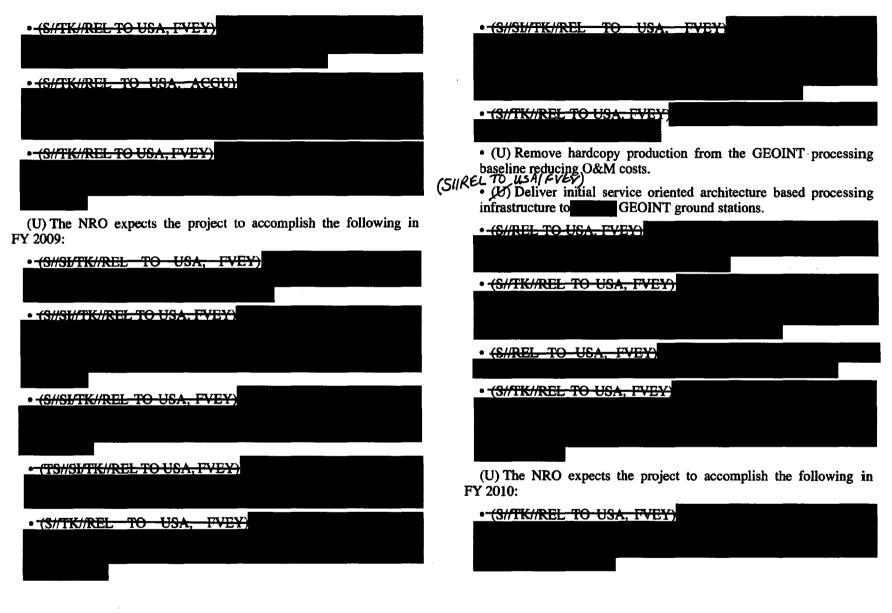
### (U) UGA PROCESSING DEVELOPMENT



(U) Resources in this project are used to:

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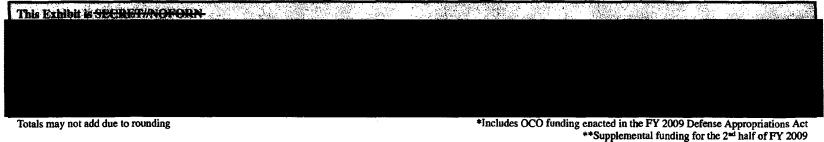
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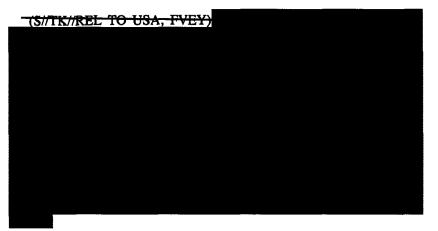
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# (U) UGA ENTERPRISE DEVELOPMENT



\*\*\*Funds and Government FTEs/Positions requested in the GEOINT and SIGINT Ground Development projects

### (U) Project Description

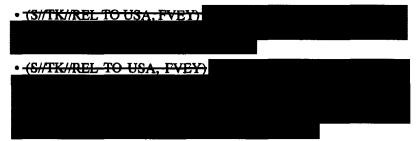


(U) Resources in this project are used to:

- (S//TK//REL TO USA, FVEY)
- (S//TK//REL TO USA, FVEY)

• (U) Transform information management across the architecture to enable a single user query to return a streamlined and simplified inventory of all overhead information available on a topic.

• (U) Begin validation of activities to virtualize information services.



• (U) Support development, factory maintenance and support, and phased replacement of obsolete hardware/software to sustain enterprise frameworks and services.

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Provides NRO support of the intelligence enterprise by implementing initial enterprise-wide security services, including central directory services for cross-site Public Key Infrastructure

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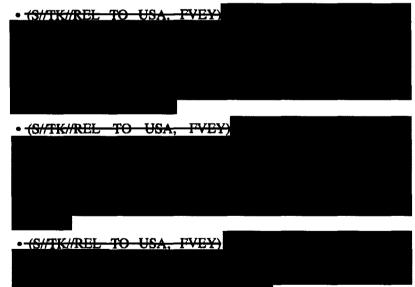
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identification and authentication for access to any authorized user in the IC. This provides for mission-centric collaboration, information centric security, and attribute based access control.

• (U) Initiate Metadata Catalog and Service registry development to streamline data access through mission focused filtering and tailoring of data and information. Supports rapid, secure, tailored network access to NRO data information and services.

• ( <del>S//TK//REL_TO_USA, _FVEY)</del>		
• <del>(S//TK//REL TO USA, FVEY)</del>		
(U) The NRO expects the project	to accomplish	the following in

(U) The NRO expects the project to accomplish the following in FY 2010:



• <del>(S//TK//REL-TO-USA. EVEY)</del>		
• (S//TK//REL_TO_USAFVEY)		
• (S//TK//REL TO USA, FVEY)		
•-(S//TK//REL TO USA: FVEY)	 	

### (U) Significant Increases from FY 2009 to FY 2010:

• <del>(S//TK//NF)</del>				
• <del>(\$//NF)</del>				
•				
•				

- (U) Significant Decreases from FY 2009 to FY 2010:
  - (U) There are no significant decreases in FY 2010.

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### **(U) GROUND INTEGRATION & SUPPORT**

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Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

### **(U) Project Description**

(U) The Ground Integration & Support project is responsible for requirements, architectures, schedules, interfaces, integration, verification, and testing activities to support acquisition of GEOINT command and control capabilities and all Ground Enterprise mission management, processing, and supporting enterprise service capabilities. It also provides resources for personnel to travel and receive training in support of the mission. This project also provides funds to recognize outstanding performance of government personnel.

(U) This project provides funding for Contracted Advisory and Assistance Services (CAAS), non-CAAS and FFRDC support. These resources provide technical support associated with program planning, acquisition development, and integration of Ground capabilities. Additionally, these resources support and conduct planning and studies for future architectures, CONOPS, capabilities definition, and requirements allocation.

(U) Resources in this project are used to:

• (U) Define and manage systems requirements, baseline configuration, and schedule processes for GEOINT command and control efforts.

• (U) Define and manage systems requirements, baseline configuration, and schedule processes for all Ground mission management, processing, and enterprise services.

• (U//FOUO) Partner with collection management authorities to ensure ground systems provide the collection management features required to fully exploit evolving processing capabilities as they come online.

• (U) Conduct independent evaluations of integrated ground systems to identify and exploit opportunities that increase overall system performance, optimize data manipulation, and improve collection, processing, and ground station operation and maintenance.

• (U) Define functional performance and verification requirements.

• (U) Develop program financial plans, formulate budget requirements, and monitor financial execution performance of NRO Integrated Ground projects.

• (U) Continuously adapt overhead enterprise architecture capabilities to keep pace with emerging needs and technologies and to achieve compatibility with the NRO enterprise standards.

• (U) Implement an adaptive prototype architecture to migrate towards a unified ground architecture consisting of a common and standardized infrastructure, enabling ground station interoperability.

(U) The NRO expects the project to accomplish the following in FY 2009:

• <del>(S//TK//REL_TC</del>	HSA. FVEY)
• <del>(S//TK//REL-TO</del>	USA, FVEY)
•	
• <del>(S//TK//REL TO</del>	USA, FVEY)
• <del>(\$//TK//REL_TC</del>	USA. FVEY
	tems requirements and CONOPS documentation present of capabilities for use against new threats.
-	pects the project to accomplish the following in
	DO LISA EVEN

• <del>(S//TK//REL\_\_TO\_\_USA,\_\_FVEY)</del>

• <del>(S//TK//REL TO USA, FVEY)</del>
• (U) Develop systems requirements and CONOPS documentation required for development of capabilities for use against new threats.
(U) Significant Increases from FY 2009 to FY 2010:



- (U) Significant Decreases from FY 2009 to FY 2010:
  - (U) There are no significant decreases in FY 2010.

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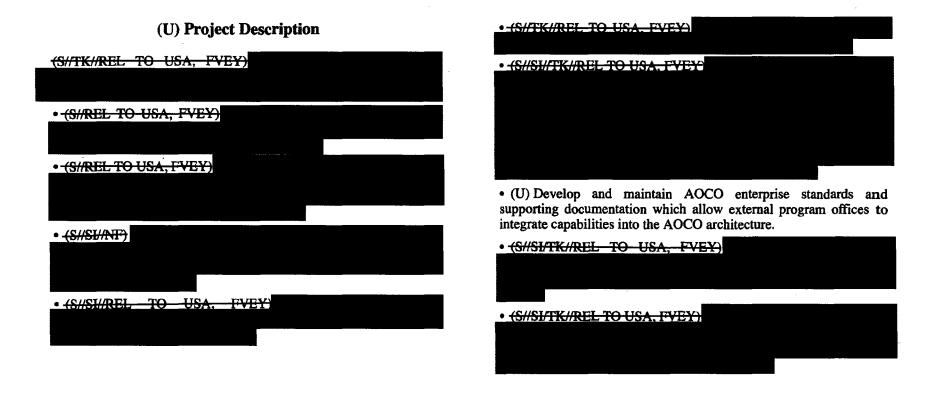
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# (U) DEPLOYED SUPPORT



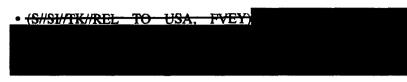
\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009 \*\*\*Funds and Government FTEs/Positions requested in the SIGINT Applications and Integration project.



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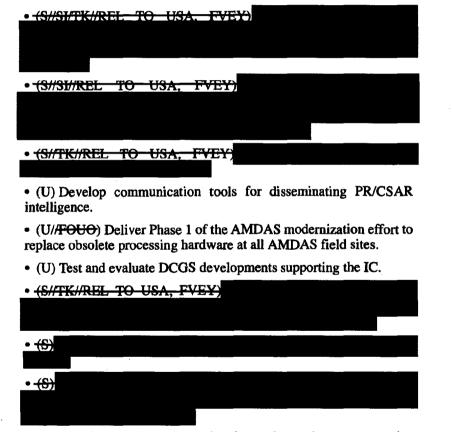
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links.



(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Execute over 25 operational test and evaluation events for on-orbit SIGINT assets.



• (U) Develop and disseminate planning tools to enhance cooperative operations mission planning, analysis and predictive performance.

(U) Provide theater-focused capabilities supporting near real-time dissemination of AOCO precision geolocations over tactical data

• (S//TK//REL TO USA, FVEY)

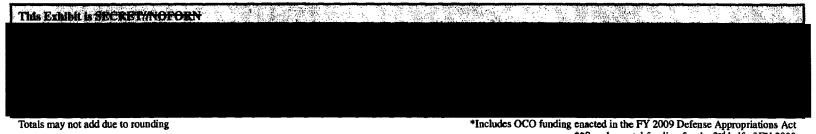
(U) The NRO expects the project to accomplish the following in FY 2010:

• <del>(S//REL TO USA, FVEY)</del> • <del>(S//REL TO USA, FVEY)</del> • <del>(S//TK//REL TO USA, FVEY)</del>

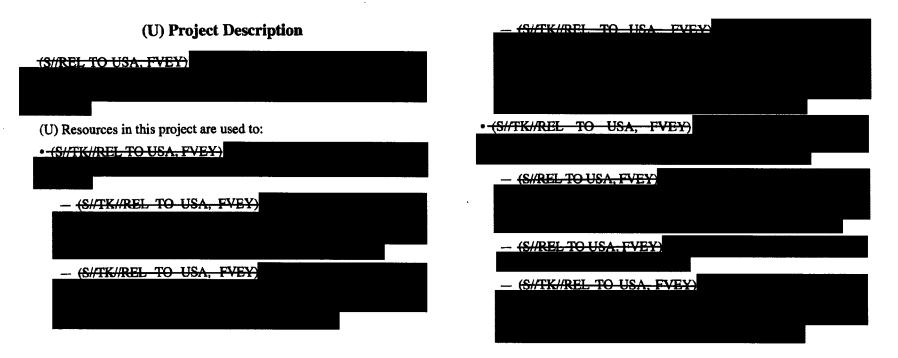
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# (U) CONUS OPERATIONS

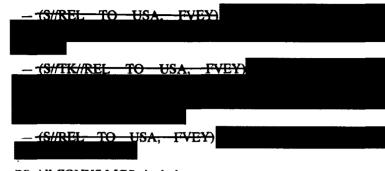


\*\*\*Supplemental funding for the 2<sup>ad</sup> half of FY 2009 \*\*\*Funds and Government FTEs/Positions requested in the GEOINT and SIGINT Ground Operations projects, and GEOINT Station Integration & Support projects



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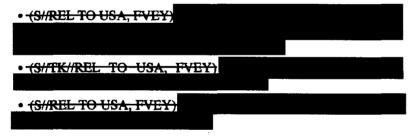
• (U) All CONUS MGSs include:

- (U) Site support services: logistics, facilities O&M, medical support, and security support.

- (U) Infrastructure support such as networks, facilities, configuration management, and asset recapitalization.

- (U) Site unique core contractor support.

(U) The NRO expects the project to accomplish the following in FY 2009:



• (U) Enable on-going operations of NRO satellite systems and ground stations, and provide the projected operational availability levels shown in the Mission Ground Stations Expenditure Center (EC) performance table (NRP\_00554, 00555, 00556, 00559, 00561, 00563, 00564, 006647, 00648, 00649, 00662, 00663, 00664, 00665, 00706, PE\_00004).

(U) The NRO expects the project to accomplish the following in FY 2010:

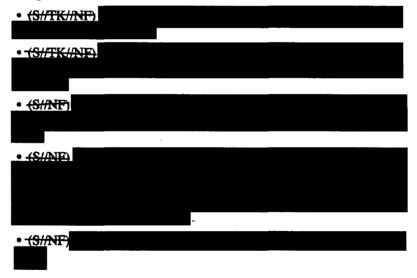


• (U) Enable on-going operations of NRO satellite systems and ground stations, and provide the projected operational availability levels shown in the Mission Ground Stations EC performance table (NRP\_00554, 00555, 00556, 00559, 00561, 00563, 00564, 00647, 00648, 00649, 00662, 00663, 00664, 00665, 00706, PE\_00004).

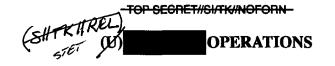
### (U) Significant Increases from FY 2009 to FY 2010:

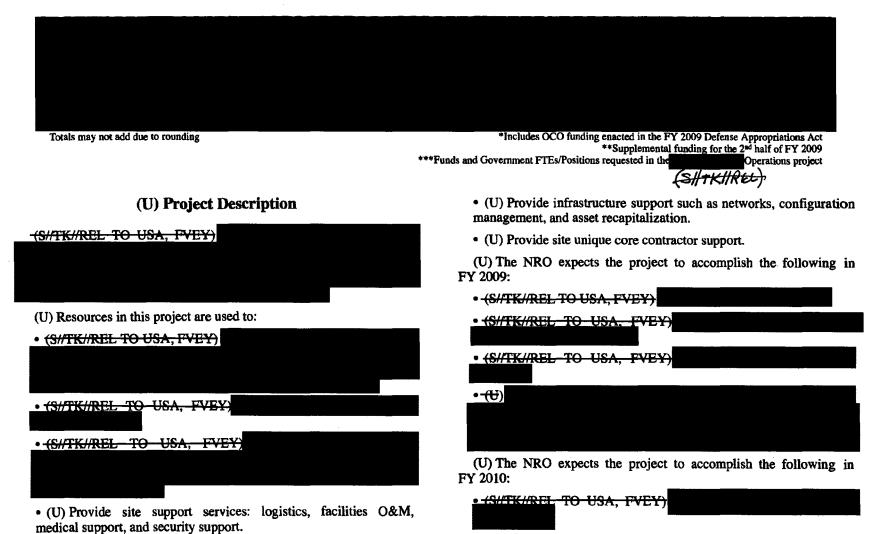
(U) There are no significant increases in this project for FY 2010.

