NATIONAL RECONNAISSANCE OFFICE
14675 Lee Road
Chantilly, VA 20151-1715

3 December 2012

Mr. Steven Aftergood
Senior Research Analyst
Federation of American Scientists
1725 DeSales St NW, Suite 600
Washington, D.C. 20016

Dear Mr. Aftergood:

This is in response to your email letter, dated 12 March 2012, received in the Information Management Services Center of the National Reconnaissance Office (NRO) on 12 March 2012. 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 2013."*

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 three hundred and forty three pages responsive to your request. These pages are 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, 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 243 pages at .15 per page which equals $36.45. In this case, all fees are being waived. Additional information about fees can be found on our website at www.nro.gov.

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 F12-0063.

Sincerely,

Douglas J. David
Chief, Information Access
and Release Team

Enclosure: CBJB for FY2013
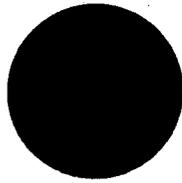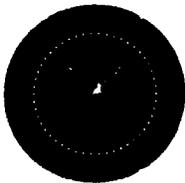
National Intelligence Program

FY 2013
Congressional Budget Justification

Volume IV

NATIONAL RECONNAISSANCE PROGRAM

FEBRUARY 2012

DRV FROM: NCG 6.0, 21 May 2005
DECL ON: 25X1, 20620206
    RRG dated July 05

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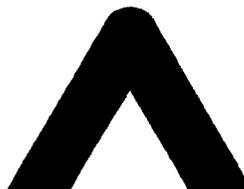
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(U) TABLE OF CONTENTS

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BOOK 1

(U) PROGRAM OVERVIEW

(U) Description

(U) Overhead reconnaissance is the foundation for global situational awareness as space collection provides near instantaneous worldwide access, and does so without risk of infringing on national sovereignty. As such, NRO systems are key enablers for multiple intelligence disciplines as well as national and DoD missions. NRO systems allow users to quickly focus multiple sensors on almost any point on the globe to respond to emerging crises or operational requirements and provide persistent, multi-INT coverage. With these capabilities the NRO is an indispensable contributor to national policymakers, the overall national intelligence effort, and the war on terrorism and ongoing military operations.

(U) The NRO provides unique support to national security objectives by:

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- (S//TK//NF) █████████████████████████████████

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- (U) Providing special ground processing tools and applications which provide integrated multi-INT information to support intelligence analysts and operational users.

(U) NRO systems provide continuous world-wide surveillance, I&W support, and denied area access. They support the counterterrorism and counterproliferation missions while providing special communications and critical DoD planning and battlefield support capabilities. In addition to their primary intelligence missions, NRO systems increasingly support Homeland Security requirements.

(U) In short, NRO systems provide unique, flexible intelligence collection capabilities not available via other means.

(U) Strategic Direction

(U) The NRO is postured to continue leveraging its unique blend of engineering skills, ground station operational expertise, and data processing capabilities to improve the responsiveness of existing systems while developing new satellite and ground capabilities to address evolving missions and new requirements. The NRO is focused on:

- (U) Improving foundational capabilities essential to the national intelligence mission, policymakers, and military operations.

- (U) Developing new product types integrating multi-platform, multi-INT, and multi-domain data to maximize overhead performance and synergistically address the nation's highest priority issues.

- (U) Maintaining a vigorous R&D and technology insertion program to incrementally improve the performance of future systems while balancing the need to meet user needs.

- (U) Executing programs on time and on budget.

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(U) The NRO programmatic strategy is shaped around the following IC strategic priorities:

(U) Intelligence Integration

- (U) Developing cross-system tasking, mission management, and sensor data processing tools enabling NRO systems to operate as a fully integrated constellation to maximize multi-INT collection, increase effective persistence, and enhance mission value through synergistic collection.

- (U) Improving the ability of overhead sensors to operate cooperatively with airborne and terrestrial sensors.

- (U) Expanding on successes developing new operational concepts and sensor data processing tools enabling legacy satellites, designed against different collection requirements and operating well beyond their design lives, to effectively address current intelligence problems.

- (U) Driving ground efficiencies through further cross-system architectural integration, expanded common processing, and additional shared services.

- (U) Developing new product types tailored to evolving user needs.

- (U) Improving tools and processes enabling timely cross-INT and cross-domain tipping and cueing.

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(U) Terrorist and Extremist Threats

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- (S) ██

- (U) Improving on the recent 88 percent reduction in collection-to-analyst dissemination timelines to further reduce product production and dissemination requirements for time-sensitive data.

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(U) WMD and WMD-Terrorism

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- (U) R&D to increase satellite sensor spectral diversity and sensitivity.

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

(U) Counterintelligence

- (U) Comprehensive efforts focused on protecting the end-to-end overhead reconnaissance enterprise.

- (U) Addressing supply chain vulnerabilities.

- (U) Strengthening information assurance and network security capabilities.

- (U) Implementing robust insider threat detection processes and methodologies.

(U) Collaboration and Information Sharing

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

- (U) Delivering application service provider support to NGA focused on improving NGA financial management capabilities, assisting NGA in posturing themselves to achieve a successful financial audit, and improving IC business-process efficiency.

- (U) Leveraging expertise gained developing IC programs to lead development of the Defense Intelligence Information Enterprise Framework supporting the Distributed Common Ground System (DCGS) Enterprise, Joint Intelligence Operations Centers, and other DoD ISR elements.

- (U) Deploying software upgrades enabling users to rapidly access NRO metadata files and cross-correlate available data and products.

(U) Annual Performance and Accountability

(U) The NRP FY 2013 request, in concert with the FY 2011 IC Agency Financial Reports provided in November 2011, and "FY 2011 NIP Summary of Performance and Financial Information" dated February 2012, meets the FY 2011 annual performance and accountability requirement for the IC. The NRP is committed to demonstrating that resources produce measurable results. The relationship between resources, results, and performance are addressed throughout the request.

(U) This year the Performance Summary tables in the Expenditure Center (EC) sections consolidate the annual and long term performance reporting for acquisition cost and schedule measures. This change is intended to eliminate redundant reporting and simplify the tables by putting annual and long-term performance information into one narrative. For each MSA, its *Annual Acquisition Cost Growth* measure and its *Long-Term Acquisition Cost Growth* measure are consolidated into a single *Acquisition Cost Growth* measure. Similarly, the *Annual Acquisition Schedule Delay* measure and *Long-Term Acquisition Schedule Delay* measure have been consolidated into a single *Acquisition Schedule Delay* measure. Annual performance results – cost changes of more than 2.5 percent and significant schedule changes relative to prior years – are now reported in the narrative of the new consolidated measure. In addition, if an MSA has been rebaselined, the narrative for the consolidated measure quantifies and explains the change in cost or schedule from one baseline to the next.

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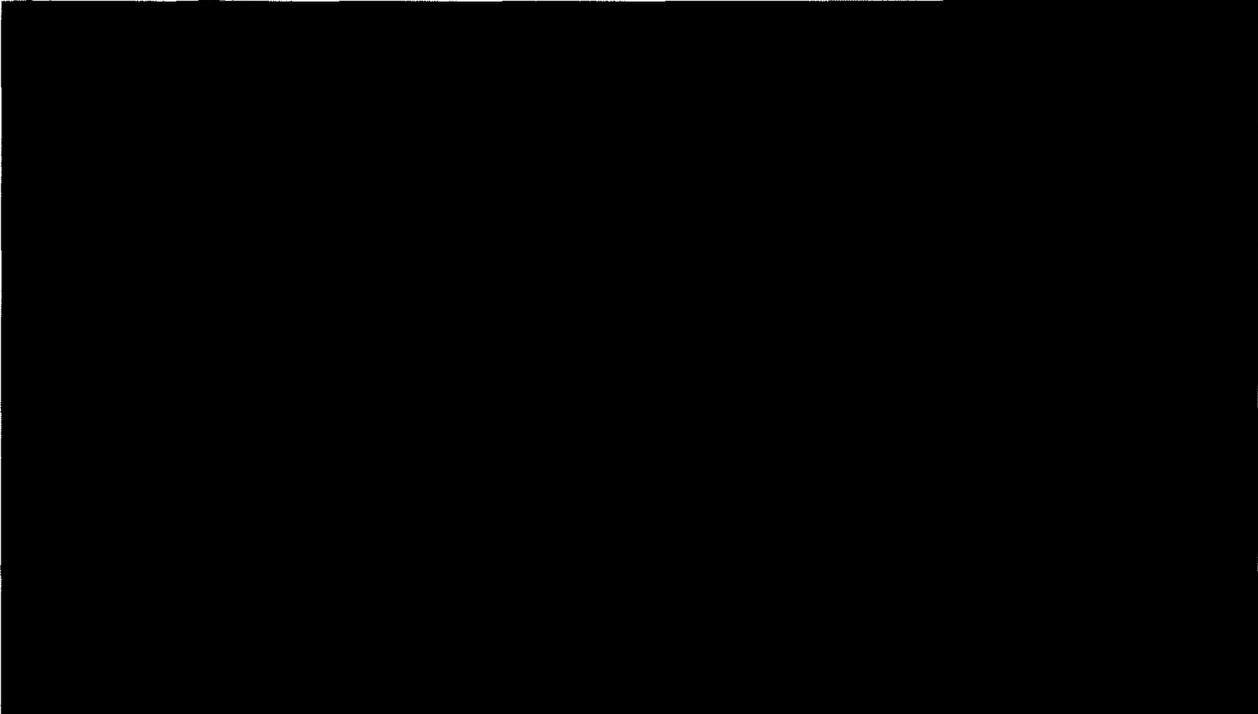
(U) Management Oversight

(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) Appropriations Use

(S//NF)

██████████████████████████████████████

(U) Funding for National Intelligence Strategy Mission Objectives

(U) The chart below displays the NRP FY 2013 funding request as allocated to support the NIS mission objectives (MOs). Activities that support MO6, Support Current Operations, are funded within the other MOs. The NIP Summary, Volume I, describes the IC's progress and goals in each MO mission area.