### (U) Significant Decreases from FY 2009 to FY 2010:



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### (U) STATION INTEGRATION & SUPPORT

Totals may not add due to rounding
\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding request for the 2nd half of FY 2009 \*\*\*Funds and Government FTEs/Positions requested in the GEOINT and SIGINT Station Integration & Support projects, GEOINT and SIGINT Ground Operations projects, and Overhead Collection Management Center project

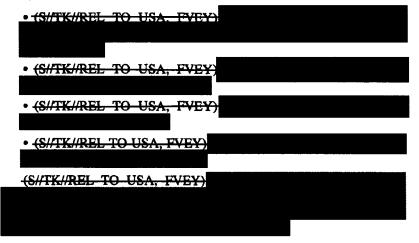
### (U) Project Description

(U) The Station Integration & Support project includes resources for systems engineering efforts in support of the NRO System Operations (SO) Directorate headquarters offices. Government personnel in concert with Contracted Advisory and Assistance Service (CAAS), FFRDC, and non-CAAS contractors provide engineering support including:

• (U) Integration, readiness, and verification activities in support of ground developments and satellite launches.

- (U) Evaluation of IOSA constellation strategy options.
- (U) Operational need statement evaluations.
- (U) Future architecture requirements evaluations and study support.
- (U) Systems Engineering Configuration Management Boards.
- (U) Budget and contracts support.

(U) This project further provides funding to support System Operations Directorate personnel travel, permanent change of station moves to and from the NRO MGSs, mission training, and awards recognition. (U) The NRO expects the project to accomplish the following in FY 2009:



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### (U) CONNECTIVITY

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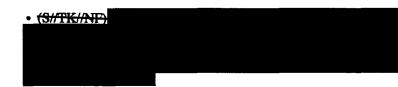
\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

### **(U) Project Description**

(U) The Connectivity project provides resources to develop, acquire, deliver, operate and maintain, and defend the NRO's enterprise information systems and terrestrial communication networks. These information systems and networks provide global communication services enabling the mission of the NRO and those of our IC mission partners and the DoD. Resources in this project are used to:

• (U//FOUO) Enhance the mission-critical message handling capabilities, enterprise-wide information assurance capabilities, management information systems, and voice and video communications systems through the Enterprise Systems program.





• (U//FOUO) Provide the Core portion of the network and migration from an asynchronous transfer mode (ATM) backbone to an Internet Protocol/MultiProtocol Label Switching (IP/MPLS) backbone to facilitate cross-agency, cross-department information sharing.

• (U//FOUO) Procure high-speed cryptographic devices.

• (U//FOUO) Provide the Edge portion of the network including voice and video to users through the Next Generation Edge/LAN (NGEL), the Future Architecture for Command and Telemetry Services (FACTS), and the Unclassified Wide Area Network (UWAN).

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U//FOUO) Begin the acquisition of the enterprise Unclassified Management Information System (UMIS), and the Secret Collateral MIS (SCMIS).

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• (U//FOUO) Assume responsibility for the sustainment of the Digital Integrated Communications Electronic System (DICES) from SIGINT.

• (U/FOUO) Consolidate and converge the network and begin an acquisition effort to migrate from an ATM backbone to an IP/MPLS backbone (NRP\_00613).

- (U) Consolidate and converge the network and provide higher throughput to the desktop to support user needs and enhanced services.
- (U//FOUO) Provide upgrades to the FACTS program to support enhanced satellite command and control networks.

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U//FOUO) Begin the acquisition activities for a next generation enterprise-wide information sharing and routing service fundamental to the NRO's ground transformation.

• (S//TK//NF)

• (U//<del>FOUO</del>) Continue the acquisition effort to migrate from ATM backbone to an IP/MPLS backbone (NRP\_00613).

• (U) Continue to consolidate and converge the network and provide higher throughput to the desktop to support user needs and enhanced services.

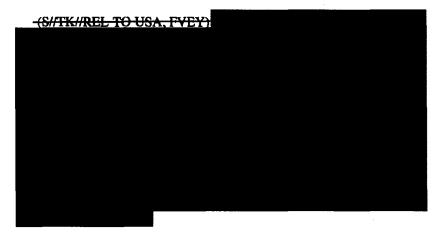
(U) Significant Increases from FY 2009 to FY 2010:

# • <del>(S//TK//NF)</del> • <del>(S//TK//NF)</del>

(U) Significant Decreases from FY 2009 to FY 2010:

<del>(S/NF)</del>	
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### **(U) Accommodation Procurement**



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### (U) ENTERPRISE ARCHITECTURE AND PLANNING

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 Totals may not add due to rounding

 \*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act

### (U) Project Description

(U) The Enterprise Architecture and Planning project provides resources to support the secure and effective management of NRO Information and Information Technology (I&IT) resources and IT workforce. The Office of the CIO (OCIO) advises the Director, NRO and NRO senior managers on all I&IT related matters. The OCIO develops NRO I&IT strategy and policies that incorporate National. IC. Federal, and DoD guidance into the NRO Enterprise Architecture (EA), and the NRO IT Architecture. The OCIO is responsible to develop and implement an I&IT portfolio management program to govern how the NRO evaluates, selects, acquires, controls, manages, operates and maintains I&IT. In addition, the OCIO enables NRO Enterprise information sharing through the adoption and integration of best practice identity and access management services (IAMS) standards, policies and controls to ensure secure access and sharing of information across the NRO and with the IC and its partners. Resources in this project are used for:

• (U) Facilitate the development of the NRO I&IT Strategy, which serves to inform activities throughout NRO on the vision and direction for I&IT.

• (U) Facilitate the development of the NRO I&IT Strategic Plan, which will provide a very high-level roadmap for the development of I&IT capabilities needed for NRO mission and business activities.

\*\*Supplemental funding request for the 2nd half of FY 2009

• (U) Facilitate the development of the NRO EA, which will assist in providing data and information useful for NRO seniors in making investment decisions and in meeting DNI and OMB EA requirements.

• (U) Facilitate the development of NRO IT Architecture, which will identify IT capabilities and functions needed for accomplishment of the NRO mission and business objectives.

• (U) Plan, coordinate, collaborate, formulate, and disseminate NRO I&IT policy, governance, and standards.

• (U) Implement I&IT investment portfolios across the NRO to support NRO senior management decisions concerning selection, control, and evaluation of I&IT investments.

• (U) Facilitate information sharing throughout the NRO and the IC, and identify possible technologies for the solution of tough information sharing challenges.

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• (U) Provide IAMS that enable public key infrastructure, remote access services and cross domain IC federated services in the form of architectures, policies, governance, and management frameworks and controls to support the NRO network information sharing infrastructure.

(U) The NRO expects the project to accomplish the following in FY 2009:

- (U) Establish an NRO I&IT Strategy.
- (U) Establish an NRO IT Architecture.
- (U) Maintain and update NRO IT Standards.

• (U) Achieve enhanced ability to accurately account for the depth and breadth of NRO I&IT resources across the enterprise by developing and implementing clear and concise I&IT policies, clear and accountable governance, and improved insight, oversight, and management of NRO I&IT resources.

(U) The NRO expects the project to accomplish the following in FY 2010:

- (U) Update the NRO I&IT Strategy.
- (U) Establish the NRO I&IT Strategic Plan.
- (U) Update the NRO IT Architecture.
- (U) Maintain and update NRO IT Standards.
- (U) Provide enterprise systems engineering support for agency-wide issues and to IC working groups and forums.

• (U) Continue expansion of the ability to accurately account for the depth and breadth of NRO I&IT resources across the enterprise by continuing the development and implementation of clear and concise I&IT policies, clear and accountable governance, and improved insight, oversight, and management of NRO I&IT resources, as well as expand the OCIO span of influence in I&IT decisionmaking and corporate governance.

• (U) Provide updated version for remote access services to enable external management information system connections to the NRO enterprise.

• <del>(S//TK//NF)</del>

• (U) Enable role based access control systems and policy models.

#### (U) Significant Increases from FY 2009 to FY 2010:



### (U) Significant Decreases from FY 2009 to FY 2010:

(U) There are no significant decreases in this project for FY 2010.

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### (U) INFORMATION ASSURANCE

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Totals may not add due to rounding

### (U) Project Description

(U) The Information Assurance (IA) project provides the resources to gain insight into and provide guidance to the NRO Directorates and Offices for the planning, designing, developing, implementing, and operating of IA activities and solutions.

(U) In order for the NRO to be successful in planning and implementing IA as an enterprise solution that enables the mission, a strong governance structure, defined IA architecture, enterprise vulnerability management program, and efficient certification and accreditation (C&A) program is required. Additionally, a comprehensive IA training function that reflects new approaches and C&A transformation will ensure IA skills and training standards are established for the IA workforce throughout the NRO.

(U) Resources in this project are used to:

• (U) Lead the IA architectural development in the NRO and drafting policies for proposed IA standards and guidelines.

• (U) Lead security accreditation for all NRO systems.

• (U) Track system vulnerabilities and recommended corrective and preventative actions.

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding request for the 2nd half of FY 2009

• (U) Manage the NRO's privacy program and IT COOP planning (EMS\_00020).

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Take initial steps in rewriting all IA policies to reflect the NRO transformation and new directions published by the ODNI (EIT\_00007).

• (U) Start the process to evolve the C&A process to comply with ODNI-proposed C&A changes.

• (U) Begin the process for developing a comprehensive approach mapping threats to specific vulnerabilities of NRO systems, and providing risk mitigation recommendations.

• (U) Initiate programmatic actions that will lead to the NRO having a sustainable privacy program that meets the organizations statutory compliance and practical protection needs.

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Continue the development and implementation of the NRO IA program.

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• (U) Provide a comprehensive approach to configuration management and control as an enterprise activity.

• (U) Proceed with the development and implementation of the enterprise-wide vulnerability management program.

• (U) Develop policies that address audit and audit data analysis.

• (U) Prepare the initial IA architectural views that describe the conceptual basis for the development, implementation, and management of the NRO IA program.

### (U) Significant Increases from FY 2009 to FY 2010:

• <del>(S//NF)</del>			
• <del>(S//NF)</del>			
• <del>(S//NF)</del>			 _

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• <del>(S//NF)</del>			 	
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		•		
• <del>(\$//NF)</del>				

### (U) Significant Decreases from FY 2009 to FY 2010:

(U) There are no significant decreases in this project for FY 2010.

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### (U) RESEARCH & TECHNOLOGY DEVELOPMENT

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Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding request for the 2nd half of FY 2009 \*\*\*Funds and Government FTEs/Positions requested in the Basic Research, Applied Research, and Advanced Technology Development projects

### (U) Project Description

(U) The Research & Technology Development project funds the NRO's advanced research and development (AR&D) activities, including direct support of these activities. To improve the flexibility and responsiveness of the R&D portfolio, the NRO has consolidated its three Advanced R&D projects into this single Research and Technology project.

(U) These AR&D activities enable evolutionary and revolutionary capability improvements to current and future GEOINT, SIGINT, Multi-INT, communications, and ground systems. The Advanced Systems and Technology Directorate continues to aggressively pursue innovation in technologies, architectural options, and acquisition approaches. AR&D efforts are focused on rapidly, and effectively, developing these technologies to improve our capabilities in the following six areas:

- (U) Persistence: Means and methods to monitor subjects and areas of interest whenever desired for as long as necessary to detect, track, and understand patterns of activity and behavior.
- (U) Broad Area Coverage: Search large areas of interest to detect unanticipated targets or patterns of activity and geolocate them to cue precision collection by other sensors.

• (U) Phenomenology: New sources and methods for detecting non-traditional observables from targets of interest.

• (U) Value-Added Information: Networked, high bandwidth communications and collaborative processing services to enhance our ability to share, fuse, and extract timely, actionable information.

• (U) Spatial, Spectral, and Sensitivity Extension: Increase technical performance for collection against weak signals and low reflectance targets in dense clutter and co-channel interference backgrounds.

• (U) Innovative Technologies and Capabilities: Foundational, cross-cutting technologies to reduce cost, improve overall system performance, and decrease time-to-market.

(U) AR&D efforts are further aligned in six distinct activities: Basic Research, GEOINT Technology, SIGINT Technology, Communications Technology, Crosscutting Technology, and Phased Array Technology Maturity.

### (U) Basic Research

(U) Develop new and innovative sources and methods through the Director's Innovation Initiative (DII), the Innovative Solutions Initiative (ISI), and white papers proposed by industry, academia, other government organizations, and laboratories. The DII solicitation provides unclassified access to revolutionary R&D concepts and provides a risk-tolerant

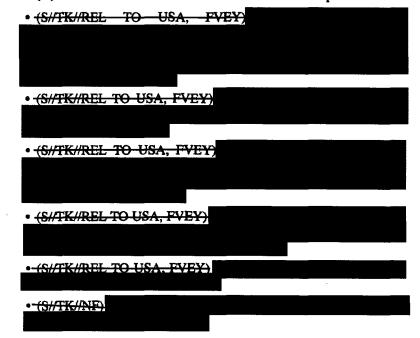
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environment to invest in cutting edge technologies and high-payoff concepts relevant to the NRO's mission. The ISI is a classified solicitation that explores new and innovative ideas, concepts, technologies, and methods that will provide the nation and the IC with actionable intelligence to solve current and enduring problems.

### (U) GEOINT Technology

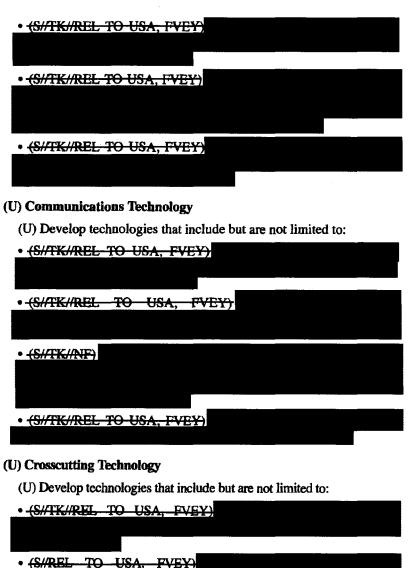
- (U) Develop technologies that include but are not limited to:
- (U) New collection sources and methods scalable to space.



### (U) SIGINT Technology

(U) Develop technologies that include but are not limited to:

• (S//TK//REL TO USA, FVEY)



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### • (S//REL TO USA, FVEY)

- (U) Carbon nanotube (CNT) memory/logic, power cables, and structural applications.
- (U) Third generation long duration CNT lithium ion batteries.

• (U) Radiation hardened analog, mixed signal, and digital microelectronics.

• (U) Next generation high efficiency solar cells.

• (U) Advances in thermal management for both payload and computer chips.

- (U) Advanced power electronics.
- (U) Multi-INT ground processing technologies.
- (S//NF)-

• (U) Advanced Futures Lab ground processing and data fusion technologies.

• (S//TK//REL TO USA, FVEY)

- (S//REL TO USA, FVEY)
- (U) Technology Forum/Technology Symposium coordination.

• (U) NRO advanced technology programs in partnership with the Air Force Research Laboratory and the Department of Energy's National Laboratories.

• (U) Emerging opportunities for technology investment.

#### (U) Phased Array Technology Maturity (PATM)

(S//TK//REL TO USA, FVEY)

• (U) Horizon to horizon coverage.

FY 2009: • (U) Complete initial effort for the 29 FY 2008 DII projects and initiate further development of at least 10 percent of these technologies.

• (U) Complete base study effort for the seven FY 2008 ISI projects and exercise options for 3-4 high payoff projects.

(U) The NRO expects the project to accomplish the following in

• (S//TK//REL-TO USA, FVEY)

• (S//TK//REL TO USA, FVEY)

• (S//TK//REL TO USA, FVEY)

· (S//TK//REL\_TO\_USA: FVEY)

• (U) Cross mission/precision geolocation.

• (S//TK//REL TO USA, TEYE)

• (S//TK//NF)

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- (S//SL/TK//REL TO USA, FVEY)
- <del>(S//REL TO USA, FVEY)</del>

• -(S//TK//NF)

• (U) Complete PATM design concept review milestone.

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• (U) Focus on the NRO goal of transitioning 50 percent of transition-ready technologies into operations (NRP\_00672, 00674).

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Continue to conduct the annual DII and ISI solicitations to identify high potential payoff technologies for the NRO.

• <del>(S//TK//REL TO USA, FVEY)</del>

 • <del>(S//TK//REL TO USA, TEYE)</del>

 • (U) Start development on additional R&D components for extended dynamic range.

 • <del>(S//TK//NF)</del>

 • <del>(TS//TK//NF)</del>

 • <del>(TS//TK//REL TO USA, FVEY)</del>

• (U) Complete Advanced Testbed Rapid Pathfinder and launch.



• (U) Complete PATM prototype testing activities.

• (U) Focus on the NRO goal of transitioning 50 percent of transition-ready technologies into operations (NRP\_00672, 00674).

### (U) Significant Increases from FY 2009 to FY 2010:

•			
•- <del>(S//NF)</del>			
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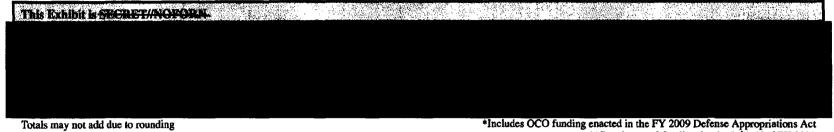
### (U) Significant Decreases from FY 2009 to FY 2010:

•				
• <del>- (S//NF)</del>	-			

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# (U) RESEARCH & TECHNOLOGY SUPPORT



# (U) Project Description

### (S//TK//NF)

- (U) State-of-the-art engineering and scientific analysis.
- (U) Technology analysis and forecasting.
- (U) Contracting, financial, and human resource management.
- (U) Information Technology.
- (U) Security.
- (U) Computer-aided design, simulation technology, and applications.

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

• (U) Graphics production, multimedia products, and administrative support.

(U) The NRO expects the project to accomplish the following in FY 2009—continue engineering and infrastructure support to the AS&T Director and the Senior Southwest Technical Laboratory Liaison.

(U) The NRO expects the project to accomplish the following in FY 2010—continue engineering and infrastructure support to the AS&T Director and the Senior Southwest Technical Laboratory Liaison.

### (U) Significant Increases from FY 2009 to FY 2010:

(U) There are no significant increases in FY 2010.

### (U) Significant Decreases from FY 2009 to FY 2010:

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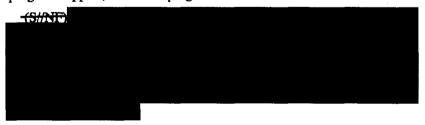
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# **(U) ACQUISITION MANAGEMENT**



### (U) Project Description

(U/FOUO) The Acquisition Management project includes acquisition support resources for the Office of the Chief Operating Officer (COO), as well as support for Directorate-level staffs within the IMINT, SIGINT, and Communications (COMM) Directorates within COO. Acquisition support activities in this project include travel, training, awards, Advisory and Assistance Services, support for front office operations, financial management, security, and the IMINT Research and Technology Office, as well as other miscellaneous program support, to include program closeout activities.



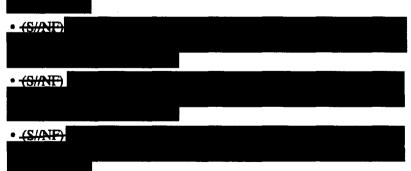
(U) The NRO expects the project to accomplish the following in FY 2009—provide COO and Directorate level acquisition support resources.

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Provide COO and Directorate level acquisition support resources.

• <del>(S//NF)</del>					
(U) Significar	t Increase	s from FY 2	2009 to FY	<b>2010:</b>	
• <del>(S//NF)</del>					



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### (U) EDUCATION AND TRAINING



Totals may not add due to rounding

# \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

### (U) Project Description

(U) The Education and Training project provides resources for NRO and IC corporate initiatives that focus on improving workforce performance through training courses, career and professional development programs, retention initiatives, and exploitation of joint IC training opportunities.

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Provide an array of education and training services to include courses on supervisory skills and career planning, increased offerings of existing courses to match employee needs, and opportunities for employees to compete for and attend external training and education courses.

• (U) Deploy education and training programs in support of Performance Management and IC pay modernization.

• (U) Execute employee development initiatives to support the NRO's human capital management strategy to attract, develop, and retain a world-class workforce, to include continuing professional education and certifications. (EMS 00018)

• (U) Establish NRO University construct (policy and procedures) to corporately integrate training programs, metrics, and statistics.

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Expand education and training opportunities to include the IC workforce in alignment with DNI initiatives.

• (U) Conduct migration and integration of training data and systems to support NRO University.

• (U) Provide an array of education and training services to include courses on supervisory skills and career planning; increased offerings of existing courses to match employee needs; and opportunities for employees to compete for and attend external training and education courses.

### (U) Significant Increases from FY 2009 to FY 2010:

• (U) There are no significant increases in FY 2010.

### (U) Significant Decreases from FY 2009 to FY 2010:

• <del>(S//NF)</del>

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### (U) FINANCE

This Exhibit is SECRET/INCFORM
Totals may not add due to rounding
\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act

(U) Project Description

(U) The Finance project is responsible for NRO fund accounting in accordance with Generally Accepted Accounting Principles, timely and accurate processing of invoices, and preparation of external financial statements per OMB regulations. Finance provides financial policy guidance for NRO programs to ensure efficient and effective financial management. In addition, Finance provides support for NRO financial systems including the NRO Financial Information System.

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Establish a cost accumulation framework across the NRO.

• (U) Initiate standardization of NRO property, intergovernmental transactions, and funds balance with treasury procedures to IC strategic direction.

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

• (U) Enhance electronic interfaces with the financial system through establishment of a service oriented architecture.

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Achieve a clean audit opinion on the FY 2009 NRO financial statements.

• (U) Initiate consolidation of NRO systems and processes with CIA to a single core financial system.

• (U) Stand up and maintain a financial requirements tool for enterprise-wide planning, requirement gathering, and tracking.

(U) Significant Increases from FY 2009 to FY 2010:

(U) There are no significant increases in FY 2010.

(U) Significant Decreases from FY 2009 to FY 2010:

(U) There are no significant decreases in FY 2010.

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### (U) HEADQUARTERS MANAGEMENT

This Exhibit is SECRET//NOFORM Totals may not add due to rounding \*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act

### (U) Project Description

(U) The Headquarters Management project provides executive level management and staff support for developing and issuing guidance, reviewing and evaluating program performance, allocating and distributing resources, and conducting intermediate- and long-range planning, programming and budgeting. This project includes diverse management functions such as support to the Director's Office, General Counsel, Equal Employment and Diversity Management, Inspector General, and Business Plans and Operations—Contracts, Acquisition Center of Excellence, Cost Analysis Improvement Group, Policy, Strategic Communications, Center for the Study of National Reconnaissance, and Resource Management.

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Submit quarterly metrics update to DNI, submit FY 2010 CBJB and FY 2011 Intelligence Program Budget Submission, and conduct quarterly execution reviews.

• (U) Develop office of Strategic Communications capital business processes, instructions, and procedures.

• (U) Implement and align updated policy for independent cost estimating and earned value management with NRO's Acquisition Management Plan revision, and develop approximately 12 full program ICEs.

\*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

• (U) Support approximately 110 NRO and mission partner source selections and offer 100 formal and 60 informal Streamlined Timely Acquisition Topics, Just in Time, and graduate program training courses.

• (U) Complete an overhaul of the NRO corporate regulatory structure, improve mandatory Ethics and Executive Order 12333 training, and increase legal liaison with Department of Justice, Department of Homeland Security, Director of National Intelligence and the NRO's mission partners.

• (U) Complete three lessons learned studies for the DNI.

• (U) Complete enhancements to IT tools that will support IG audit and inspection process and their Procurement Fraud Initiative, resume the annual audit of the NRO financial statements, perform audit and inspection activity to focus on the impact and effectiveness of the NRO transformation, and complete approximately 150 investigations.

(U) The NRO expects the project to accomplish the following in FY 2010:

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• (U) Complete NRO Financial Report, submit quarterly metrics update to DNI, submit FY 2011 CBJB and FY 2012 Intelligence Program Budget Submission, and conduct quarterly execution reviews.

• (U) Integrate and expand earned value management support contracts and cost estimating support contracts, and develop approximately 12 full program ICEs.

• (U) Support approximately 110 NRO and mission partner source selections and offer 100 formal and 60 informal Streamlined Timely Acquisition Topics, Just in Time, and graduate program training courses.

• (U) Expand ethics training to all NRO employees and monitor and review the overhauled corporate regulatory structure to satisfy OMB, DNI, DoD, and internal NRO requirements and standards.

• (U) Implement a comprehensive E-commerce strategy establish guidance and procedures governing acquisition security with respect to industrial and corporate relationships in response to a dynamic and global industrial environment.

• (U) Complete two lessons learned studies for the DNI.

(U) Significant Increases from FY 2009 to FY 2010:

(U) There are no significant increases in FY 2010.

(U) Significant Decreases from FY 2009 to FY 2010:

(U) There are no significant decreases in FY 2010.

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# **(U) HUMAN RESOURCES**



Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

### **(U) Project Description**

(U) The Human Resources (HR) project funds personal services for NRO civilian personnel and HR support and initiatives to improve recruitment, career development, recognition, retention, and management of the NRO's diverse scientific and acquisition workforce.

(U) The NRO is augmenting its current staffing model with 100 NRO career service employees to provide management continuity, workforce stability, long term perspective, and critical space acquisition skills and experience (engineering, program management, contracting, and budgeting) to execute the NRO mission. These personnel will be added over a three-year period (30 in FY 2010, 40 in FY 2011, and 30 in FY 2012). Under the current staffing model, the NRO is reliant on external agencies and services to meet mission critical staffing requirements. The Air Force and CIA continue to be the primary providers of talent for the NRO across all occupations; however, resource constraints and evolving priorities have resulted in reduced fill rates and shortened tenure in mission critical occupations.

(U) Resources in this project are used to:

• (U) Reimburse the CIA for personnel support costs, as well as travel costs for retirees and new employees, and other non-personal services costs.

• <del>(S//NF)</del>

• (U) Provide the NRO Employee Assistance Program. EAP provides centralized in-house, confidential mental health counseling and referral services; provides consultation services to managers and supervisors; and provides workshops and facilitates support groups on relevant mental health issues.

• (U) With the exception of the 94 personnel within the HR project, personnel are distributed among the other ECs within the NRP.

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Implement new/revised civilian pay system for DoD civilians.

• (U) Field programs to retain the NRO workforce and to recruit new employees.

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• (U) Develop and implement the Talent Management Initiative and its components: succession management, leadership development, organization culture, and organization systems and processes.

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Implement new/revised civilian pay system for CIA civilians.

• (U) Hire 30 new NRO DoD career service employees.

- (U) Significant Increases from FY 2009 to FY 2010:(U) There are no significant increases in FY 2010.
- (U) Significant Decreases from FY 2009 to FY 2010:
  - (U) There are no significant decreases in FY 2010.

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### (U) NRO MISSION SUPPORT

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Totals may not add due to rounding

### **(U) Project Description**

(U//FOUO) The NRO Mission Support (NMS) project directly supports the Director, NRO and the NRO Senior Leadership in making decisions on the acquisition of satellite and ground system capabilities in response to IC and DoD information needs. The NMS project places a top priority on building cross-INT collaboration and information sharing with users and ensuring responsiveness to the timelines of the most dynamic users. The NMS project is charged with ensuring effective NRO support to the IC, DoD, civil, and federal agencies to include managing relationships with customers, understanding their information needs, educating them on current capabilities, developing new capabilities, and leveraging NRO-wide enterprise solutions to operational and intelligence challenges. Additionally, the NMS project directly supports warfighters and operators in harm's way with capabilities and tools that enable real-time access to overhead collected data, tailored data processing, and information fusion tools to enable mission planning and execution. These capabilities are being used to prosecute high-value targets.

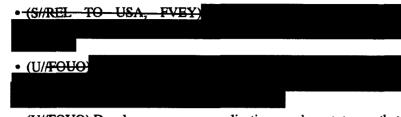
(U) Resources in this project are used to:

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

• (U// <del>FOUO)</del>		
• (U//F <del>OUO)</del>		
• <del>(S//REL TO USA, FVEY)</del>		
• (U//F <del>OUO</del> )		

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•  $(U_{\rm HFOUO})$  Develop new user applications and prototypes that maximize the utility of national system capabilities and data in collaboration with NRO enterprise, mission partners, IC, DoD, industry, and academic communities.

• (U<del>//FOUO</del>) Provide national users and military units training on the various NRO technologies and collection capabilities and the potential applications of national systems data as they apply to both strategic and tactical intelligence problems.

• (U//FOUO) Provide planning and coordination of experiments for technology development and field testing conducted in support of deployed units/forces.

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Collaborate and enhance responsiveness to IC partners, operators, and analysts. Identify and coordinate needs with the NRO Systems Engineering Office and solution providers ensuring long-term user requirements are incorporated into the NRO strategic/acquisition planning and emergent operational solutions.



• (U) Participate in military and national exercises and experiments ensuring NTM data is represented and utilized correctly, fully exploiting NTM applications and capabilities.

• (U//<del>FOUO</del>)

• (U) Participate in space protection activities and leverage Air Force Space Command programs of record for mutual benefit.

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Continue to refine its business processes to ensure user requirements are captured and appropriately addressed.

• (U) Ensure NROC operations fully support and are responsive to, the IC and DoD space protection initiatives.

### (U) Significant Increases from FY 2009 to FY 2010:

(U) There are no significant increases in FY 2010.

### (U) Significant Decreases from FY 2009 to FY 2010:



#### TOP SECRET//SI/TK/NOFORN-

## (U) SECURITY



Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

## (U) **Project Description**

(U/<del>/FOUO</del>) The Security project provides a wide array of common security support and CI services to the entire NRO government and industry population. The Office of Security and Counterintelligence supports approximately government and industry personnel in over 900 NRO-sponsored facilities and almost 3,000 information systems networks.

## (U) Resources in this project are used to:

- (U) Develop and distribute security policy guidance.
- (U) Identify, analyze, and disseminate information on terrorist and foreign intelligence service threats.
- (U) Plan long-range security initiatives.
- (U) Conduct security clearance investigations (EMS\_00030, 00032).
- (U) Perform polygraph examinations.
- (U) Adjudicate and grant NRO accesses (EMS\_00031).
- (U) Inspect and accredit secure facilities and information systems.

• (U) Provide security and CI training and awareness products to NRO employees.

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Provide protection services to ensure zero breaches of the exterior perimeter of the NRO compound and outlying buildings.

• (U) Complete 15,000 initial and periodic clearance reviews to stay within the DNI directed timelines of 90 percent of initial reviews completed in 65 days and 90 percent of periodic reviews completed in 150 days.

• (U) Conduct daily CI activities to include auditing, monitoring, and analyses in support of the insider threat, information assurance, and technology protection programs.

(U) The NRO expects the project to accomplish the following in FY 2010:

• (U) Provide protection services to ensure zero breaches of the exterior perimeter of the NRO compound and outlying buildings.

• (U) Complete 15,000 initial and periodic clearance reviews to stay within the DNI directed timelines of 90 percent of initial reviews completed in 65 days and 90 percent of periodic reviews completed in 150 days.

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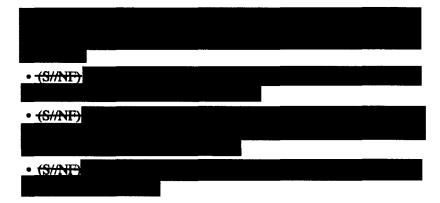
• (U) Conduct daily CI activities to include auditing, monitoring, and analyses in support of the insider threat, information assurance, and technology protection programs.