(U) FY 2013 Workforce Highlights

(U) The NRO government workforce is comprised entirely of military and civilian employees from other government organizations - primarily Air Force, Navy, and CIA - who provide expertise in acquisitions, research and technology, satellite and ground operations, and enabling services in support of the NRO mission. In FY 2013, the NRO plans to continue implementation of enterprise workforce planning methodologies to integrate the disparate elements of the NRO workforce to form a comprehensive picture of current and future requirements to meet mission objectives. Central to this initiative are our efforts to significantly strengthen human resources data integrity and develop sophisticated analytics to maximize utility for informed decision making.

(U) Summary of Planned Workforce Changes

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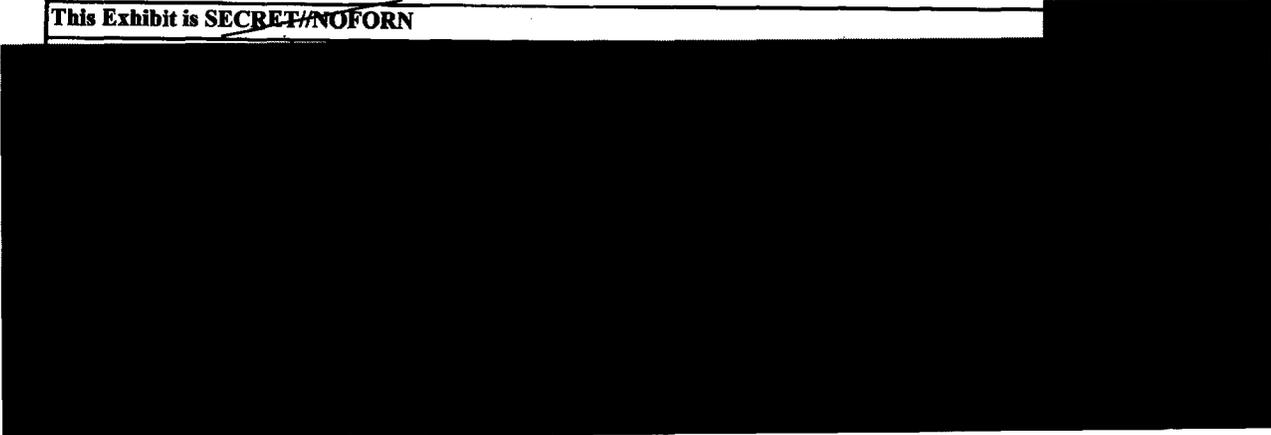
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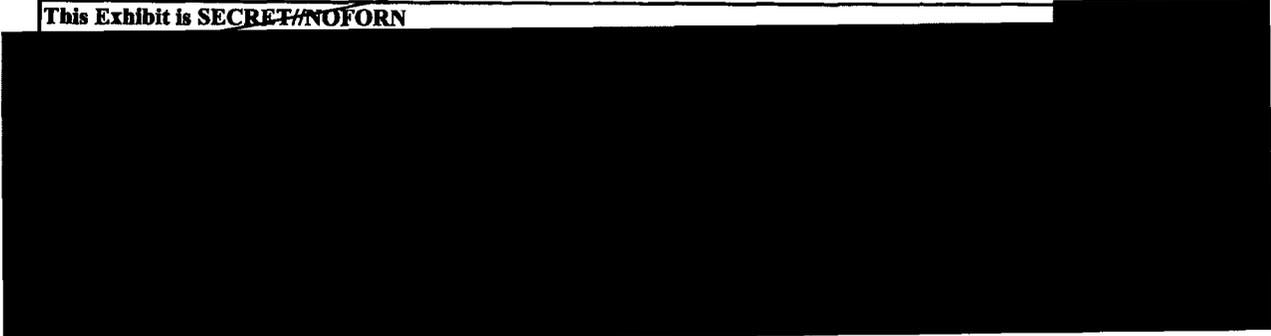
(U) NRP Requested Workforce Changes

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(U) The NRO uses FFRDCs to provide objective technical analysis and assessment, and program and technology continuity with freedom from conflict of interest in advising the government on the development, acquisition, test, launch, and operations of some of the most complex systems built by man. FFRDCs are positioned throughout the NRO enterprise based on program requirements to provide expertise that is not readily available within the government workforce and to maintain a knowledge base that is not supported by the current availability and stability of the government workforce. The majority of the FFRDC workforce supports NRO program offices in acquisition and delivery of space system hardware, launch systems, and their associated ground equipment. This end-to-end involvement reduces development risks and costs and, as demonstrated by recent

NRO performance, allows for a higher probability of mission success. To support federal deficit reduction efforts, the NRO has identified opportunities to be more efficient, take acceptable and manageable risks, and reduce reliance on Core Contractor and FFRDC support in FY 2013, resulting in reduced costs across the NRO.

(U) NRP Employment Demographics

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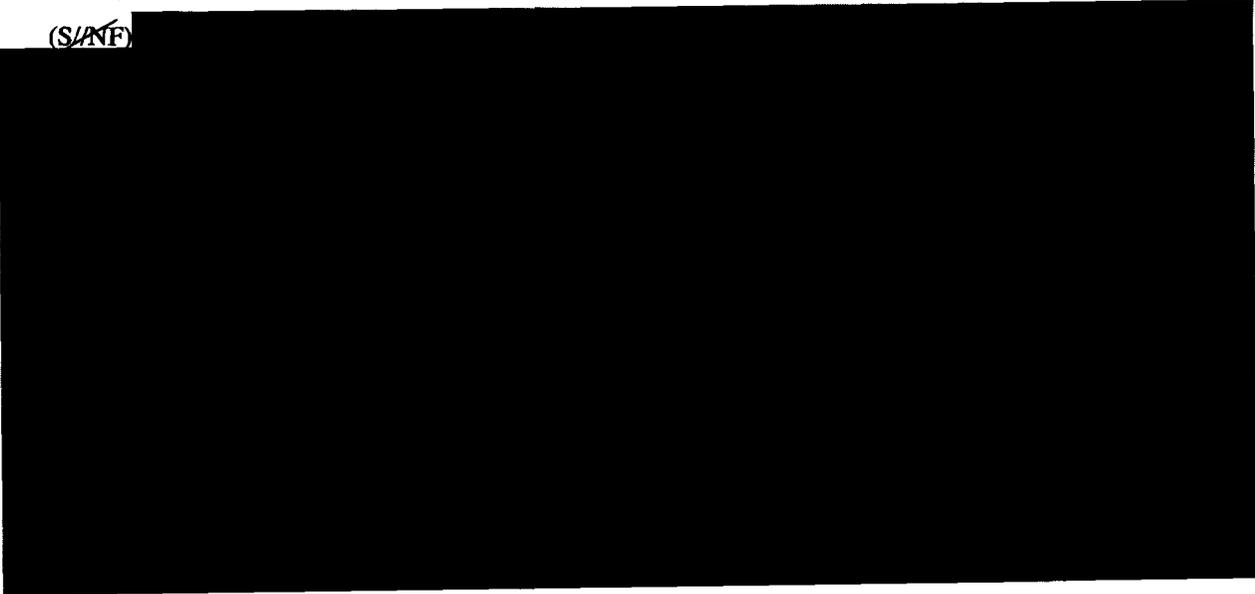
(U) Conclusion

(U) The NRO strategic human capital efforts will continue to strengthen, stabilize, and unify the unique NRO workforce in support of mission objectives. Fundamental to success is an integrated approach to the entire human capital lifecycle – workforce analysis and planning, talent acquisition and management, performance management and rewards, training and development, and engagement and retention. The human capital programs will provide managers and leaders across the NRO with the tools, data, insights, and business processes they need to sustain the current workforce and plan for the future; and will provide employees with resources to maintain career momentum while they are on assignment at the NRO.

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(U) GEOINT EO
(U) ENHANCED IMAGERY SYSTEM

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[REDACTED]

(U) Project Description

(S//TK//REL TO USA, FVEY) [REDACTED]

(U) Base resources in this project are used for:

- (S//TK//REL TO USA, FVEY) [REDACTED]
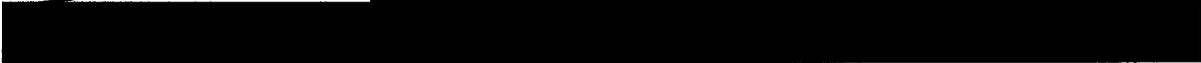
- (U) Program risk reduction, technical studies, and analyses.