## (U) Significant Increases from FY 2009 to FY 2010:

(U) There are no significant increases in FY 2010.

## (U) Significant Decreases from FY 2009 to FY 2010:

•- <del>(S//NE)</del>		



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## (U) SYSTEMS ENGINEERING

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Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009 \*\*\* Funds and FTEs/Positions requested in the Systems Engineering: Communications; GEOINT and SIGINT projects

## (U) Project Description

(U/<del>fFOUO</del>) The Systems Engineering project provides systems integration and architecture systems engineering activities in support of the COO, across the acquisition directorates, Advanced Systems and Technology directorate and the Office of Space Launch. SE is chartered to establish systems engineering processes, maintain and manage the Integrated NRO architecture and long-term investment planning baseline, and represent the NRO at all requirements based interaction and interfaces with the IC and DoD. SE ensures that NRO system acquisitions achieve the required intelligence mission capabilities by conducting end-to-end cross-site/cross-system integration, validation, verification and transition activities of satellite, ground, and infrastructure systems.

(U) Resources in this project are used to:

• (U) Provide oversight and management of NRO corporate-level systems engineering processes.

• (U//FOUO) Develop and manage an integrated NRO architecture to produce new and innovative solutions that leverage mission partner efforts and build upon multi-INT information with enhanced data access, content, and delivery timelines.

• (U) Create corporate-level strategic and investment plans, including development of technology roadmaps.

• (U) Implement effective NRO-level engineering and industrial base policies, processes, and initiatives.

• (U) Inform and provide the technical basis for corporate-level programmatic decisions.

• (U) Perform corporate-level trade studies supporting requirements and architecture development and interface definition.

• (U) Run system-level modeling and simulation.

• (U) Provide the technical analysis—and represent the NRO—for overhead-related IC and DoD studies.

• (U) Raise the level of systems engineering and program management expertise across the NRO.

• (U) Coordinate with NRO's mission partners the set of cross-agency mission integration activities across the separate NRP, NGP, CCP, and GDIP programs in accordance with the DNI's priorities.

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• (U) Perform end-to-end GEOINT, SIGINT and Communications space and ground systems requirements management, architecture management, risk management/mitigation, schedule management, and configuration management.

• (U) Support pre-acquisition architecture development for new programs and candidate concepts, including requirements definition and concept of operations studies.

• (U) Plan and execute full system lifecycle readiness, to include definition of acquisition readiness schedules and milestones, data reporting requirements and supporting engineering assessments.

• (U) Assure end-to-end integration and test management, including readiness assessments for the transition and deployment of new capabilities to operations.

• (U) Support preparation for and execution of acquisition milestone decisions.

• (U/FOUO) Conduct studies and analyses addressing protection, survivability, and counter denial and deception.

• (U//FOUO) Interact with other NRO activities and IC partners to ensure end-to-end continuity and security of essential functions in primary and reconstituted modes in order to ensure access to critical capabilities across IC agencies and customers.

• (U//FOUO) Perform enterprise IT systems engineering activities. Advocate enterprise-level architecture, engineering, requirements, standards, and IT that enable secure NRO mission capabilities.

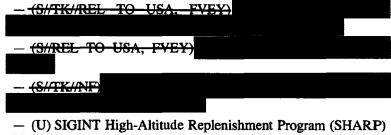
(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Provide end-to-end baseline management of GEOINT, SIGINT and Communications space and ground systems requirements, schedule, and risk management activities.

(W) Complete the Congressional Directed Action to conduct a study on overhead imagery requirements and capabilities enable the DNI and SecDef to determine the path forward for electro-optical and imagery.

• (U) Participate in year four of the DNI-led Intelligence Collection Architecture effort.

• (U) Provide architectural readiness, independent verification and validation management, test and transition planning, review, and assessment for the following program events:



PDR.

- (S//TK//REL TO USA. FVEY)

(U) The NRO expects the project to accomplish the following in FY 2010-provide architecture systems engineering to reduce risk and improve mission assurance for the following program events:

• <del>(S//REL TO USA, FVEY)</del>
• <del>(S//REL_TO_USA,_FVEY)</del>
• <del>(S//REL TO USA, FVEY</del> )
• <del>(S//TK//NF)</del>

(U) Significant Increases from FY 2009 to FY 2010:



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## **(U) FACILITIES**



(U) Project Description

(U//FOUO) The Facilities project provides resources to support the O&M of NRO HQ facilities; provide facility infrastructure policy, enterprise management, enterprise leadership, and guidance in support of all NRO and IC components; acquire and maintain essential leased facilities; and support world-wide NRO construction projects.

(U) Resources in this project are used to:

- (U) Operate and maintain NRO HQ facilities and grounds.
- (S//TK//REL TO USA, FVEY)



• (U//FOUO) Provide essential leased space and associated O&M in support of NRO HQ requirements within the National Capital Region. Leased facilities include

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

• (U) Provide timely facility infrastructure standards support, cooling expertise) to the NRO. enterprise management, policy, and guidance (to include power and

- NRO construction projects and recapitalization efforts.
  - + (S//TK//REL-TO-USA, FVEY)

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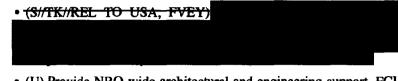
(U) The NRO expects the project to accomplish the following in FY 2009:

• <del>(S//TK//NF</del>

• (U//FOUO) Start new lease for DNI directed community space (Keystone), supporting NSA, NGA, and NRO operations and intelligence analysis in Denver, Colorado (EMS\_00035).

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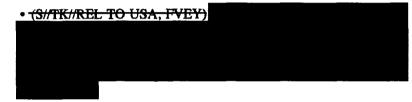
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• (U) Provide NRO-wide architectural and engineering support, FCl assessments, and facility project management support.

(U) The NRO expects the project to accomplish the following in FY 2010:

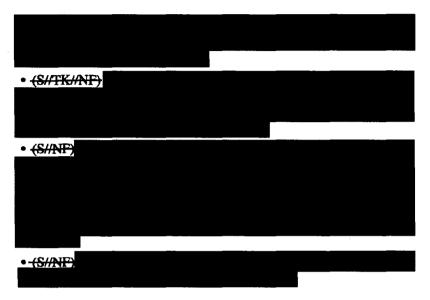
• (U/FOUO) Continue to develop, execute, and monitor Keystone, the Denver lease project.



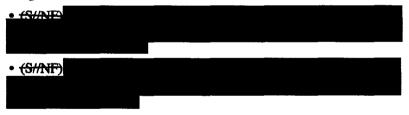
- (U) Accomplish Hangar Little J renovations at Cape Canaveral Air Force Station, FL.
- (U) Continue Eastern Processing Facility construction at Cape Canaveral Air Force Station, FL.
- (U) Continue establishment of additional CONUS freight transfer facilities.

## (U) Significant Increases:





## (U) Significant Decreases:



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## (U) LOGISTICS



Totals may not add due to rounding

\*Includes OCO funding enacted in the FY 2009 Defense Appropriations Act \*\*Supplemental funding for the 2<sup>nd</sup> half of FY 2009

## (U) Project Description

(U) The Logistics project provides resources for diverse enterprise level support services and transportation management services that enable the NRO to perform its worldwide mission.

(U) Resources in this project are used for:

• (U) Business systems development and integration, automation upgrades. O&M, and configuration management of administrative business services.

• (U) NRO environmental, safety, and system safety support; Comprehensive Emergency Management Program; Fire Protection Program; medical and fitness support; life cycle records management; multimedia and production services; full-service government travel and accounting services; NRO cover and liaison services; library and technical research services; management control; knowledge management; and process reengineering.

(U) Reception and Representational funds.

• (S//TK//REL TO USA, FVEY)



## (S//TK//NE)

• (U) Centralized NRO vehicle program management, including vehicle leases and procurement, to include policy.

(U) The NRO expects the project to accomplish the following in FY 2009:

• (U) Continue sustainment of enterprise resource planning (ERP) capabilities.

• (U) Initiate deployment of electronic records management system and/or electronic records management.

• (U) Complete deployment of Phase II of e-Trip, the travel management software for all NRO government employees, fully incorporating financial "fast pay" and automated statistical sampling program for domestic travel vouchers.

• (U) Increase environmental oversight for remediation efforts and assessment process for construction activities.

• (U) Administer the FY 2009 ODNI Employee Survey and address action items generated from the FY 2008 NRO Climate Survey.

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• (U) The NRO expects the project to accomplish the following in FY 2010:

(S//TK//REL\_TO\_USA; FVEY)
(U) Research the supplier relationship management and customer

relationship management functionality from within existing ERP system.

• (U) Expand pilot electronic records management tool enterprise-wide.

• <del>(S//TK//REL\_\_TO\_\_USA,\_\_IVEY)</del>

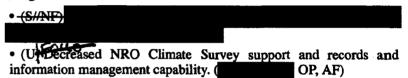
• (U) Address action items generated from FY 2009 ODNI Employee Survey results.

• (U) Continue operation and maintenance of Global Material Tracking System with business intelligence capabilities. Continue establishment of additional CONUS freight transfer capability.

## **(U) Significant Increases:**

(U) There are no significant increases in FY 2010.

## (U) Significant Decreases:



-TOP-SEGRET#SI/TK//NOFORN-

# (U) LIFE CYCLE COST SUMMARY

## (U) Acquisition Summary

-(S//TK//REL TO USA, FVEY)	
-(S//TK//REL TO USA, FVEY)	

(U) FY 2011 – FY 2015 budget estimates for the MIP included in this volume are not based on policy decisions and are not included in the MIP justifications books. Instead, the estimates represent internal DoD notional planning numbers, which are provided here for purposes of meeting Congressional requirements to compare funding with independent cost estimates.

## (U) Major Performers

Performer N	ane/Location	Function	

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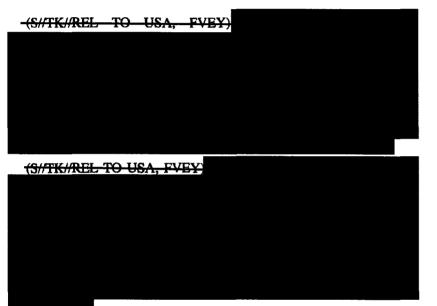
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## (S//TK//REL TO USA, FVEY) (U) LIFE CYCLE COST SUMMARY

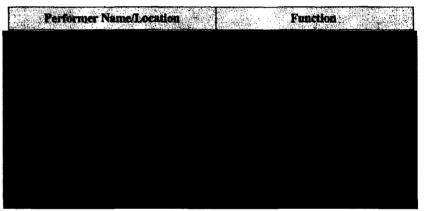
## (U) Acquisition Summary



(U) FY 2011 – FY 2015 budget estimates for the MIP included in this volume are not based on policy decisions and are not included in the MIP justifications books. Instead, the estimates represent internal DoD

notional planning numbers, which are provided here for purposes of meeting Congressional requirements to compare funding with independent cost estimates.

## (U) Major Performers

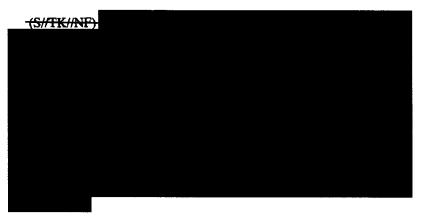


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## (S//TK//REL TO USA, FVEY) (U) LIFE CYCLE COST SUMMARY

## (U) Acquisition Summary

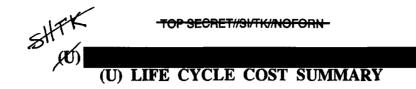


(U) The DNI CAIG ICE was completed in September 2008. To be consistent with the scope of the ICE, the budget shown in the LCC table includes space acquisition, system integration, launch and other government costs. The total budget delta across the FYDP is within 2 percent of the ICE. The funding profile reflects decreases associated with the NRO core contractor reductions in FY 2009 - FY 2015.

## (U) Major Performers

Performer Name/Location Bunction

This exhibit is SECRET//TALENT KEYHOLE//NOFORN-



## (U) Acquisition Summary



## (U) Major Performers

Performer Name/Location	Function
Raytheon/Reston, VA	Mission integrator and developer.
Lockheed Martin/San Jose, CA and Valley Forge, PA	Systems integrator.

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#### TOP SECRET//SI/TK//NOFORN

## (U) FUNCTIONAL AVAILABILITY AND SATELLITE LIFE ESTIMATES

## (U) Background

(U) In 1997, the Mean Mission Duration Panel recommended the development of a standardized process for determining satellite life and constellation replenishment criteria based on mission satisfaction. In response, the NRO developed the Functional Availability (FA) process, which employs a combination of probability theory, manufacturer's wear-out data, on-orbit experience, and constellation mission satisfaction.

## (U) Functional Availability

(U) Functional Availability is the probability that a *constellation of* satellites will meet specific mission requirements at a future point in time. In addition to estimates for wear-out and random failures of satellite components, FA depends on assumptions regarding future events such as the replenishment schedule. Different measures of FA may be defined for a constellation, corresponding to different missions of the same constellation.

(U) NRO systems engineering initiates the FA methodology at the piece parts reliability level up through the component, subsystem, system, and satellite, to the constellation level. The data is displayed as a curve that provides FA as a function of time.

(U) **Reliability.** A satellite's reliability is the probability that it will remain operable and mission worthy at some future point in time, given everything known about its current status and future operation. Reliability functions provide this probability as a function of time, and usually decline continuously. Reliability functions are constructed for key components that can be aggregated, enabling the construction of mathematical reliability models, as with FA, for larger systems.

(U) Life Estimates. A satellite's life estimate is derived from its reliability function. The satellite's mean life estimate (MLE), given in months, represents the expected average life. Typically, a satellite has about a 50 percent chance of operating beyond its current MLE. Decisionmakers should use caution when evaluating MLE of vehicles in the current constellations. MLE should not be used as the sole basis for satellite replenishment or to justify conclusions about constellation capability, but be used in conjunction with other decision points (e.g. current satellite performance, requirement satisfaction, communication throughput, ground capability, etc.).

(U) Risk Management. FA is primarily a risk management tool for senior leadership in the NRO. FA charts indicate constellation mission satisfaction over time and illustrate the mission impact of launch failures, schedule changes, and on-orbit failures. Ideally, the NRO constellation replenishment plan should ensure that FA levels remain above minimum thresholds. However, current affordability considerations do not permit optimal satellite acquisition and launch phasing.

(U) Content. The following sections contain FA data on GEOINT electro-optical (EO) and radar, communications relay constellations, and SIGINT high altitude and low earth orbit (LEO). Each section contains a mission description, functional success criteria, changes from last year's CBJB, and vehicle highlights. The accompanying graphics page displays the constellation FA curve and a horizontal "stoplight" bar to show overall constellation status over time. The bottom portion of the graphics page shows reliability data for each satellite including MLE.

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## (U)GEOINT EO FUNCTIONAL AVAILABILITY

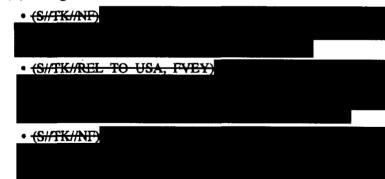
## (U) GEOINT EO Functional Availability Mission Statement

(U) The NRO acquires and operates the overhead imagery collection and processing enterprise that provides timely and relevant geospatial intelligence data to our customers. FA analysis for the EO portion of the constellation determines the probability that the constellation will meet user requirements and/or functional success criteria (FSC) as a function of time.

## (U) GEOINT EO Functional Success Criteria



(U) Changes from FY 2009 CBJB



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• <del>(S//TK//NF)</del>	
(U) GEOINT EO Vehicle Highlights	
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## (U) GEOINT RADAR FUNCTIONAL AVAILABILITY

## (U) GEOINT Radar Functional Availability Mission Statement

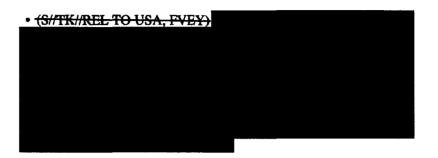
(U) The NRO acquires and operates the overhead imagery collection and processing enterprise that provides timely and relevant geospatial intelligence data to our customers. FA analysis for the Radar portion of the constellation determines the probability that the constellation will meet user requirements and/or FSC as a function of time.

## (U) GEOINT Radar Functional Success Criteria



(U) Changes from FY2009 CBJB





## (U) GEOINT Radar Vehicle Highlights

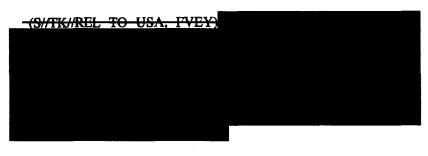
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## (U) NRO GROUND ENTERPRISE BLOCK 1

## (U) Purpose



## (U) Introduction

(U) On March 31, 2008, the NRO underwent a fundamental reorganization aimed at addressing the growing mission need for providing our IC mission partners and users with value-added information products and services. The NRO reorganization created a construct that allows cross-INT integration within the Ground Enterprise Directorate (GED), and cross-INT operations within the Systems Operations Directorate. The partnership between GED and the other elements of the NRO in collaboration with NSA and NGA will help transform the NRO ground architecture.

#### (U) Vision

(U) "A fully integrated ground architecture where information is virtual, assured, available on demand, and globally accessible to authorized users empowered with the tools and services necessary to generate tailored, timely, trusted, and actionable intelligence products."

## (U) Mission

(U) "To develop, deliver, and sustain a responsive, secure, interoperable, and integrated ground architecture while collaboratively providing timely, value-added, trusted information to users worldwide through innovative solutions."

#### (U) Desired End State

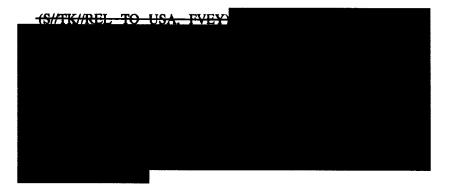
(U) "An enterprise that operates as efficiently as the best commercial IT and knowledge service companies enabling authorized users to receive, task, and query trusted information on-demand to improve the speed and execution of decisions from anywhere in the world."

(U) In order to capitalize on this strategy, the directorate has organized itself into functional lines of business consisting of Command and Control, Mission Management, Mission Processing, and Mission Frameworks. This GED alignment will enable our end-state vision of providing a common, virtual intelligence network that authorized users can leverage not only to obtain the best available intelligence information but also to be more responsive to the mission.

## (U) Transition

(U) The transition from the current NRO ground-related GEOINT and SIGINT MSAs into four new functionally-aligned ground MSAs will begin during FY 2009. Existing and future content will be aligned into one of four functional MSAs—Command and Control; Mission Management; Processing; and Mission Frameworks. The realignment enables improved insight into NRO ground systems acquisition management, and a structured ground baseline program which links key dependencies directly to current and future space systems' MSAs of record.

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## (U) Benefits

(U) The benefits of this business realignment of recapitalization acquisition and other ground development activities will:

• (U) Provide for full accountability and insight into all NRO ground programs in the four functional areas rather than only reporting on a small selected group of projects.

• (U) Assist in implementation of the ODNI and NRO vision to achieve economies-of-scale in each of the four functional areas.

• (U) Allow for each space system to capitalize on the core competency knowledge base across multiple acquisitions.

• (U) Align GED with the NRO organization restructure and internal management controls by assigning a single acquisition manager for each of the four functional ground MSAs, allowing for clear communication of GED budget performance to oversight committees.

• (U) Ensure future acquisitions are aligned with ODNI and NRO strategic objectives of consistency, interoperability and mission-oriented collaboration.

## (U) New Functional Ground MSAs

(U) The content of these new MSAs will be developed by the NRO in coordination with ODNI and the community. The four new functionally-aligned ground MSAs are planned for NRO Acquisition Boards (NAB) in FY 2010. These functional MSAs are assembled from multiple contracts structured to develop and integrate the required capabilities into the GED baseline.

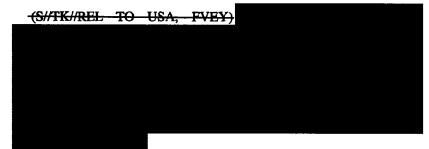
(U) The ODNI and NRO CAIGs will develop an ICE for each new NRO Ground MSA in FY 2009 to establish a cost baseline for the MSA activities beginning in FY 2010. These estimates will potentially include all ground activities, including those incremental ground improvements that were included in previous estimates for the aforementioned Space Systems NABs.

(U) The potential content of the four new functional NRO Ground MSAs is described in the following paragraphs:

(U) Mission Management

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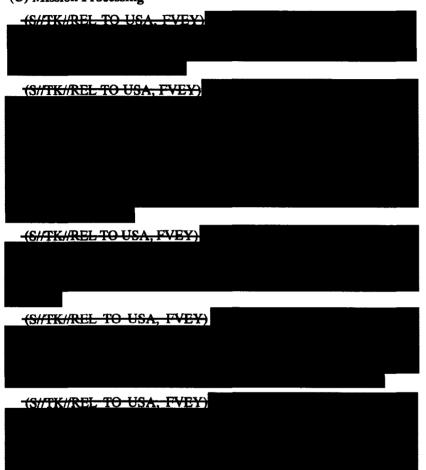
(U) Command and Control



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## (U) Mission Processing



### (U) Mission Frameworks

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(U) The data services and distribution mission activity will focus on increasing content and improving the timeliness of data delivery by providing enhanced data storage, data management, and data distribution capabilities.

(U) The information sharing mission activity will increase external access to NRO-accessible data by developing a modern information sharing framework and hosting reporting, messaging, and data access services.

(U) The framework services mission activity will develop core enterprise services that will be interoperable, discoverable and shareable with other organizations.

(U) The framework integration and innovation mission activity will develop the multi-functional computing environment that hosts mission management, processing, and command and control applications and enables rapid deployment of new capabilities and technologies. -TOP-SECRET//SI/TK/NOFORN-

## (U) PROGRAM ASSESSMENT SUMMARY (U)

## **Program/Activity Evaluated in 2008**

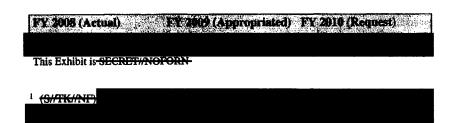
(U) Program: National Reconnaissance Program

(U) Facilities Program

## (U) Activity Summary/Description

(U) The Facilities Program provides cost-effective and responsive facilities and facilities services to meet current and future requirements of National Reconnaissance Office (NRO) customers and mission partners. This requires the Facilities Program to manage, lease, construct, and maintain facilities that respond to mission requirements and enable workforce success.

## (U) Activity Funding Level (\$M)<sup>1</sup>

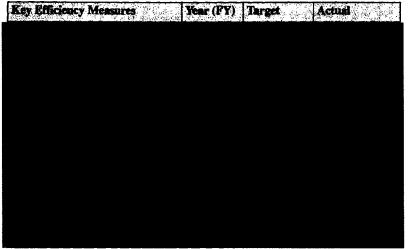


## (U) Performance Measures

Long-term/Annual Key Performance Measures	Year (FY)	Target	Actual
Space Fulfillment Ratio – Capacity. Measure helps assure NRO has appropriate workspace for its workforce. The measure is calculated by dividing total occupied and assigned seats by the number of design capacity seats. (Outcome)	2005 2006 2007 2008 2009 2010 2011 2012 2013	Baseline $\leq 100\%$ $\leq 100\%$ $\leq 100\%$ $\leq 100\%$ $\leq 90\%$ $\leq 90\%$ $\leq 90\%$ $\leq 85\%$	104% 110% 95% 96%
Facility Condition Index (FCI) – NRO-wide Average. FCI is the ratio of total maintenance backlog cost (deferred) to the total replacement value of a facility. This measure shows the NRO-wide average FCI. (Outcome)	2005 2006 2007 2008 2009 2010 2011 2012 2013	$Baseline \\ \le 10\% \\ \le 10\%$	7.7% 7.7% 7.8% 7.8%
Facility Condition Index (FCI) – Percent of NRO Sites that have a 10 percent or better FCI. (Outcome)	2005 2006 2007 2008 2009 2010 2011 2012 2013	Baseline ≥50% (2/4) ≥60% (3/5) ≥67% (4/6) ≥67% (6/9) ≥78% (7/9) ≥78% (7/9) ≥89% (8/9) ≥89% (8/9)	50% (2/4) 50% (2/4) 60% (3/5) 60% (3/5) <sup>2</sup>

<sup>2</sup> (U//FOUG) FY 2008 targets assumed the Facilities Program would be able to reprogram funds for one FCI survey. This did not occur due to competing priorities and resulted in the FY 2008 target shortfall. Management Services & Operations/Logistics & Facilities Support Group has allocated sufficient funds to conduct the necessary surveys in FY 2009-FY 2013.

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<sup>3</sup> (U//FOUO) The Facilities Program imposed additional rigor in work order tracking processes in FY 2008. These improvements include more robust project estimates, adherence to project management schedule/cost change practices, and conducting peer reviews of projects over \$1 million. The baseline and FY 2008 targets were set before these improvements were in place, and overestimated what could be achieved.

## (U) Appropriation Type

#### (U) Capital Assets and Service Acquisition

## (U) Findings

(U//FOUO) Finding 1: The NRO Facilities Program is moderately effective in carrying out its mission to manage, lease, construct, and maintain facilities. The Program is generally well managed, and the leadership actively seeks to address any identified problems. The Program's purpose is clear, is not duplicative of other public or private sector efforts, and outputs reach the intended beneficiaries. (U//FOUO) Finding 2: The lack of a centrally-managed Facilities Program has promoted inefficiencies; hindered prioritization and monitoring of facilities funding and requirements at the corporate level; and hampered the Program's efforts to make clear the impact of funding decisions on performance. NRO is addressing these issues by centralizing facilities management as part of its Enterprise Transformation. This should also permit the Facilities Program to strengthen and institutionalize the mechanisms to capture meaningful performance data on NRO facilities, and help NRO identify and implement NRO-wide best practices. However, the NRO Enterprise Transformation was not fully in place when the Program Assessment was conducted, and many details were still unclear. NRO will need to devote significant management attention to implementing these changes and ensuring that the facilities program realizes the expected benefits of the reorganization.

-(S//REL TO USA, TEYE) Finding 3:

(U//FOUO) Finding 4: The NRO Facilities Program uses long-term/annual outcome and efficiency measures, with ambitious targets, to assess performance. The Program has achieved its goals to a large extent. As of the 2008 Program Assessment evaluation, the Facilities Program had met two of three long-term/annual targets in FY 2006; had met all long-term/annual targets and one of two efficiency targets in FY 2007; and was on track to achieve FY 2008 targets.

(S) Finding 5:

## (U) Follow-Up Actions (Improvement Plan)

(U) As a result of the Program Assessment evaluation, the NRO and the Facilities Program are initiating the following actions to improve the performance of the Program.

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(U//FOUO) Follow-Up Action 1: Establishing clear lines of authority and responsibility for all aspects of the Facilities Program, to support the goals of NRO Enterprise Transformation.

(U//FOUO) Follow-Up Action 2: Evaluating how to apply the principles of earned value management to better track cost and schedule variances of future major construction and capital lease projects, and appropriately applying these principles to future projects.

(U//FOUO) Follow-Up Action 3: Ensuring that NRO consistently conducts independent cost estimates before beginning major construction projects, or before entering into large capital leases. This action will complete when NRO has updated the related NRO Instructions and a government entity independent from the facilities program conducts cost estimates for major projects for two budget cycles.

(U) Follow-Up Action 4: Implementing modifications to internal NRO budget, management control, and reprogramming processes and authorities to provide Facility Program resource transparency and visibility. This includes instituting at each site a disciplined, repeatable, and reportable process that tracks facilities-related projects against approved spend plans.

(U) Follow-Up Action 5: Providing data necessary to enable OMB to conduct a scoring analysis for the Keystone project.

(U) Follow-Up Action 6: Planning, budgeting, and executing FCI audits for each facility every five years. This action will complete when NRO has conducted an FCI audit on all facilities, and has funded a five year audit plan.

(U//FOUO) Follow-Up Action 7: Addressing material weaknesses and reportable conditions identified in independent audits with a goal of regaining an unqualified opinion in the FY 2009 audit.

## (U) Program/Activity Evaluated in 2008

(U) Program: National Reconnaissance Program

(U) Office of Space Launch (OSL) Program

## (U) Activity Summary/Description

(U) The Office of Space Launch (OSL) is responsible for assuring access to space for overhead reconnaissance missions and providing mission assurance and other launch-related services to successfully deliver NRO satellites undamaged to their required orbit. The OSL mission, to successfully deliver every NRO satellite into the right orbit on time, directly supports the NRO Strategic Framework assured access to space objectives. OSL manages all aspects of launch for designated NRO missions throughout the mission life encompassing early satellite concept exploration, mission design and integration; vehicle certification and independent validation and verification; and satellite transportation and processing at the launch site, culminating with delivery on orbit. OSL also provides NRO access to the Air Force Satellite Control Network (AFSCN) for launch, satellite early on-orbit checkout, and satellite operations.

## (U) Activity Funding Level (\$M)<sup>1</sup>

FY 2008 (Actual) FY 2009 (Appropriated) BY 2010 (Request)

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(U) Launch Program includes NRP funding only

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## (U) Performance Measures

Long-term Key Performance Measures	Year (FY)	Target	Actual
Cumulative Launch Success. Percent of OSL-managed launch vehicles that successfully place the NRO satellites into their planned orbit since 1995. (Outcome)	2005 2006 2007 2008 2009 2010 2011 2012 2013	Baseline 96.3% 96.6% 93.8% 93.8% 94.1% 94.7% 95.1% 95.4%	96.0%(24/25) 96.3% (26/27) 93.1%(27/29) <sup>2</sup> 93.6%(29/31) <sup>3</sup>
Launch Service Timeliness. Percent of NRO satellites experiencing 180 days or less of cumulative launch-related delay from contractual launch date to launch. (Outcome) [ <i>This measure</i> <i>is lower priority than achieving</i> <i>launch success.</i> ]	2005 2006 2007 2008 2009 2010 2011 2012 2013	Baseline ≥75% ≥75% ≥75% ≥75% ≥75% ≥75% ≥80% ≥80%	86% (6/7) 71% (5/7) 83% (5/6) 78% (7/9)

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Annual Key Performance Measures	Year (FY)	Target	Actual
Annual Launch Success. Percent of NRO satellites placed in planned orbit on OSL-managed launch vehicles. (Outcome)	2005 2006 2007 2008 2009 2010	Baseline 100% 100% 100% 100% 100%	100% (2/2) 100% (2/2) . 50% (1/2) <sup>3</sup> 100% (2/2)
Launch Campaign Timeliness. Percent of NRO satellites experiencing 60 days or less of launch-related delays after the satellite is shipped to the launch site. (Outcome) [This measure is lower priority than achieving launch success.]	2007 2008 2009 2010	Baseline 100% 100% 100%	100% (1/1) 100% (3/3)
Percent of Delta IV Heavy Lift Upgrade (HUG) Performance Requirement Achieved. A comparison of the Delta IV HUG program's estimated performance to the required minimum of 14,500 lbs (GEO) and 47,500 lbs (LEO) east coast launch. (Output) <sup>4</sup>	2005 2006 2007 2008 2009 2010	Baseline ≥0% ≥0% ≥0% ≥0% ≥0%	-11.0% -11.0% 5.5% 2.7%
NRO Operations Squadron Contact Success. Percent of successful contacts through the Air Force Satellite Control Network in support of NRO launch and satellite operations. (Outcome)	2005 2006 2007 2008 2009 2010	Baseline ≥98.9% ≥98.9% ≥98.9% ≥98.9% ≥98.9%	98.9% 98.9% 98.8% 98.8%

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<sup>4</sup> (U) LEO denotes low earth orbit and GEO denotes geosynchronous orbit.