- (U) Engineering support for on-orbit anomaly investigation and resolution, as necessary, for on-orbit EO systems.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) [REDACTED]
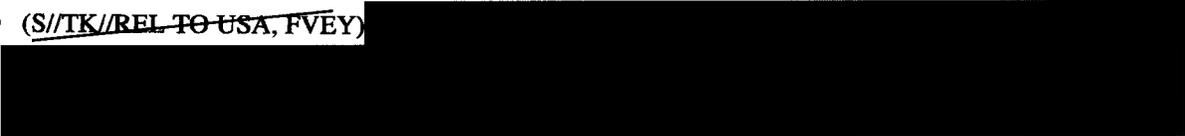
- (U) Perform risk reduction, studies, characterization/optimization of on-orbit constellation, and technology maturation activities.

(U) Changes From FY 2012 to FY 2013:

(S//NF) [REDACTED]

- (S//NF) [REDACTED]

(U) GEOINT EO

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(U) Project Description

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(U) Base resources in this project are used for:

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- (U) Program risk reduction, technical studies, technology development, and insertion activities to satisfy NGA-validated requirements against emerging hard targets.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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- (U) Perform Phase B risk reduction, studies, and technology maturation activities.

(U) Changes From FY 2012 to FY 2013:

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- (U) Realignment in of 2 civilian and 6 military positions to support acquisition phasing ramp-up.

- (U) Realignments out:

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(U) GEOINT EO
(U) EO INTEGRATION & SUPPORT

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(U) Project Description

(S//REL TO USA, FVEY)

(U) Base resources in this project are used for:

- (U) EO risk reduction, trade studies and analyses.
- (U) Requirements analyses.
- (U) Prime contractor design evaluation.
- (U) Modeling and simulation.
- (U) Program and business management support.
- (U) Integration, test, and launch support.
- (U) Acquisition support activities such as engineering change proposal evaluations, acquisition planning, and technology assessments.
- (S//REL TO USA, FVEY)
- (U) Travel and training.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//REL TO USA, FVEY)
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(U) GEOINT RADAR
(S//REL TO USA, FVEY) ████████

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(U) Project Description

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(U) Base resources in this project are used for:

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(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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(U) GEOINT RADAR
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(U) Base resources in this project are used for:

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- (U) Technology development and insertion activities to enhance capabilities in accordance with mission needs.

- (TS//TK//NF) ████████████████

- (S//REL TO USA, FVEY)

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

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//REL TO USA, FVEY)

- (U) Conduct analyses in support of the Intelligence Community Capability Requirements process.
- (S//REL TO USA, FVEY)

(U) Changes From FY 2012 to FY 2013:

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(U) GEOINT RADAR
(U) RADAR INTEGRATION & SUPPORT
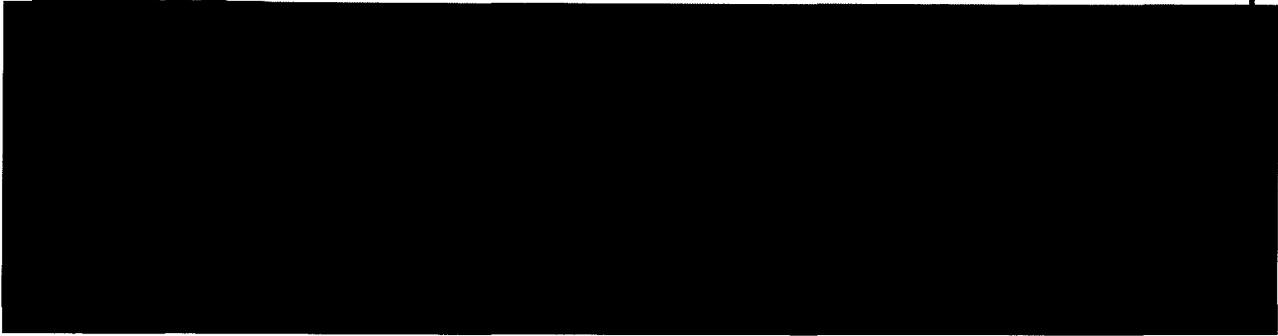
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(U) Project Description

(S//REL TO USA, FVEY) [black redaction box]

(U) Base resources in this project are used for:

- (U) Requirements analysis.
- (U) Modeling and simulation.
- (U) Transition planning/coordination.
- (U) Operations planning/coordination.
- (U) Program and business management support.
- (U) Travel and training.
- (U) Integration, test, and launch integration support.
- (U) Acquisition support activities, such as engineering change proposals and acquisition planning.
- (S//REL TO USA, FVEY) [black redaction box]
- (S//TK//REL TO USA, FVEY) [black redaction box]

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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- (S//REL TO USA, FVEY) [black redaction box]
- (S//REL TO USA, FVEY) [black redaction box]
- (U) Support risk reduction and technology maturation activities.
- (U) Support to on-orbit constellation data analysis and anomaly resolution.
- (U) Support to community outreach.

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

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(U) Project Description

(U) The Low Altitude Integration and Support (LAIS) project provides resources for engineering and technical assistance for LEO SIGINT, factory maintenance, travel, awards, and training.

(U) Base resources in this project are used for:

- (U) Core contractor (Contracted Advisory and Assistance Services, non-CAAS, and FFRDC) engineering, acquisition, and technical assistance resources to support the LAIS efforts which include:

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

  - (U) Ensuring technical completeness and interface control within the space segment and supporting external interfaces.

  - (U) Conducting advanced studies, analysis, and support for future LEO SIGINT systems, payloads and replacement vehicles.

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

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

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

  - (U) Conducting acquisition planning and Reconfigurable Receiver Payload activities.

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

  - (U) Reviewing and maintaining key program documentation, including the segment specifications, contractual baselines, and internal segment interface control documents.

  - (U) Travel and training in support of the mission.

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

- (U) Supporting adaptive and corrective factory maintenance and anomaly activities, which include:

    — (U) Integrating and delivering flight and data conditioning software baselines.

    — (S//TK//REL TO USA, FVEY) ███████████████████████████████
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    — (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.

    — (U) Performing both daily and long-term data trending to determine and predict spacecraft subsystem performance and ensuring the operational constraints of individual spacecraft are captured following subsystem degradations or failures.

    — (S//TK//REL TO USA, FVEY) ███████████████████████████████
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    — (U) Remaining postured to assume health and safety responsibilities of operational spacecraft in the case of disaster or communication failure at the primary ground station.

    — (U) Replacing software, equipment, parts and materials to prevent system failure caused by obsolescence.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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(U) Changes From FY 2012 to FY 2013:

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- (S//TK//NF) ██
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- (S//NF) ███

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(U) SIGINT HIGH
(U) SIGINT HIGH ALTITUDE REPLENISHMENT PROGRAM

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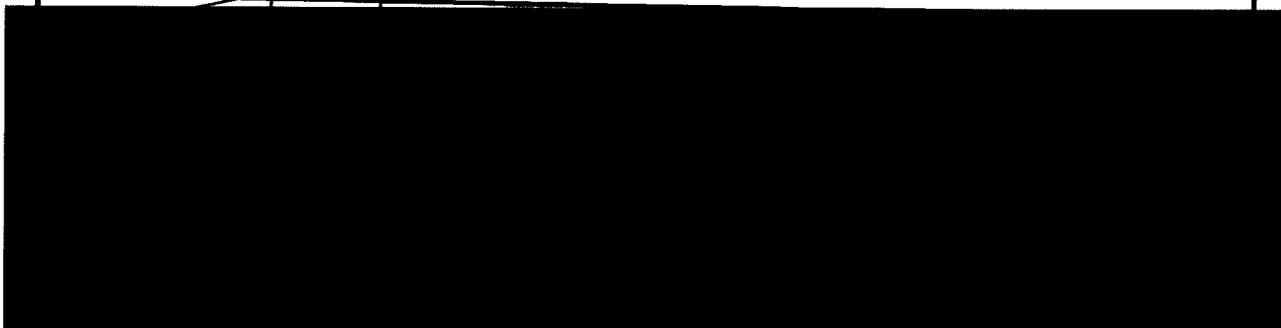
(U) Project Description
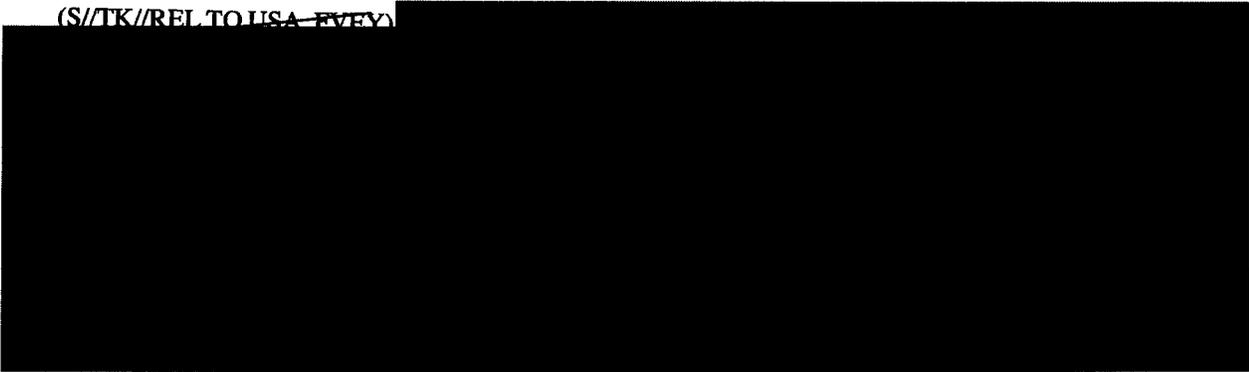
(S//TK//REL TO USA, FVEY)

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

(U) Base resources in this project in concert with related funding in the NRO MIP are used to:

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

- (U) Develop, produce, integrate, test, and install the command and control segments at the mission ground stations.