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Key Efficiency Measures	Year (FY)	Target	Actual
Delta IV Heavy Lift Upgrade Cumulative Cost Variance Percent. Measures efficiency of program execution against cost plans. (Output)	2006 2007 2008 2009 2010	Baseline ≥-10% ≥-10% ≥-10% ≥-10%	-0.19% 4.71% 2.91%
Delta IV Heavy Lift Upgrade Cumulative Schedule Variance Percent. Measures efficiency of program execution against schedule plans. (Output)	2006 2007 2008 2009 2010	Baseline $\geq 10\%$ $\geq 10\%$ $\geq 10\%$ $\geq -10\%$	-8.68% -4.84% -2.00%

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## **(U)** Appropriation Type

## (U) Capital Assets and Service Acquisition

## (U) Findings

(U//FOUO) Finding 1: OSL effectively carries out its mission to "Successfully deliver every NRO satellite to orbit on time." OSL addresses a specific and existing need to launch the NRO replenishment and next generation intelligence satellites. OSL is generally well managed, and the leadership is proactive in identifying and addressing problems.

(U//FOUO) Finding 2: OSL is committed to launch mission success as the top priority of the organization. Other goals, including launch timeliness, appropriately take a backseat to their goal of successfully delivering satellites to the correct orbit.

(U//FOUO) Finding 3: Despite being geographically-dispersed, OSL is a cohesive organization which focuses on those actions that they believe will further the goal of mission success. Independent reviews have commended OSL for an organizational culture which promotes mission focus, proficiency and teamwork. The reviews also consistently

praise OSL's use of a Mission Assurance Team, and recognize OSL's mission assurance approach as a "Best Practice" without peer in the launch industry. OSL has found, and external reviews have validated, that a robust, resilient, and responsive launch vehicle mission assurance process is vital to assuring access to space. Another recognized strength of OSL's Program design is the placement of OSL mission managers within the satellite vehicle program offices. This facilitates seamless integration of satellite and launch vehicle and contributes to the safe delivery of the satellite to its required operational orbit.

(U//FOUO) Finding 4: OSL's continued success relies on effective USAF-management of the Evolved Expendable Launch Vehicle (EELV) Launch Services (ELS) and EELV Launch Capability (ELC) contracts. The annual percent of OSL's budget executed under these USAF contracts has ranged from 25 to nearly 60 percent. This arrangement presents some challenges for OSL. Although OSL is included in decisions made by the USAF, it lacks full visibility into, and control over, the funding priorities for tasks on the ELC contract.

(U/FOUO) Finding 5: The NRO Launch Program uses long-term and annual outcome, output, and efficiency measures, with ambitious targets, to demonstrate success in reaching its goals. As of the Program Assessment evaluation, the Program had, with the exception of one launch anomaly in 2007, achieved performance targets related to its primary goal that every launch be a success. It had also achieved the majority of its other long-term, annual, and efficiency goals. For example, the NOPS service contract has operated within budget, achieved a high level of customer satisfaction, and largely met contact success goals, despite the reliance on the aging Air Force Satellite Control Network.

(U//FOUO) Finding 6: Given the ambitious EELV manifest planned over the next several years, and the ongoing consolidation of the Atlas V and Delta IV programs, NRO is likely to continue to experience some launch-related delays. In part due to affordability, the ELC contract constrains the EELV program with minimum launch sequencing requirements, which in turn limit the number of yearly launch opportunities for each launch system. In addition, the Delta IV heavy launch vehicle may continue to have technical challenges during the

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next several NRO missions, since this variant of the Delta IV has limited flight experience. OSL has reflected these considerations in its long-term Launch Service Timeliness targets.

(U) Finding 7: The NRO is making progress in aligning investments with Program goals. However, significant work in achieving resource transparency as well as budget and performance integration must still be done. In addition, the NRO does not currently have a clean audit opinion, and it will need to continue to implement an aggressive remediation plan.

(U//FOUO) Finding 8: The cost for the Eastern Processing Facility (EPF) has grown significantly above the original estimates. OSL has identified no schedule or technical issues with the facility. However, OSL management needs to focus on ensuring that costs remain stable in the future. Furthermore, because OSL plans to accept risk in other areas to accommodate this cost growth, OSL management will need to focus additional attention on managing this risk.

(U/FOUO) Finding 9: Although such decisions may be based on sound rationale, OMB is concerned that the NRO does not have an explicit process and associated criteria for identifying the conditions for pursuing a satellite program office-acquired launch service (such as delivery on orbit) instead of an OSL-procured launch service.

## (U) Follow-Up Actions (Improvement Plan)

(U) As a result of the Program Assessment evaluation, the NRO and the OSL Program are initiating the following actions to improve the performance of the Program.

(U/FOUO) Follow-Up Action 1: Improving NRO Launch Program coordination with the USAF on the EELV program by ensuring that 1) the NRO has visibility into all tasks under the ELC contract which

affect launch schedule, mission success, or ELS funding requirements; 2) impacts of funding priorities for ELC are coordinated with OSL prior to execution of changes to the current baseline contract; 3) the NRO and USAF can, through an established process, identify realistic funding requirements for ELC; and 4) the NRO and USAF develop an EELV strategy to meet NRO launch requirements beyond the current contracts.

(U/FOUO) Follow-Up Action 2: Conducting an independent detailed estimate for the remaining task orders necessary to support the design and construction of the EPF that accurately quantifies the magnitude of cost growth expected above the original contractor estimate.

(U/FOUO) Follow-Up Action 3: Clearly documenting the process and criteria for identifying the conditions and/or circumstances when an OSL-managed launch will and will not be used to support a NRO satellite launch requirement.

(U/FOUO) Follow-Up Action 4: Addressing material weaknesses and reportable conditions identified in independent audits with a goal of regaining an unqualified opinion in the FY 2009 audit.

(U//FOUO) Follow-up Action 5: Implementing recommendations from the 2007 Inspector General report and increasing collaboration with NASA and USAF to further enhance mission assurance as recommended in the Launch Mission Assurance Assessment Study.

(U/FOUO) Follow-up Action 6: Coordinating with the USAF a well defined integrated explanation of the objectives and specific cost elements of the ELC investment, along with the actions being taken by the USAF to manage ELC costs. The integrated explanation should be in a format that can be consistently communicated and clearly understood by external stakeholders, including Congress.

## (U) Program/Activity Evaluated in 2007

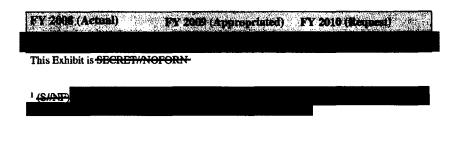
(U) Program: National Reconnaissance Program and NRO Military Intelligence Program

(U) Advanced Systems and Technology (AS&T) Program

## (U) Activity Summary/Description

(U) Advanced Systems and Technology (AS&T) conceives and develops technologies and demonstrates new systems to increase actionable intelligence in support of the NRO mission and strategic goals. NRO AS&T's strategic vision, derived from the NRO Strategic Framework, is to accelerate the pace of innovative technologies, reduce the time to market, and develop new sources and methods.

## (U) Activity Funding Level (\$M)<sup>1</sup>



## (U) Performance Measures

Long-term Key Performance Measures <sup>2</sup>	Year (FY)	Target	Actual

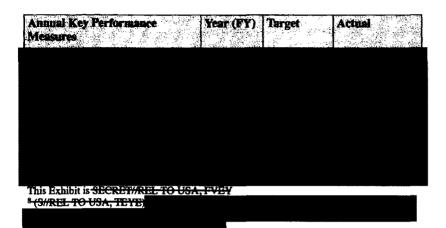
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<sup>2</sup> (U) NRO and OMB agreed to discontinue the long-term measure "Percent of deliveries in each of six focus areas that are on target to deliver within a specified target window" beginning in FY 2008. This measure was redundant with the annual measure "Annual Technology Readiness Level Progression Against Strategic Goals," and the latter adequately addresses portfolio technical progression.

Long-term/Annual Key Performance Measures Actual	

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Key Efficiency Measures	Xeer (FV) Inrge	Actual

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<sup>9</sup> (U/<del>FOUO</del>) FY 2007 data represents a three-year average of FY 2005, FY 2006, and FY 2007 results. Similarly FY 2008 data represents a three-year average of FY 2006, FY 2007, and FY 2008.

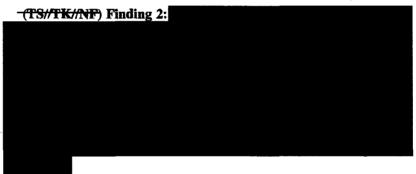
## (U) Appropriation Type

(U) Capital Assets and Service Acquisition

(U) Research and Development

## (U) Findings

(U/FOUO) Finding 1: The purpose of the NRO AS&T Program is clear and AS&T leadership has ambitious corporate goals that are aligned with the Program's mandate. The AS&T Program addresses current and relevant technology and intelligence needs. It is not duplicative of other public or private sector efforts and its outputs reach the intended beneficiaries. It has no performance limiting design flaws.



(U//FOUO) Finding 3: The Program is generally well managed, and the leadership is proactive in addressing any identified problems.

(U/FOUO) Finding 4: The NRO is making progress in aligning investments with Program goals. However, significant work in achieving resource transparency and budget and performance integration must still be done.

(U//FOUO) Finding 5: The NRO does not currently have a clean audit opinion, and it will need to continue to implement an aggressive remediation plan.

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(U//FOUO) Finding 6: Program partners commit to the goals of the AS&T Program. The Program collaborates and coordinates well with related Programs, and conducts intensive coordination efforts with other federal space and science and technology agencies. For example, AS&T's practice of assigning personnel to customer organizations to assist with technology transitions demonstrates a clear commitment to program success. AS&T would benefit from a more structured mechanism that documents feedback from customers.

(U/AFOUO) Finding 7: Timely, quality independent reviews of the bulk of the AS&T Program are available and are largely positive. However, OMB recommends a rigorous independent assessment of the actual impact that AS&T programs have had.

(U//FOUO) Finding 8: The AS&T Program evaluates the benefits of alternative investments, uses a prioritization process to guide budget requests, and uses management processes to maintain Program quality.

## (U) Follow-Up Actions (Improvement Plan)

(U) As a result of the Program Assessment evaluation, the NRO and the AS&T Program are initiating the following actions to improve the performance of the Program.

(U) Follow-Up Action 1: Initiating an independent, methodical study of the actual impact of AS&T programs.

• (U//FOUO) (Year Began: 2007. Action taken, but not completed). AS&T has initiated the study. An "early look" was delivered in Sep 2008. AS&T expects to close this action with delivery of the Final Report in May 2009.

(U) Follow-Up Action 2: Clearly documenting Strategy, Technology, and Engineering Panel (STEP) findings.

• (U//FOUO) (Year Began: 2007. *Completed*). The STEP evaluations conducted in Jan 2008 and Jun 2008 used an improved process which produces better documentation of panel findings. AS&T plans to continue to use the improved process.

(U) Follow-up Action 3: Establishing a more structured mechanism that documents feedback from customers.

• (U//FOUO) (Year Began: 2007. Action taken, but not completed). AS&T will address this action in concert with the study being conducted for Follow-Up Action 1. AS&T expects to close this action with delivery of the Final Report in May 2009.

(U) Follow-Up Action 4: Reviewing measures that have moving averages to determine if there is a time period that is more meaningful.

• (U//<del>FOUO)</del> (Year Began: 2007. Action taken, but not completed). AS&T does not recommend changes to the measures at this time, but will reassess during 2009. AS&T will close this action after that reassessment.

(U) Follow-Up Action 5: Addressing material weaknesses and reportable conditions identified in independent audits with a goal of regaining an unqualified opinion in the FY 2009 audit.

• (U) (Year began 2007: Action taken, but not completed). NRO has developed and is executing a comprehensive two year audit project plan which identifies corrective actions, resources, and milestones. NRO is making progress toward its goal of a clean audit opinion in FY 2009.

(S//TK//NF) Follow-Up Action 6:

• (<del>S//TK//NF)</del>

- (U//<del>FOUO</del>) 2007-05099, Inspection of the Special Technology Group.

- (U) Final Report: Inspection of the Director's Innovation Initiative (Project Number 2005-008 N).

## (U) Program/Activity Evaluated in 2007

(U) Program: National Reconnaissance Program and NRO Military Intelligence Program

(U) Imagery Intelligence (IMINT) Program

## (U) Activity Summary/Description

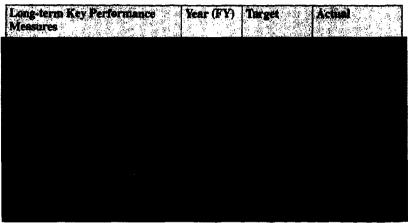
(U) The NRO IMINT Program acquires and operates the overhead imagery collection and processing enterprise that provides timely and relevant GEOINT data to customers. To accomplish this, the IMINT Program acquires, operates, and maintains space-based IMINT systems, and works with the NGA to deliver vital intelligence to the Intelligence Community and military customers. The Program assessed in the Program Assessment evaluation encompasses the activities of the NRO IMINT Directorate, including its joint responsibilities and interfaces with NGA, oversight/policy organizations, and other Program partners. It does not include functional management responsibilities for the total US Government IMINT enterprise, which are assigned to NGA.<sup>1</sup>

## (U) Activity Funding Level (\$M)<sup>2</sup>

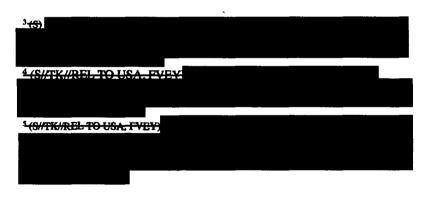
FY 2008 (Actual) FY 2009 (Appropriated) FY 2010 (Request) This Exhibit is SECRET // TALENT KEYHOLE /REL TO USA. FVEY 1 (S//REL TO USA EVEY) million in FY 2008.

Four (0) Includes NRP and NRO MIP funding. NRO MIP funding is million in FY 2009, and million in FY 2010.

## (U) Performance Measures <sup>3</sup>



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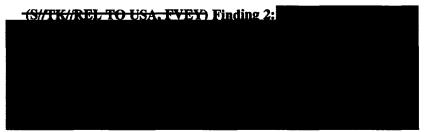
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## (U) Appropriation Type

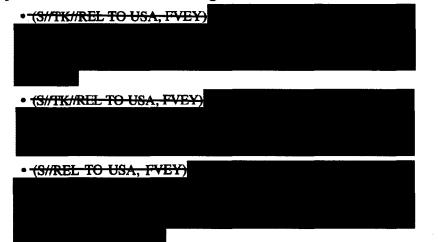
(U) Capital Assets and Service Acquisition

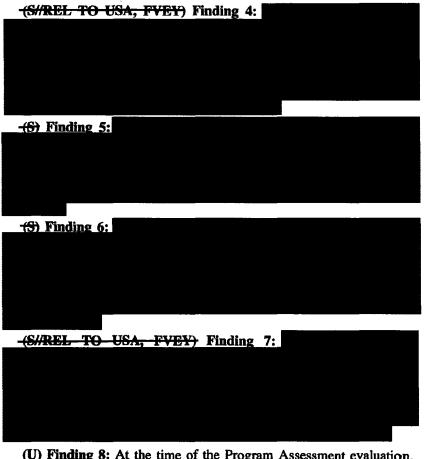
## (U) Findings

(U) Finding 1: The purpose of the IMINT Program is clear. It addresses a current and relevant need; it is not currently duplicative of other public or private sector efforts; and its outputs do reach the intended beneficiaries.