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

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

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

- (U) Provide acquisition support efforts, studies, enhancements, and other design changes.

(U) SIGINT HIGH
(U) HIGH ALTITUDE INTEGRATION & SUPPORT
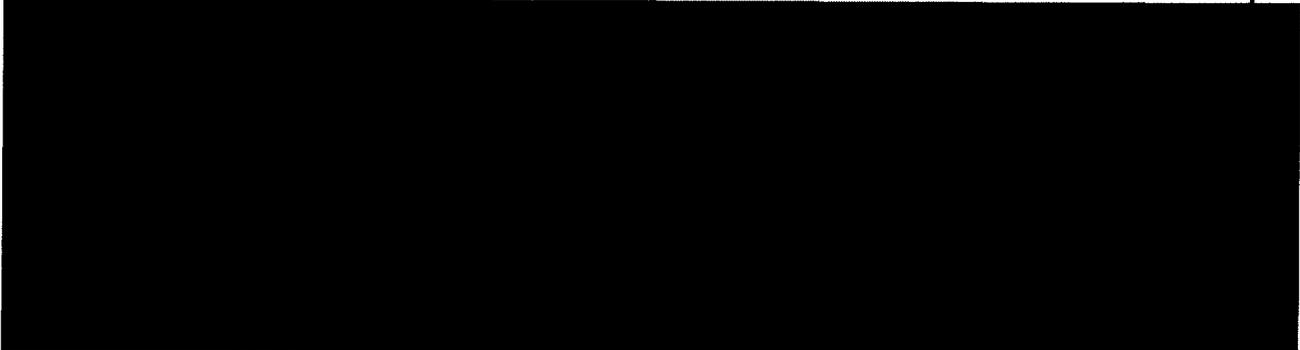
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(U) Project Description

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(U) Base resources in this project are used for:

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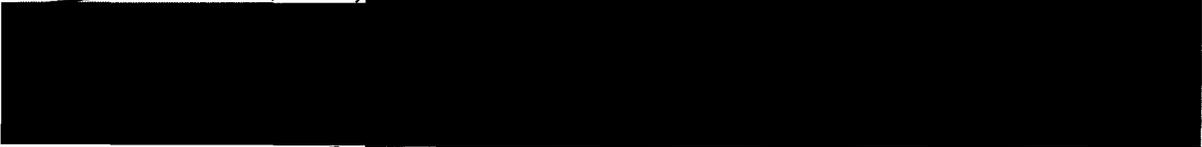
- (S//TK//REL TO USA, FVEY) ████████████████████

- (U) Core Contractor support to all of the SIGINT High EC spacecraft programs. Core Contractor support is jointly funded between NRO MIP and NRP.

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

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

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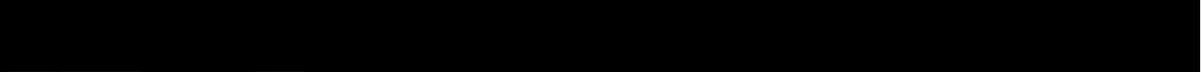
- (S//TK//REL TO USA, FVEY) ████████████████████████

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

- (U) Personnel PCS in support of the mission.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) ████████████████████████████████
- (S//TK//REL TO USA, FVEY) ████████████████████████████████
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- (U) Support the production and procurement of SHARP.

- (U) Conduct studies, analyses, and developments for non-traditional SIGINT systems

(U) Changes From FY 2012 to FY 2013:

(S//NF) ██

- (S//TK//NF) ██

- (S//NF) ██

- (S//NF) ██

(S//NF) ████████████████████████████████

- (S//NF) ████████████████████████████████

- (S//NF) ████████████████████████████████

| High Altitude Integration & Support Project Budget Chart |
| FY 2013 Budget Request by Appropriation Account |
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(U) SPACE COMMUNICATIONS
(S//TK//REL TO USA, FVEY) ███████████

This Exhibit is SECRET//NOFORN

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(U) Project Description

(S//TK//NF) ███████████████████████████████
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(U) Base resources in this project are used to:

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- (S//TK//NF) █████████████████████████████
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- (S//TK//REL TO USA, FVEY) ██████████████████
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(U) There are no new activities in this project in FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) ████████████████
- (S//TK//REL TO USA, FVEY) █████████████████
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(U) SPACE COMMUNICATIONS
(S//TK//REL TO USA, FVEY)

This Exhibit is SECRET//NOFORN

(U) Project Description

(S//TK//REL)

(U) Base resources in this project are used to:

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

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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

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

- (U) Continue risk reduction brass board (preliminary instantiation of planned technology insertion efforts) and engineering model development.

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

(U) SPACE COMMUNICATIONS
(U) SPACE OPERATIONS DEVELOPMENT SEGMENT

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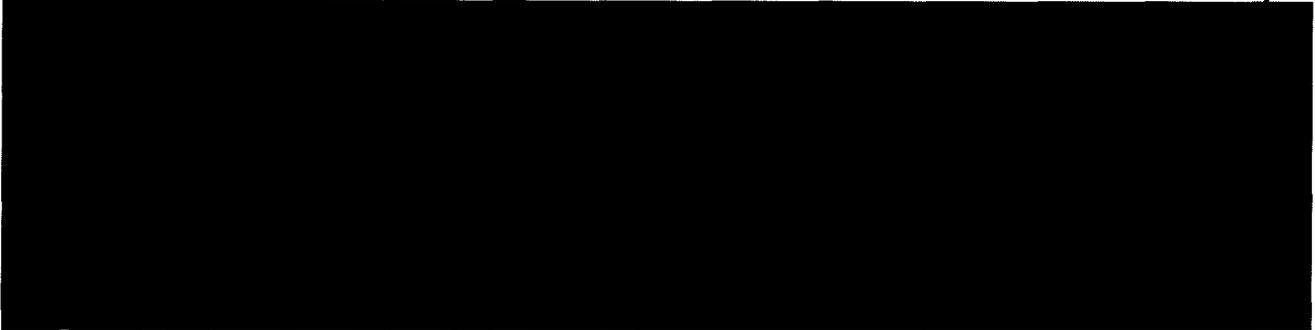
(U) Project Description

(U) The Space Operations Development Segment project provides funding for activities supporting command and control (C&C) and data dissemination for space-based communications systems.

(U) Base resources in this project are used for:
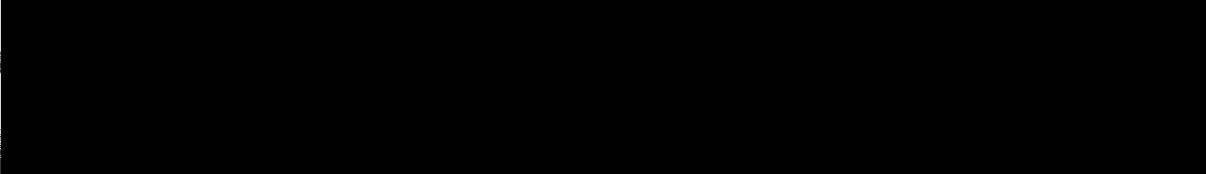
- (S//TK//REL TO USA, FVEY)

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

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

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

- (S//TK//NF)

- (S//TK//NF) ██████████████████████████████
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(U) There are no new activities in this project in FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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

- (U) Continue O&M support to the legacy MDDS architecture.

- (U) Update MDDS hardware and software to support DNI ICD 503 system re-accreditation.

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- (S//TK//REL TO USA, FVEY) ██████████████████████████████████
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(U) Changes From FY 2012 to FY 2013:

(S//NF) ████████████████████████████████████
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- (S//TK//NF) ████████████████████████████████

- (U) Realignments out:

  — (S//TK//NF) ████████████████████████████████
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(U) SPACE COMMUNICATIONS
(U) RELAY READINESS & LAUNCH

This Exhibit is SECRET//NOFORN

[REDACTED]

(U) Project Description

(S//TK//REL TO USA, FVEY) [REDACTED]

(U) Base resources in this project are used to:

- (U) Maintain and monitor vehicles for health and safety functions.

- (U) Maintain required test and ground equipment at factory and launch sites.

- (U) Perform planning for spacecraft integration for launch.

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

- (U) Perform required test activities for call-up and readiness activities.

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

- (U) 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.

(S//TK//REL TO USA, FVEY) [REDACTED]

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) [REDACTED]
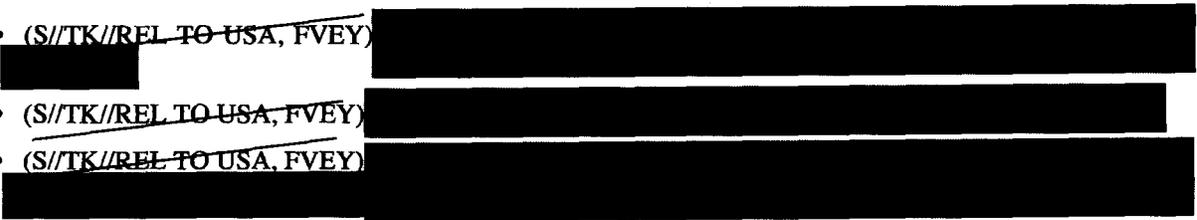
- (S//TK//REL TO USA, FVEY) [REDACTED]
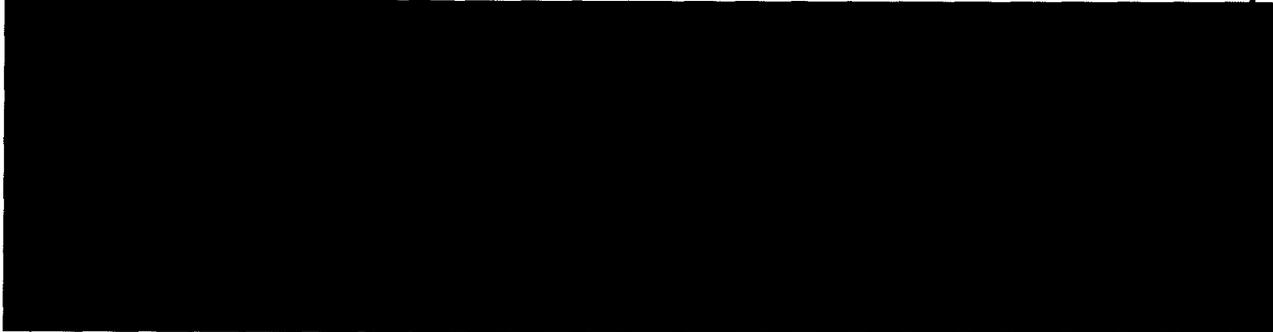
- (S//TK//REL TO USA, FVEY) [REDACTED]

(U) SPACE COMMUNICATIONS
(U) SPACE COMMUNICATIONS INTEGRATION & SUPPORT
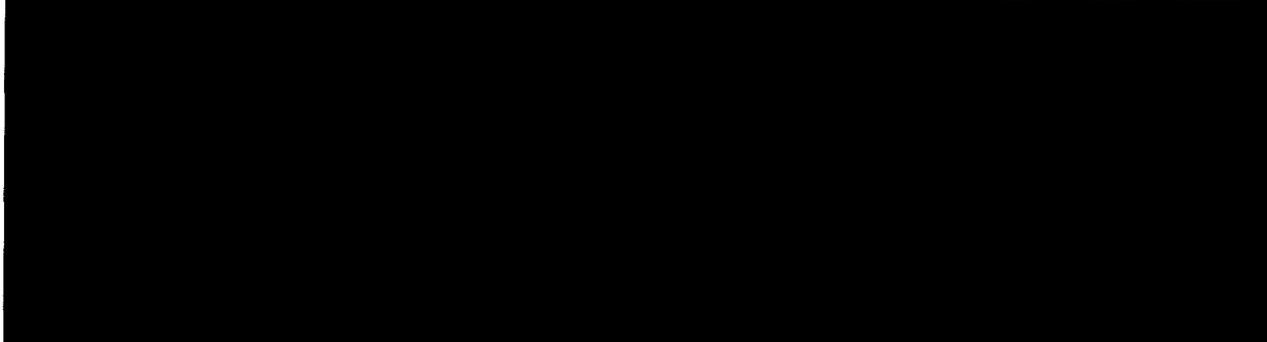
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[REDACTED]

(U) Project Description

(S//TK//REL TO USA, FVEY) [REDACTED]

[REDACTED]

(U) Base resources in this project are used for:

- (U) Requirements and CONOPS development.
- (U) Architecture development.
- (U) Independent verification and validation.
- (U) Transition to operations.
- (U) Life-cycle 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.
- (S//TK//REL TO USA, FVEY) [REDACTED]

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) [REDACTED]
- (S//TK//REL TO USA, FVEY) [REDACTED]
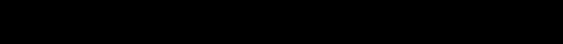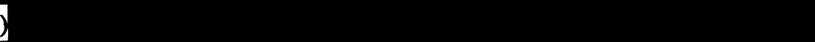
- (U) Provide analysis to optimize the constellation's global access.
- (S//TK//REL TO USA, FVEY) [REDACTED]

[REDACTED]

(U) SPACE COMMUNICATIONS
(U) MISSION SYSTEM ENCRYPTION

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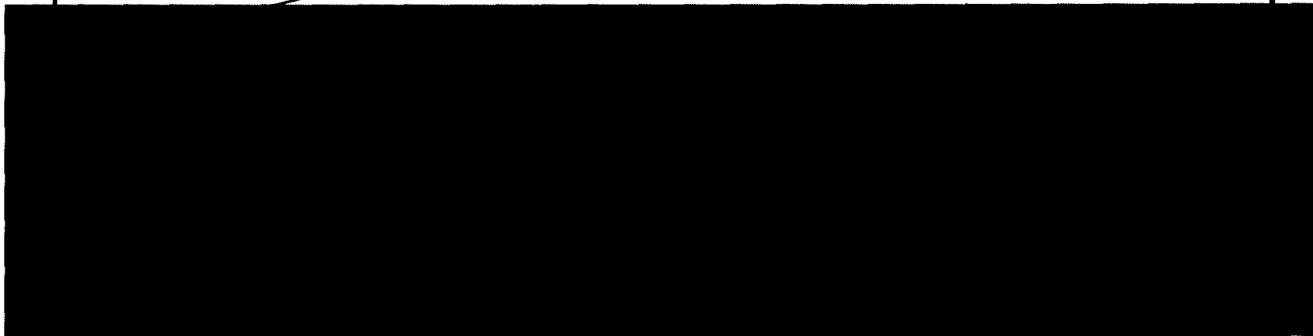
(U) Project Description

(U) The Mission System Encryption (MSE) project provides resources to develop and deploy required cryptographic solutions and provide information assurance services supporting current and future space-based intelligence collection and special communications systems architectures. The MSE project will provide net-ready encryption technology for next generation high-speed national security space (NSS) capabilities, enabling seamless integration of space, air, and ground architectures.

(U) Base resources in this project are used to:

- (S//TK//NF)

- (U//FOUO) Provide full communications security (COMSEC) life-cycle support for the organization's COMSEC assets. Perform operations including registration, ordering, generation, distribution, and accounting via Electronic Key Management System (EKMS) operations. (b)(3)50 USC 403-1
  (b)(3)50 USC 403-1

- (U) Formulate enterprise information assurance (IA) architectures, standards, and solutions using information systems security engineering services, IA research, and IA engineering critical to NRO missions and programs, as well as those of other NSS customers.

- (U) Analyze threats to and vulnerabilities of future NSS space and ground systems to establish future cryptographic security requirements and deliver state-of-the-art NSA certified IA technologies and solutions.

- (S//TK//NF)

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Complete prototype development and NSA certification for the cryptographic core processor program.
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(U) Changes From FY 2012 to FY 2013:

(S//NF) ████████████████████████████

- (U) Increases:

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- (S//NF) ████████████████████████

- (U) Realignments in:

  — (S//NF) ████████████████████████████

  — (S//NF) ████████████████████████████

Mission System Encryption Project Budget Chart		
FY 2013 Budget Request by Appropriation Account		
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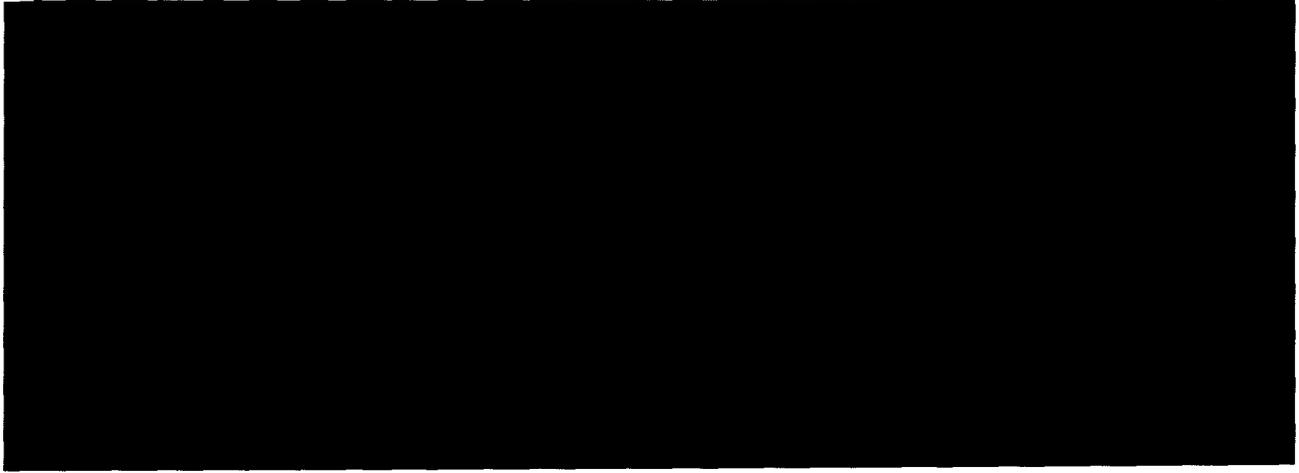
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(U) LAUNCH
(U) LAUNCH VEHICLES