(U) Finding 3: The IMINT Program uses annual and long-term outcome and output measures, with ambitious targets, to assess performance. As of the FY 2007 Program Assessment evaluation:





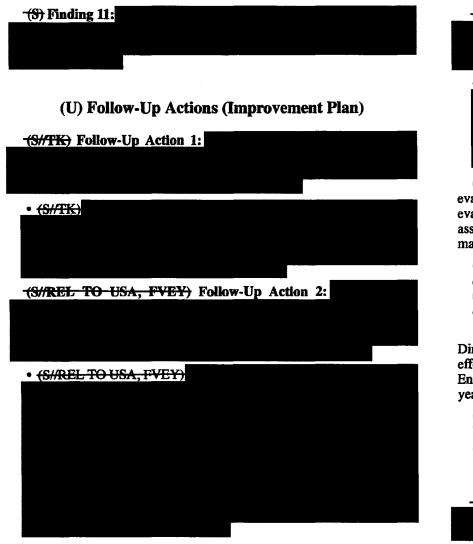
(U) Finding 8: At the time of the Program Assessment evaluation, not all acquisition baselines were clearly documented in Baseline Agreement and Acquisition Reports (BAAR).

-(S) Finding 9:

(S) Finding 10:

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# - <del>(S//TK)</del> Follow-Up Action 3: • <del>(S//TK//REL TO USA, FVEY)</del>

(U//FOUO) Follow-Up Action 4: Scheduling an independent evaluation to assess the efficacy of the IMINT reorganization. This evaluation should be completed within two years, and include an assessment of the effectiveness of IMINT acquisition, program management, and strategic planning activities.

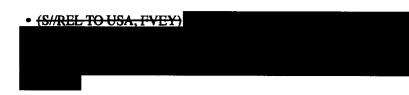
• (U//FOUO) (Year Began: 2007. No action taken) Administratively closed due to the NRO Enterprise Transformation which restructured the IMINT organization that existed during the Program Assessment evaluation.

(U/FOUO) Follow-Up Action 5: With the NRO Ground Enterprise Directorate, supporting an independent evaluation to assess the effectiveness of programs consolidated under the NRO Ground Enterprise Directorate. This evaluation should be completed within two years.

• (U//FOUO) (Year Began: 2008. Action taken, but not completed). NRO has identified the organization that will conduct the independent assessment. This organization is budgeted to perform the assessment, and will initiate the effort in the second half of FY 2009 and complete it by the end of FY 2010.

(S//REL TO USA, FVEY) Follow-Up Action 6:

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(U) Follow-Up Action 7: With ODNI, developing outcome-based performance measures that assess IMINT contributions to achieving goals associated with the National Intelligence Strategy.

• (U//<del>FOUO</del>) (Year Began: 2007. Action taken, but not completed). NRO has been working with DNI to develop measures, but has not yet finalized measures.

(U) Follow-Up Action 8: Addressing material weaknesses and reportable conditions identified in independent audits with a goal of regaining an unqualified opinion in the FY 2009 audit.

• (U) (Year Began 2007: Action taken, but not completed). NRO has developed and is executing a comprehensive two year audit project plan which identifies corrective actions, resources, and milestones. NRO is making progress toward its goal of a clean audit opinion in FY 2009.

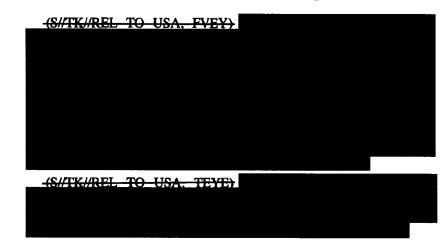
(U) [New] Follow-Up Action 9: Developing a new performance measure that succinctly gauges "acquisition success" for each spacecraft in achieving Key Performance Parameters (or equivalent). Establish this measure in FY 2009. The purpose of this measure is to provide insight into the outcome of the acquisition at the point in time when the spacecraft is transitioned from acquisition to operations.

## (U) Program/Activity Evaluated in 2005

(U) Program: National Reconnaissance Program and NRO Military Intelligence Program

(U) Signals Intelligence (SIGINT) Program

## (U) Activity Summary/Description



## (U) Activity Funding Level (\$M)<sup>1</sup>

FY 2008 (Actual) FY 2009 (Appropriated) FY 2010 (Request)

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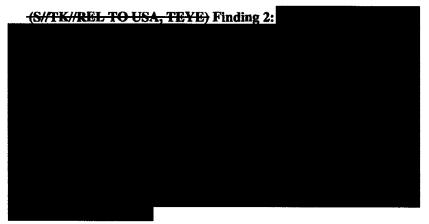
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## **(U)** Appropriation Type

(U) Capital Assets and Service Acquisition

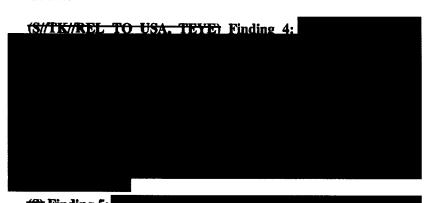
## (U) Findings

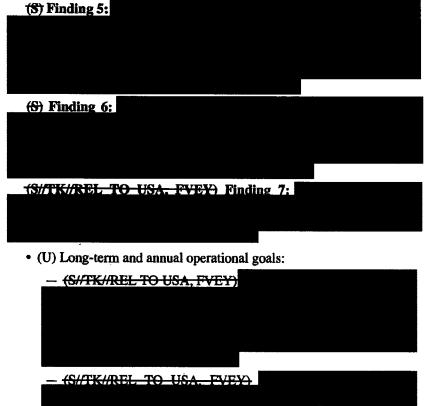
(U) Finding 1: The purpose of the NRO SIGINT Program is clear. It addresses a current and relevant need; it is not duplicative of other public or private sector efforts; and its outputs reach the intended beneficiaries.



(S//TK//REL TO USA, FVEY) Finding 3:



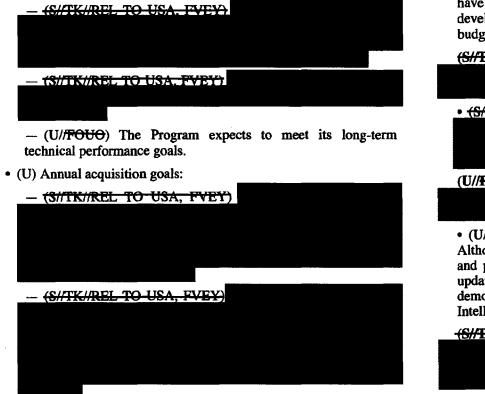




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• (U) Long-term acquisition goals:

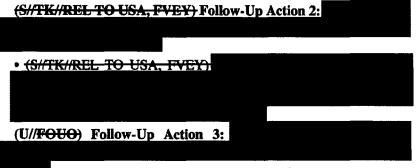


## (U) Follow-Up Actions (Improvement Plan)

(U) The SIGINT Program has made significant changes. The SIGINT Program continues to implement the following actions to improve the performance of the Program.

(S//TK//REL TO USA, FVEY) Follow-Up Action 1:

• (U//<del>FOUO)</del> (Year Began: 2005. *Completed*). The DNI and NRO have institutionalized several consensus-building processes, and have developed consensus on the architecture reflected in the FY 2009 budget.



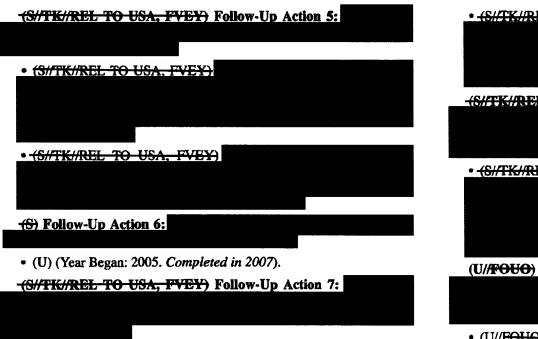
• (U//FOUO) (Year Began: 2005. Action taken, but not completed). Although NRO has established new policies for reporting baselines and performance, it has not yet demonstrated that BAARs will be updated in a timely manner. This action can be closed when the NRO demonstrates it can consistently meet the deadlines required by Intelligence Community Policy Guidance 801.1.

(S//TK//REL TO USA, FVEY) Follow-Up Action 4:

• (U//FOUO) Cost measures: (Year Began: 2005. Action taken, but not completed). NRO has begun to develop ground cost analysis tools to aid cost models that will be used to more effectively baseline multi-INT ground systems.

• (S//TK//REL\_TO\_USA, FVEY)

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• (U) (Year began 2007: Action taken, but not completed). NRO has developed and is executing a comprehensive two year audit project plan which identifies corrective actions, resources, and milestones. NRO is making progress toward its goal of a clean audit opinion in FY 2009.

(U) Follow-Up Action 8: Using ICEs to help establish program budgets.

• (U) (Year Began: 2005. Completed in 2007).

(S//TK//REL TO USA, FVEY) Follow-Up Action 9:

# • <del>(S//TK//REL TO USA, FVEY)</del> <del>(S//TK//REL TO USA, FVEY)</del> Follow-Up Action 10: • <del>(S//TK//REL TO USA, FVEY)</del> (U//<del>FOUO)</del> Follow-Up Action 11:

• (U//FOUO) (Year began: 2008. Action taken, but not completed). NRO has identified the organization that will conduct the independent assessment. This organization is budgeted to perform the assessment, and will initiate the effort in the second half of FY 2009 and complete it by the end of FY 2010.

(U) [New] Follow-Up Action 12: Developing a new performance measure that succinctly gauges "acquisition success" for each spacecraft in achieving Key Performance Parameters (or equivalent). Establish this measure in FY 2009. The purpose of this measure is to provide insight into the outcome of the acquisition at the point in time when the spacecraft is transitioned from acquisition to operations.

## (U) Program/Activity Evaluated in 2006

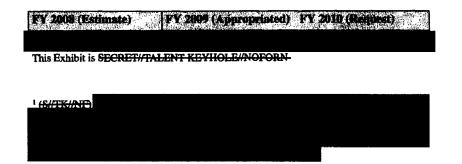
(U) Program: National Reconnaissance Program and NRO Military Intelligence Program

(U) Communications (COMM) Program

## (U) Activity Summary/Description

(U) The NRO Communications Program provides the telecommunications network (space and ground) system and enterprise IT services necessary to support the NRO's development, launch, and operation of space reconnaissance systems and other NRO intelligence-related activities. The Program evaluated in the Program Assessment includes the activities of the NRO Communications Systems Acquisition and Operations Directorate (COMM) and NRO's joint responsibilities and interfaces with mission partners and oversight/policy management organizations.

## (U) Activity Funding Level (\$M)<sup>1</sup>



## (U) Performance Measures<sup>2</sup>

Long-term Key Measures <sup>3</sup>	Performance	Year (	FY) Tar	1.111444	Actual

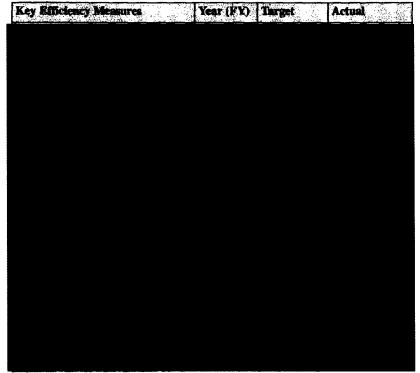
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<sup>2</sup> (U) The terms Prgm Baseline and/or Prgm Rebaseline appear in the actual column of the Long-term Acquisition Cost Growth and Schedule Delay measures tables, and explicitly denote when a program baseline was originally established and any subsequent program rebaselines.



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18 (S/TK//REL TO USA, FVEY)		

## (U) Appropriation Type

(U) Capital Assets and Service Acquisition

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## (U) Findings

(U) Finding 1: The purpose of the NRO COMM Program is clear. It addresses current and relevant needs for communication and IT services; it is not duplicative of other public or private sector efforts; and its outputs reach the intended beneficiaries.

-<del>(S//TK//NF)</del> Finding 2: (U//F<del>OUO)</del> Finding 3:

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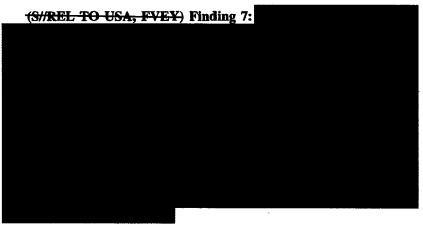
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(U/FOUO) Finding 4: The COMM Program has procedures in place to measure efficiency and demonstrates improved cost effectiveness in achieving Program goals each year. It has established a clear measure of cost effectiveness: Bits per Second per Dollar.

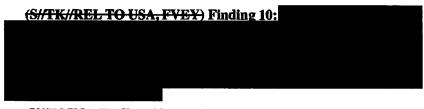
(U//FOUO) Finding 5: The space and terrestrial elements of the Program collaborate and coordinate well with related programs, particularly in day-to-day operations.

(U//FOUO) Finding 6: Timely, quality independent reviews of the bulk of the COMM Program are available. Many of the reviews indicate that the Program is performing its mission very well and provides excellent customer services; others identify issues that could affect, or have affected, customer satisfaction, network security, or other outcomes. In particular, the report on COMM Special Programs Group (SPG) (formally known as Mission Integration Office (MIO)) indicated substantial problems with that element of the Program. However, the COMM Program has taken significant steps to correct strategic planning and management problems, including those identified in the IG report on MIO.

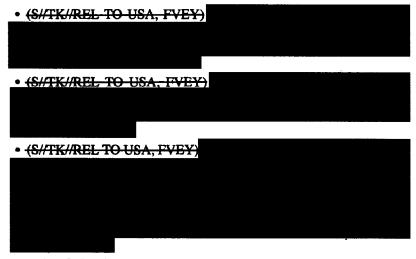


(U//FOUO) Finding 8: The NRO COMM Program clearly defines deliverables and regularly collects and uses performance information. However, the IC needs to improve budget presentation such that resource needs are well understood and more clearly linked to performance.

(U//FOUO) Finding 9: NRO did not receive a clean audit opinion of its Financial Statements for the year ending in 2005. NRO is taking proactive steps to address the deficiencies noted in the FY 2005 Financial Statements Audit by implementing an aggressive remediation plan towards a clean audit opinion in FY 2008.



(U//FOUO) Finding 11: As of the FY 2006 Program Assessment evaluation, the COMM Program met most of its long-term and annual goals.



• (U//FOUO) The Program is meeting annual goals and is on track to meet the long-term targets for Terrestrial Network Capacity.

• (U//FOUO) The Program is demonstrating efficiencies in achieving Program goals each year.

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(U//FOUO) Finding 12: NRO COMM has established the following additional measures, with baselines and targets, which are not reflected in the measures summary tables.

• (S//TK//REL TO USA, FVEY)

• (U//FOUO) During FY 2004-FY 2006, the COMM Program met its annual goals for Operational Availability for SPG activities. This measure includes Number of Operational Windows Available for Transmission, Total System Operational Availability, and Link Availability.

• (U//FOUO) The COMM Program gathers Patriot contract metrics on a monthly basis to determine contractor performance, and holds the contractor accountable for falling below minimum acceptable objectives.

## (U) Follow-Up Actions (Improvement Plan)

(U) The COMM Program continues to implement the following actions to improve the performance of the Program.

-(S//TK//NF) Follow-Up Action 1: • (U//FOUO) Mapping users to providers: (Year Began: 2006. Completed in 2007). • (S//TK//NF) • (S//TK//REL TO USA, AUS, GBR)



(U//FOUO) Follow-Up Action 2: Developing and implementing methods to track and manage progress and performance on meeting goals and objectives established in strategic plans and business plans. Improving traceability between COMM-level strategic plans and higher-order plans at the NRO and DNI levels.

• (U//FOUO) (Year Began: 2006. Completed in 2007).

(U/FOUO) Follow-Up Action 3: Improving traceability between customers needs, strategic plans, business/operating plans, requirements, architecture, and budgets. This includes improving processes to assure more timely updates of requirements and related planning documents (architectures, business plans, analyses of alternatives, etc.) reflect evolving user needs (e.g., next generation IMINT requirements).

• (U//FOUO) (Year Began: 2006. Completed in 2007).