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[REDACTED]
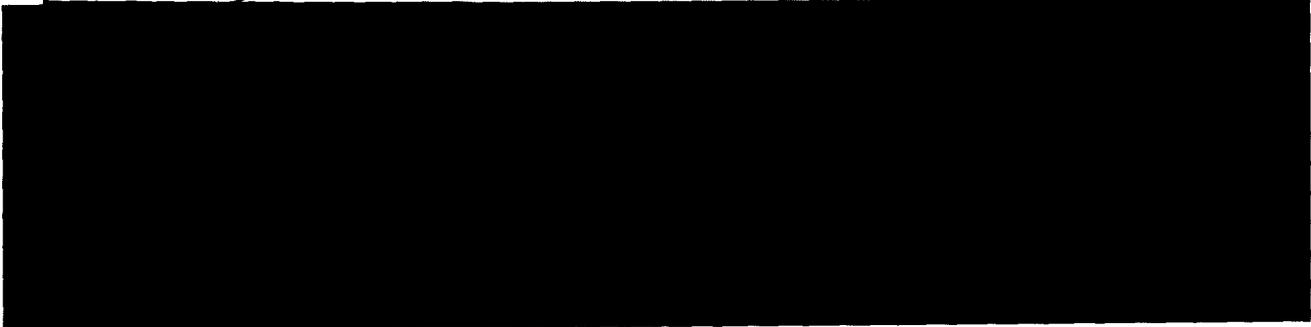
(U) Project Description

.(U) This project procures Evolved Expendable Launch Vehicles (EELV) and hardware, conducts integration activities for NRO satellites and performs leading edge integration activities and studies for NRO satellites and new launch service providers.

(U) Base resources in this project are used to:

- (U) Procure standard EELV launch services on a fixed price basis, fully funded approximately two years prior to launch, and EELV heavy launch vehicles approximately three years prior to launch. Well-defined mission-unique hardware plus integration efforts are funded beginning up to five years in advance of the launch date.

- (U) Conduct early investigation and analyses of advanced launch systems for potential NRO application. The structure of the EELV contracts allows separate funding and accounting for NRO missions.

(S//TK//REL TO USA, FVEY) [REDACTED]
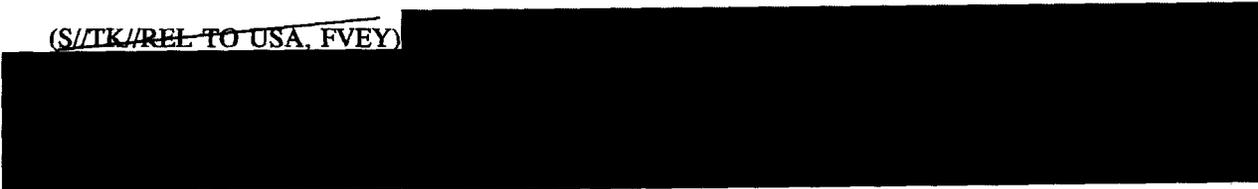
(U) Schedules for launch vehicles are as follows:

- (S//REL TO USA, FVEY) [REDACTED]

- (S//REL TO USA, FVEY) [REDACTED]

- (S//TK//REL TO USA, FVEY) [REDACTED]

- (S//TK//REL TO USA, FVEY) [REDACTED]

- (S//TK//REL TO USA, FVEY) [REDACTED]

- (S//REL TO USA, FVEY) [REDACTED]

- (S//TK//REL TO USA, FVEY) [REDACTED]

- (S//TK//REL TO USA, FVEY) [REDACTED]

(U) In addition, there are five new activities in this project for FY 2013:

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

(U) The NRO expects the project to accomplish the following in FY 2013:

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

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- (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 and new entrants for potential launch of NRO payloads, including reusable launch vehicles and new entrant certification.

(U) Changes From FY 2012 to FY 2013:

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(U) LAUNCH
(U) LAUNCH CAPABILITY INFRASTRUCTURE

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(U) Project Description

(U) This project funds the EELV Launch Capability (ELC) contract to maintain the infrastructure and support required for the launch of National Security Space missions. Launch capability infrastructure is separate from launch vehicle hardware, which is funded through the EELV Launch Services contracts.

(U) Base resources in this project are used to:

- (U) Retain critical skills at EELV contractor facilities and the launch sites and maintains proficiency of the EELV contractor workforce.

- (U) Transport, integrate, and process all EELV launch vehicles in support of NRO launches.

- (U) Perform systems engineering and maintain critical launch vehicle engineering skills.

- (U) Operate and maintain launch complexes at Vandenberg Air Force Base and Cape Canaveral Air Force Station for the Atlas V and Delta IV launch vehicle families.

(S//TK//REL TO USA, FVEY) ████████████████████████
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(U) The NRO and the Air Force maintain a relationship to provide the EELV launch capability for the nation. This funding request represents the NRO's contribution to the ELC contract. In FY 2013, the NRO is funding 25 percent of the common launch capability infrastructure costs. This contribution sustains the relationship with the Air Force; enabling insight into launch investment and infrastructure planning and providing NRO input to the ELC contract management and execution.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) ████████████
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- (U) Maintain launch capability through maintenance and operations of the launch sites, depreciation and amortization of capital equipment and tooling.

- (U) Perform systems engineering and launch activities to resolve fleet-wide launch issues.

- (U) Maintain launch vehicle prime contractor and supplier critical skills.

- (U) Maintain critical engineering skills at the launch vehicle manufacturing facilities.

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

(U) LAUNCH
(U) LAUNCH OPERATIONS AND ENGINEERING

This Exhibit is SECRET//NOFORN

(U) Project Description

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

(U) Base resources in this project are used to:

- (U) Operate and maintain the NRO Payload Transportation System which provides secure transportation from the factory to the launch base, VAFB or CCAFS.

- (U) Provide forklifts, tractors, trailers, and other mechanical hardware for satellite vehicle electrical aerospace ground equipment and satellite vehicle mechanical aerospace ground equipment.

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

- (U) Fund spacecraft launch-base and launch mission support from the Eastern and Western Launch Ranges.

- (U) Perform NRO Operations Squadron (NOPS) launch and on-orbit support, downrange/ascent telemetry capture, and processing operations for NRO launches, to include launch and network control equipment maintenance.

- (U) Fund Core contractor, systems engineering and technical analysis, and system integration support to the Office of Space Launch.

- (U) Fund the NRO's unique FFRDC support to systems engineering and integration, mission assurance and mission safety.

- (U) Perform independent validation and verification (IV&V) of launch contractor mission integration analyses, flight loads analyses, and mission design parameters.

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

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

- (U) Support engineering activities, analyses and studies affecting multiple satellite missions on one or multiple launch systems, mission overflight assessments, radio-frequency vulnerability assessments, and other integrated, multi-mission threat and impact assessments.

- (U) Fund the NRO's contribution to the common Air Force and NRO FFRDC support for general systems engineering and integration and launch vehicle certification.

(S//REL TO USA, FVEY) ███████████████████████
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(U) The NRO and the Air Force maintain a relationship to provide the EELV launch mission assurance for the nation. This funding request includes NRO's contribution to common Air Force and NRO FFRDC support for general systems engineering and integration and launch vehicle certification. In FY 2013, the NRO is funding 40 percent of common FFRDC costs, and sustains the relationship with the Air Force; enabling insight into launch mission assurance planning and providing NRO input to mission assurance management and execution.

(U) The NRO expects the project to accomplish the following in FY 2013:

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- (S//TK//REL TO USA, FVEY) █████████████████
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- (U) Perform over 40,000 satellite support contacts from NOPS.
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(U) Changes From FY 2012 to FY 2013:

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- (U) Increases:
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(U) GEOINT/SIGINT INTEGRATED GROUND DEVELOPMENT
(U) COMMAND & CONTROL

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(U) Project Description

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

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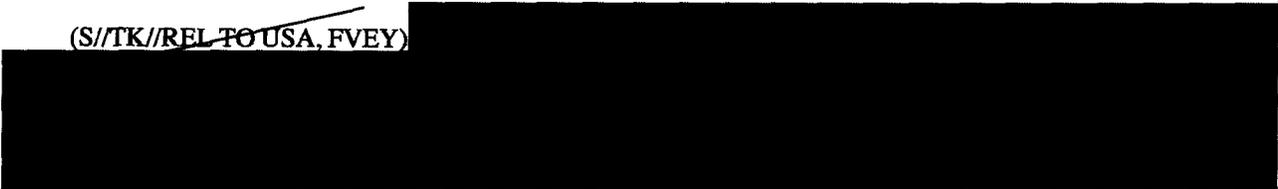
(U) The Ground Element Block 1, Increment 1 Acquisition Decision Memorandum (ADM) was signed by USD/AT&L and DDNI/AT&F on 8 November 2010. This approved the projected cost, schedule, and performance for the Block 1, Increment 1 Command and Control Major System Acquisition (MSA) presented at the Acquisition Review Board (ARB) on 14 July 2010. The Command and Control Increment 1.1 MSA achieves system closure on specific spacecraft and ground capabilities through Ground Enterprise Milestones (GEM). This project supports the completion of the Command and Control Increment 1.1 acquisition efforts.