(U/AFOUO) Follow-Up Action 4: Ensuring clear documentation of approved waivers to published availability goals.

• (U//FOUO) (Year Began: 2006. Completed in 2007).

(U/FOUO) Follow-Up Action 5: Improving coordination with stakeholders on programmatic decisions that affect communications system and service performance. This includes working to address SPG's issues related to SPG customer communications and collaboration such as those identified in the NRO IG report.

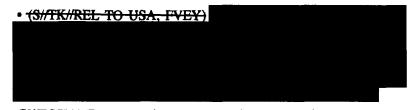
• (U//FOUO) (Year Began: 2006. Completed in 2007).

(S//TK//NF) Follow-up Action 6:

• (U//FOUO) SPG: (Year Began: 2006. Completed in 2007).

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(U//FOUO) Follow-up Action 7: Ensuring that acquisition baselines and performance are adequately and clearly documented in the Baseline Agreement and Acquisition Baseline (BAAR), where BAARs are required, and that BAARs are updated in a timely manner.

• (U//FOUO) (Year Began: 2006. Action taken, but not completed). Although NRO has established new policies for reporting baselines and performance, it has not yet demonstrated that BAARs will be updated in a timely manner. This action can be closed when the NRO demonstrates it can consistently meet the deadlines required by Intelligence Community Policy Guidance 801.1.

(U) Follow-Up Action 8: Addressing material weaknesses and reportable conditions identified in independent audits with a goal of regaining an unqualified opinion in the FY 2009 audit.

• (U) (Year Began: 2006. Action taken, but not completed). NRO has developed and is executing a comprehensive two year audit project plan which identifies corrective actions, resources, and milestones. NRO is making progress toward its goal of a clean audit opinion in FY 2009.

(U) Follow-up Action 9: Using ICEs to help define program budgets.

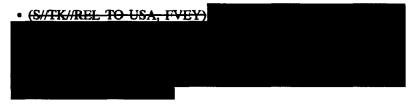
• (U//FOUO) (Year Began: 2006. Completed in 2007).

(S//TK//REL TO USA. FVEY) Follow-up Action 10:

(S//TK//REL\_TO\_USA. FVEY)

• (U//FOUO) SPG (Year Began: 2007. Completed). The IC Cost Analysis Improvement Group ICE was completed in FY 2007 and cost, schedule, and performance baselines were established at that time.

(U//FOUO) Follow-Up Action 11: Establishing clear cost, schedule, and performance baselines that describe deliverables and functionality for the integrated COMM ground system within an overarching integrated ground architecture construct.



(U//FOUO) Follow-Up Action 12: With the NRO Ground Enterprise Directorate, supporting an independent evaluation to assess the effectiveness of programs consolidated under the NRO Ground Enterprise Directorate. This evaluation should be completed within two years.

• (U//FOUO) (Year begun: 2008. Action taken, but not completed). NRO has identified the organization that will conduct the independent assessment. This organization is budgeted to perform the assessment, and will initiate the effort in the second half of FY 2009 and complete it by the end of FY 2010.

(U) [New] Follow-Up Action 13: Developing a new performance measure that succinctly gauges "acquisition success" for each spacecraft in achieving Key Performance Parameters (or equivalent). Establish this measure in FY 2009. The purpose of this measure is to provide insight into the outcome of the acquisition at the point in time when the spacecraft is transitioned from acquisition to operations.

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## (U) GLOSSARY

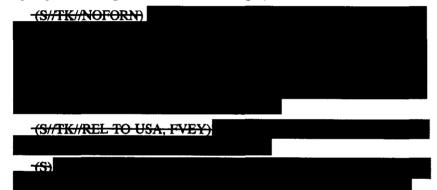
(U) ADF-C-Aerospace Data Facility-Colorado.

(U) ADF-E-Aerospace Data Facility-East.

(U) ADF-SW-Aerospace Data Facility-Southwest.

(U) AGI-Advanced GEOINT derived from imagery.

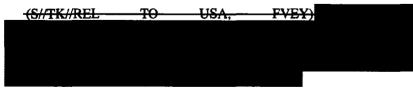
(U) AGP-Advanced GEOINT Processing. Processing of advanced geospatial intelligence derived from imagery.



(U) AR&D-advanced research and development.

(S//TK//REL TO USA, FVEY)

(U) ATM-asynchronous transfer mode. A high-bandwidth method of transporting information designed to integrate the transport of all services on a single network.



(U) BFT-blue force tracking.

(U) BOL-beginning-of-life.

(S//REL TO USA, FVEY)

(U) C&A-certification and accreditation.

(U) C&C-command and control.

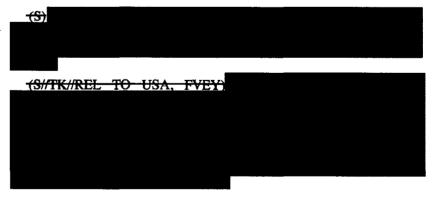
(U) CAAS—contracted advisory and assistance services. Services under contract by non-governmental sources to provide management and professional support; studies, analyses, and evaluations; or engineering and technical support.

(E) (D) (U) CCAFS—Cape Canaveral Air Force Station.

(U) CCS - constellation calibration services.

(U) CDR-critical design review.

(U) CNT-carbon nanotube. A one-atom thick sheet of graphite rolled up into a seamless cylinder with diameter on the order of a nanometer.



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(U) COMEX-COMINT Exploitation. Technical and intelligence information derived from the monitoring of foreign communications signals

(U) COMM-NRO Communications Directorate.

(U) COMSAT—communications satellite.

(U) COO-Chief Operating Officer.

(U) CPAF/IF-cost plus award and incentive fee contract.

-(S//REL\_TO\_USA, -FVEY)

(U) CSL-G—Common Services Layer-Global. Project to upgrade network infrastructure utilizing emerging telecommunications standards and next-generation network processors, CSL-G will provide the capability to rapidly establish secure connectivity between new systems and services at varying classification levels, across a centrally managed, flexible, shared infrastructure

(U) DAR Recap-data acquisition and routing recapitalization.

(S//TK//REL TO USA. FVEY)

(U) DCGS-Distributed Common Ground System.

(U) DIB-DCGS Integrated Backbone.

(U) DICES – Digital Integrated Communications Electronics System. Legacy SIGINT network conferencing equipment.

(U) DII-Director's Innovation Initiative. An AS&T program that transitions almost 50 percent of its unclassified advanced technology investigations to funded follow-on research efforts inside the NRO, the Intelligence Community, and the DoD, providing those communities with advanced technology concepts for future systems.

(U) DLA-Defense Logistics Agency.

(U) E2-echelon 2. Factory maintenance in support of ongoing operational systems.

(U) EA-Enterprise Architecture. Primary purpose of EA is to ensure that business strategy and IT investments are aligned. As such, EA allows traceability from the business strategy down to the underlying technology.

(U) EAP-Employee Assistance Program.

(U) EC-expenditure center.

(S//REL TO USA, FVEY)

(U) EELV—Evolved Expendable Launch Vehicle. The name for the family of launch vehicle, which replaced the Titan and Atlas (II and III) launch vehicles. The EELV vehicle family is comprised of multiple configurations of the Lockheed-Martin Atlas V and the Boeing Delta IV.

(S//REL TO USA: EVEY)

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(U) ELC-EELV Launch Capability contract.

(U) EO-electro-optical.

(U) ERP-enterprise resource planning.

(U) ESD-earliest service date.

(U) FA-functional availability. A measure of system performance that incorporates both improved estimates of satellite life and addresses user requirements.

(U/FOUO) FACTS—Future Architecture for Command and Telemetry Services. Replaces unsupportable legacy network equipment with a future architecture for command and telemetry services necessary to continue the crucial transmission of command and telemetry data for spacecraft and their launch vehicle.

(U) FASM—Focused Area SIGINT Mapping. One of three FA curves used to describe the system performance of IOSA high altitude spacecraft.

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(S//TK//REL TO USA, FVEY) FBN-

(U) FCI-facilities condition index.

(U) FISMA-Federal Information Security Management Act.

-(S//TK//NF)

(U) FOC-full operational capability.

(U) FOT-Final Operational Transition. Full integration of spacecraft into operations.

(S//SI//REL-TO-USA, FVEY)

(U) FSC-functional success criteria.

(U) FSR-final spacecraft review.

(U) Gbps-Gigabits per second (10<sup>9</sup> bits per second).

(U) GED-NRO Ground Enterprise Directorate.

(U) GEO—geosynchronous orbit. An orbital regime at approximately 22,000 nautical miles characterized by its 24-hour orbital period which places an object in a stationary position relative to the Earth's rotation.



(U) GOA-Government of Australia.

(U) HEO—highly elliptical orbit. A highly non-circular orbit characterized by a maximum altitude of 25,000 nautical miles and 12-hour orbital period.

## (S//TK//REL TO USA, FVEY)

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(U) HR-human resources.

(U) HVT-high value target.

(U) I&IT-information and information technology.

(U) IA-information assurance.

(U) IAMS-identity and access management services.

(U) IBS—Integrated Broadcast Service. A complex and dynamic intelligence dissemination "system of systems" that is a theater-tailored dissemination architecture with global connectivity using a common message format in support of current and programmed tactical and strategic warfare systems.

(U/FOUO) IBS-S-IBS SIMPLEX. A broadcast communications system relaying time-critical, tactical intelligence data in near real-time from national intelligence collection systems.

(U) ILC-initial launch capability.

(U) ILV-intermediate launch vehicle.

(S//TK//REL TO USA, FVEY)

(S//TK//REL TO USA. EVEY)

(U) IOC-initial operational capability.

(S//TK//REL TO USA, FVEY)

(S//TK//REL\_TO\_USA, FVEY)

(U) IP/MPLS-internet protocol/multiprotocol label switching.

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(U) ISI-Innovative Solutions Initiative. Classified analog to the Director's Innovation Initiative.

(U) IV&V-independent validation and verification.

(U) JDFPG-Joint Defense Facility Pine Gap.

(U) JSpOC—Joint Space Operations Center. A command and control (C2) weapon system focused on planning and executing US Strategic Command's Joint Functional Component Command for Space mission.

(S/TK/REL TO USA EVEY)

(U) KDP-key decision point.

(U) LCC-life cycle cost.

(U) LEO--low earth orbit. An orbital regime between 90-600 nautical miles characterized by short orbital periods (approximately 90-100 minutes) that allow for frequent revisits per day.

(U) LON-launch-on-need.

(U) LPE-low power electronics.

(U) LPI/LPD-low probability of intercept/low probability of detection.

(U) LT&I-launch, transfer, and initialization.

(S//TK//REL TO FVEY)

(U) Mbps-Megabits per second (10<sup>6</sup> bits per second).

(U) MC&G-mapping, charting, and geodesy.

(U//<del>FOUO)</del>

(S//TK//REL TO USA, FVEY)

(U) MGS-mission ground station.

(U) MHz-megahertz (10<sup>6</sup> Hertz or cycles per second).

(U) MIPS—million instructions per second.

(U) MLE-mean life estimate. Estimate of remaining lifetime of a space asset taking into account current state and system reliability.

(U) MMD-mean mission duration.

-(S//NF)

(U) MPLS-Multiprotocol Label Switching. Data carrying mechanism that belongs to the family of packet-switching networks.

(U) MSA-major system acquisitions.

(S//TK//REL TO USA. FVEY)

(U) NAB-NRO Acquisition Board.

(U) NGEO-Next Generation Electro-optic system.

(U) NIIRS—National Imagery Interpretability Rating Scale. Standardize system for describing the intelligence tasks that can be performed using an image.

(U) NMS-NRO Mission Support.

(U) NOPS-NRO Operations Squadron.

(U) OCIO-Office of the CIO.

(U) OCMC-Overhead Collection Management Center. Joint, fully-integrated organization which brokers all SIGINT overhead requirements.

(U) OCO-Overseas Contingency Operations.

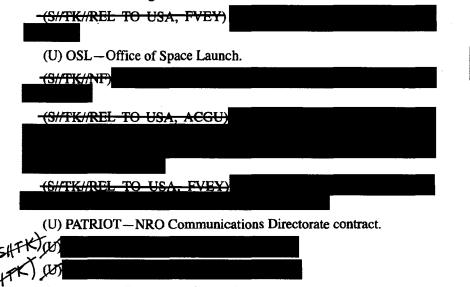
(S//REL TO USA, FVEY)

(U) OPELINT-Operational Electronic Intelligence.

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(U) OPIR-overhead persistent infrared. A subset of MASINT focused on infrared signatures.



(U) PDR-preliminary design review.

(U) Performance Objectives: Future Support - Budgeted activities that are not providing capabilities in the current budget year (FY 2009), but will significantly contribute to the outcomes, goals, and initiatives of the NIS mission objectives once they become operational (e.g., acquisition programs, research and technology programs.)

(U) Performance Objectives: Indirect Support - Operational or future budgeted activities that provide (or will provide) general support for intelligence activities (e.g. logistics, infrastructure, corporate management).

(U) Performance Objectives: Mission Objectives - One of the five mission objectives included in The National Intelligence Strategy of the United States of America, October 2005. Mission objectives relate to our efforts to predict, penetrate, and pre-empt threats to our national security and to assist all who make and implement US national security policy, fight our wars, protect our nation, and enforce our laws in the implementation of national policy goals. (U) PR/CSAR—personnel recovery/combat search and rescue.

(U) PROFORMA—weapons related, machine-to-machine signals intelligence and information.

(S//TK//REL TO USA, FVEY)

(U) R/S-relay satellite.

(U) RAFMH-Royal Air Force Menwith Hill.

(S//TK//REL\_TO\_USA.\_EVEY)

(U) RCRPA—Reconfigurable Receiver Payload. Payloads whose mission can be completely altered dynamically via software reprogramming of hardware functions, making the payload adaptable to a wide range of evolving missions. This flexibility enables a Quick Reaction Capability (QRC) where the payload functionality can be quickly changed after payload deployment, in order to rapidly respond to changing mission needs.

(U) RF-radio frequency or receive facility.

(U) SAR-synthetic aperture radar. A collection capability that uses returns from actively transmitted radar signals to produce high-resolution images regardless of weather or darkness.

(U) SCMIS-Secret collateral management information system.

(S//TK//REL TO USA. FVEY)

(U) SDR-system design review.

-(S//TK//NF)

(U) SETA-system engineering and technical analysis.

(S//TK//REL\_TO\_USA\_FVEY)

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(U) SIW-strategic indications and warning.

-(S//TK//REL\_TO\_USA,\_FVEY)

(U) SPP-Space Protection Program. Joint NRO and Air Force Space Command program to provide decision makers in the DoD and IC a comprehensive national strategy for protecting our national security space systems.

-(S//REL-to-USA, ACGU)

(U) SRR-system requirements review.

(U) SV-space vehicle.

(S//REL\_TO\_USA, FVEY)

(U) TECHELINT-Technical Electronic Intelligence.

(U) TI-technical intelligence.

(SHNF) (U) TNG-

(S//REL TO USA, FVEY)

(U) TRR-Test Readiness Review. A multi-disciplined technical review to ensure that a subsystem or system is ready to proceed into formal test.

(U) UGA-unified ground architecture.

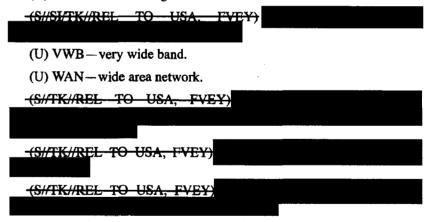
(U) UK-United Kingdom.

(U) ULA-United Launch Alliance. The Lockheed-Martin/Boeing joint venture for manufacturing and supporting the Atlas and Delta EELV booster systems.

(U) UMIS-unclassified management information system.

(U) UWAN-unclassified wide-area network. NRO's unclassified network.

(U) VAFB-Vandenberg Air Force Base.



(U) XML-extensible mark-up language.

## **NRO Approved For Release**

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