(U) Base resources in this project are used to:

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- (S//TK//REL TO USA, FVEY) ██████████████████████████████████
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- (S//TK//REL TO USA, FVEY) ██████████████████████████████████
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(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) ██████████████████████████████████
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- (U) Deliver upgrades to mitigate obsolescence and increase standardization in the ground command and control functions.

(U) GEOINT/SIGINT INTEGRATED GROUND DEVELOPMENT
(U) MISSION CONTROL

This Exhibit is SECRET//NOFORN

(U) Project Description

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

(U) This project supports the Mission Control Block 1, Increment 2 MSA which is scheduled for a 4QFY12 Joint Intelligence Acquisition Board (JIAB). The NRO Ground Enterprise (NGE) Increment 1.2 is the second increment towards the development, delivery, and sustainment of a responsive, secure, interoperable, and integrated ground architecture that collaboratively provides timely, value-added, trusted information to users worldwide through innovative solutions. The Mission Control Increment 1.2 MSA achieves system closure on specific spacecraft and ground capabilities through GEMs. Funding for the NGE Mission Control Increment 1.2 MSA begins in FY 2013. The ICE for this MSA is currently under development. The ICE and an explanation of differences from the budget request, if any, will be available in supplementary FY 2013 budget justification materials not later than 31 July 2012.

(U) In an effort to increase efficiencies in acquisition and transition to new technology without jeopardizing mission, the NRO is establishing the concept of Mission Centers (MC) in Mission Control Increment 1.2. These MCs organize acquisitions by functional mission areas with the goals of sharing common software and services, convergence of like software applications, and development of consistent architectures across the NGE. The Mission Control 1.2 MSA consolidates all activities into five core MCs: Electro-optical Scheduling Planning and Execution (SPE); Radar SPE; SIGINT SPE; Multi-INT Task Management, Coordination and Assessment; and Space-Ground Routing.

(U) Base resources in this project are used to:

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- (U) Provide factory development support, maintenance, and replacement of components required for the five Mission Centers in the Mission Control MSA.

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- (U) Develop innovative mission management and command and control solutions to meet intelligence needs.

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- (U) Initiate acquisition engineering activities for MC improvements to support the End-to-End Communications program.

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(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Continue to sustain/maintain all Command and Control and Mission Management capabilities delivered in NGE Increment 1.1.

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- (U) Initiate systems engineering for MC improvements to support the End-to-End Communications program.

- (U) Continue engineering support for space-ground routing recapitalization efforts to mitigate obsolescence in support of NRO missions.

- (S//TK//REL TO USA, FVEY) ███████████████████████████████
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(U) Changes From FY 2012 to FY 2013:

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- (U) Increases:

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(U) GEOINT/SIGINT INTEGRATED GROUND DEVELOPMENT
(U) MISSION FRAMEWORK

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[REDACTED]

(U) Project Description

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

[REDACTED]
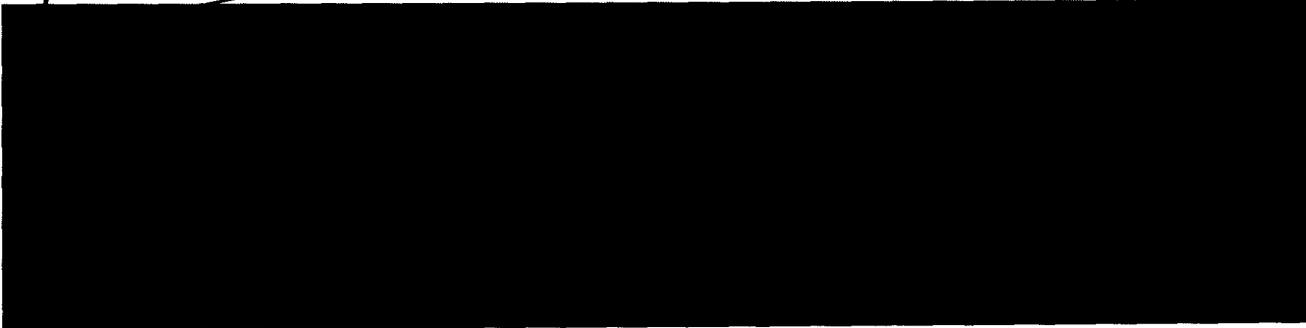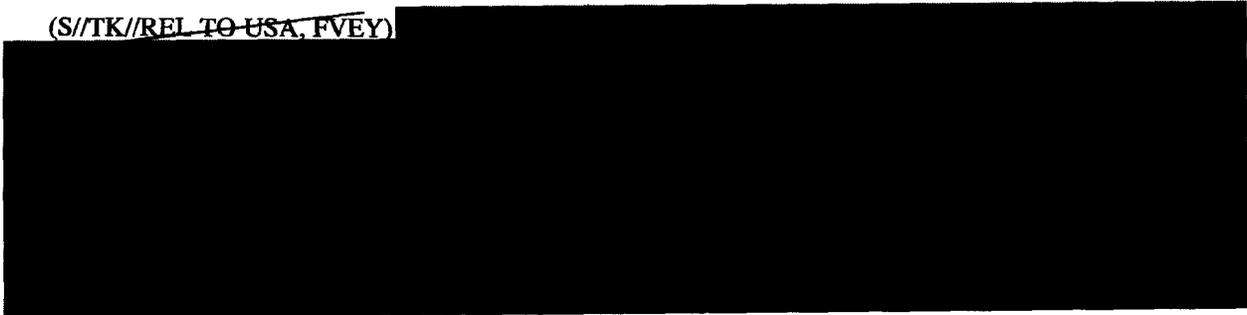
(U) This project supports completion of the Mission Framework Block 1, Increment 1 MSA and the start of the Mission Framework Block 1, Increment 2 MSA which is scheduled for a 4QFY12 JIAB. The NGE Increment 1.2 is the second increment towards the development, delivery, and sustainment of a responsive, secure, interoperable, and integrated ground architecture that collaboratively provides timely, value-added, trusted information to users worldwide through innovative solutions. The Mission Framework Increment 1.2 MSA achieves system closure on specific spacecraft and ground capabilities through GEMs. Funding for the NGE Mission Framework Increment 1.2 MSA begins in FY 2013. The ICE for this MSA is currently under development. The ICE and an explanation of differences from the budget request, if any, will be available in supplementary FY 2013 budget justification materials not later than 31 July 2012.

(U) In an effort to increase efficiencies in acquisition and transition to new technology without jeopardizing mission, the NRO is establishing the concept of Mission Centers (MC) in Mission Framework Increment 1.2. These MCs organize acquisitions by functional mission areas with the goals of sharing common software and services, convergence of like software applications, and development of consistent architectures across the NGE. The Mission Framework 1.2 MSA consolidates all activities into four core MCs: Compute, Record and Store; Routing and Distribution; Service Broker; and Sharing, Fusion, and Tools.

(U) Base resources in this project are used to:

- (S//TK//REL TO USA, FVEY) [REDACTED]

- (U) Migrate Mission Framework applications to the standardized development, test, prototype, and operational Mission Framework environments.

- (U) Improve efficiencies of network infrastructure through the acquisition and build out of additional intrasite bandwidth and interfaces.

- (S//TK//REL TO USA, FVEY) ███

- (U) Continue maintenance and development of real-time execution services for overhead SIGINT systems.

- (U) Sustain enterprise services for security logging, and messaging.

- (U) Continue security services for Public Key Infrastructure across the NGE.

- (U) Maintain information sharing between national and tactical users.

- (U) Sustain enterprise messaging and data forwarding capabilities.

- (S//TK//REL TO USA, FVEY) ███

- (U) Rapidly identify and prototype key technologies and operational concepts related to mission needs.

(U) There is one new activity in this project for FY 2013 – start of Mission Framework MSA Increment 1.2 activities. While Increment 1.2 begins in FY 2013, it is a continuation of the overall NGE Block I development efforts that began in FY 2010.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Continue to sustain/maintain all Mission Framework capabilities delivered in NGE Increment 1.1.

- (S//TK//REL TO USA, FVEY) ███

- (S//TK//REL TO USA, FVEY) ███

- (U) Sustain the standard Mission Framework environment that was operationally deployed in FY 2012.

- (U) Complete the second network operations center required to satisfy availability and security auditing requirements.

- (U) Deliver enhanced data center (Common Service Layer (CSL)-1) capacity at ADF-C, ADF-East, and ADF-Southwest (e.g., additional network switches, blade centers, and security devices). Additional capacity supports the continued transition of legacy mission/business systems to the CSL-1 infrastructure. New capacity will also support new systems deploying to the mission ground stations.

- (S//TK//REL TO USA, FVEY) ███

- (U) Provide improved management, control, and status functions for Signal Data Distribution System, bandwidth management, and prioritization for the network.

- (U) Update the end-of-life controller hardware supporting the exchange of configuration/control and status information for SIGINT data distribution and real-time control.

- (U) Provide for improved quality of existing services and adding a limited number of new user identified features necessary to work towards Distributed Common Ground System – IC IOC-2 capabilities.

- (U) Continue to transition legacy messaging systems into an enterprise service.

- (U) Decommission legacy directory service and transition systems to the enterprise-wide security service.

(U) GEOINT/SIGINT INTEGRATED GROUND DEVELOPMENT
(U) MISSION MANAGEMENT

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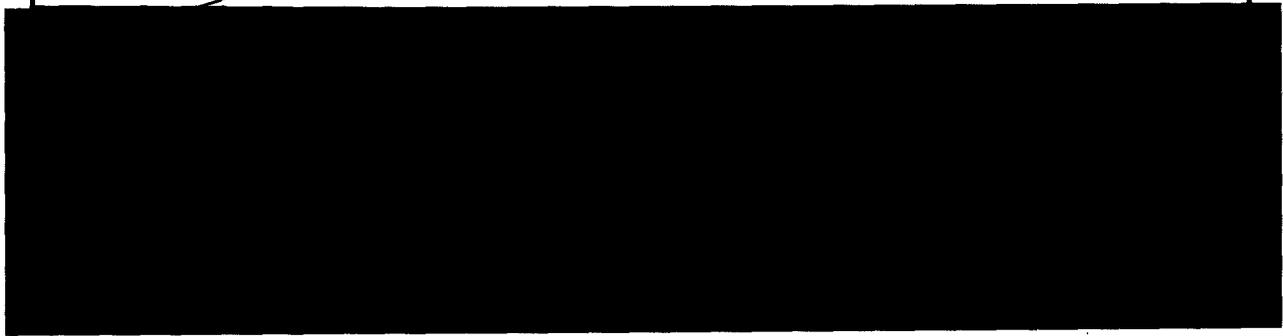
(U) Project Description

(S//TK//REL TO USA, FVEY) [REDACTED]
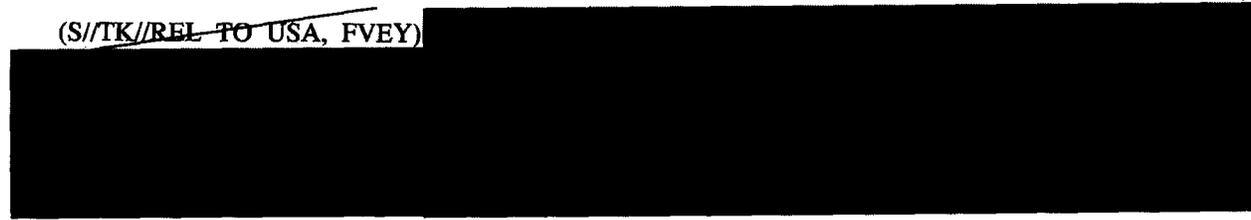
(U) The Ground Element Block 1, Increment 1, ADM was signed by USD/AT&L and DDNI/AT&F on 8 November 2010. This approved the projected cost, schedule, and performance for the Block 1, Increment 1, Mission Management MSA presented at the ARB on 14 July 2010. The Mission Management Increment 1.1 achieves system closure on specific spacecraft and ground capabilities through GEMs. This project supports the completion of the Mission Management Increment 1.1 MSA acquisition efforts.

(U) Base resources in this project are used to:

- (U) Increase the efficiency of SIGINT overhead collection by continuing to develop an integrated planning, scheduling, and execution system for the High Altitude SIGINT constellations.

- (U) Provide factory development support, maintenance, and replacement of components required for SIGINT mission management systems, GEOINT mission planning and scheduling systems, relay planning and scheduling, mission partner tasking interfaces, and collection feasibility, special collection planning, mission assessment, and mission situational awareness capabilities.

- (S//TK//REL TO USA, FVEY) [REDACTED]

- (S//TK//REL TO USA, FVEY) [REDACTED]

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) [REDACTED]

(U) GEOINT/SIGINT INTEGRATED GROUND DEVELOPMENT
(U) MISSION PROCESSING

This Exhibit is SECRET//NOFORN

(U) Project Description

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

(U) This project supports the Mission Processing Block 1, Increment 2, MSA scheduled for a 4QFY12 JIAB. The NGE Increment 1.2 is the second increment towards the development, delivery and sustainment of a responsive, secure, interoperable, and integrated ground architecture that collaboratively provides timely, value-added, trusted information to users worldwide through innovative solutions. The Mission Processing Increment 1.2 MSA achieves system closure on specific spacecraft and ground capabilities through GEMs. Funding for the NGE Mission Processing Increment 1.2 MSA begins in FY 2013. The ICE for this MSA is currently under development. The ICE and an explanation of differences from the budget request, if any, will be available in supplementary FY 2013 budget justification materials not later than 31 July 2012.

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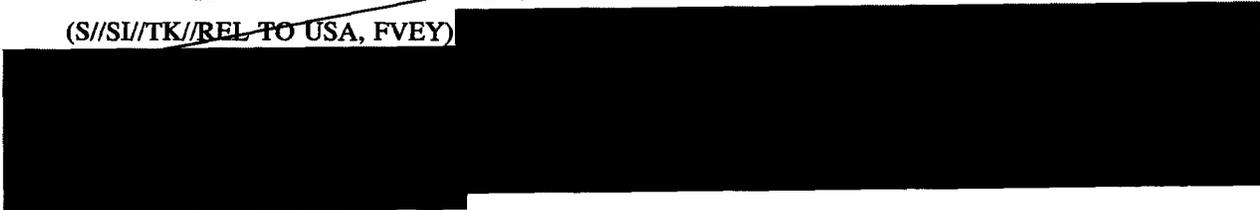
(U) Base resources in this project are used to:

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- (U) Supplement standard GEOINT and select airborne sensor data processing with advanced geospatial products.

- (U) Develop multi-INT processing capabilities that transform GEOINT and SIGINT sensor data into enriched intelligence information.

- (U) Develop evolving ground processing techniques for GEOINT and SIGINT to address dynamic customer needs.

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- (U) Develop innovative processing solutions to meet intelligence needs.

(U) In addition, there are three new activities in this project for FY 2013:

- (U) Start of NGE Mission Processing MSA Increment 1.2 activities. While Increment 1.2 begins in FY 2013, it is a continuation of the overall NGE Block 1 development efforts that began in FY 2010.

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(U) Overseas Contingency Operations (OCO) resources in this project are used to support AF/PAK operations unless otherwise stated:

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(U) GEOINT/SIGINT INTEGRATED GROUND DEVELOPMENT
(U) GROUND INTEGRATION & SUPPORT

This Exhibit is SECRET//NOFORN

(U) Project Description

(U) The Ground Integration & Support project provides core contractor support for the NRO Ground Enterprise (NGE), deployed support to enhance national/tactical mission integration, and NRO processing support for GEOINT product quality assurance and innovative solutions. This project also provides resources for personnel to travel, receive training in support of the mission, and to recognize outstanding performance of government personnel.

(S//TK//NF)

(U) Base resources in this project are used to:

- (U) Define and manage systems requirements, baseline configuration, and schedule processes for the NGE.

- (U) Define functional performance and verification requirements.

- (U) Partner with collection management authorities to ensure ground systems provide the collection management features required to fully exploit evolving processing capabilities.

- (U) Conduct independent evaluations to identify and exploit opportunities that increase system performance, optimize data manipulation, and improve collection, processing, and O&M.

- (U) Perform studies, trades, and analyses for optimization of the NGE baseline.

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

- (U) Implement adaptive prototype architectures to migrate towards a unified ground architecture, as described in the Ground Enterprise Directorate Execution Roadmap that consists of a common and standardized infrastructure and enabling ground station interoperability.

- (U) Develop financial plans, budget requirements, and monitor financial execution performance of NGE projects.

- (U) Plan and coordinate innovative solutions to meet intelligence needs.

(U) There is one new activity in this project for FY 2013 – start of Ground Integration and Support efforts supporting NGE Increment 1.2 MSAs. While Increment 1.2 begins in FY 2013, it is a continuation of the overall NGE Block 1 development efforts that began in FY 2010.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA, FVEY) ██

- (U) Support requirements verification and integration activities for all new mission processing, mission control, and mission framework capabilities.

- (U) Support system engineering activities necessary for Block 1, Increment 1 closure.

- (U) Support acquisition planning and execution for the Block 1, Increment 2 ground activities for Mission Control, Mission Processing, and Mission Framework MSAs.

(U) Changes From FY 2012 to FY 2013:

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- (U) Realignments in:

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(U) MISSION GROUND STATIONS

(S//REL TO USA, FVEY) (U) ███████████████

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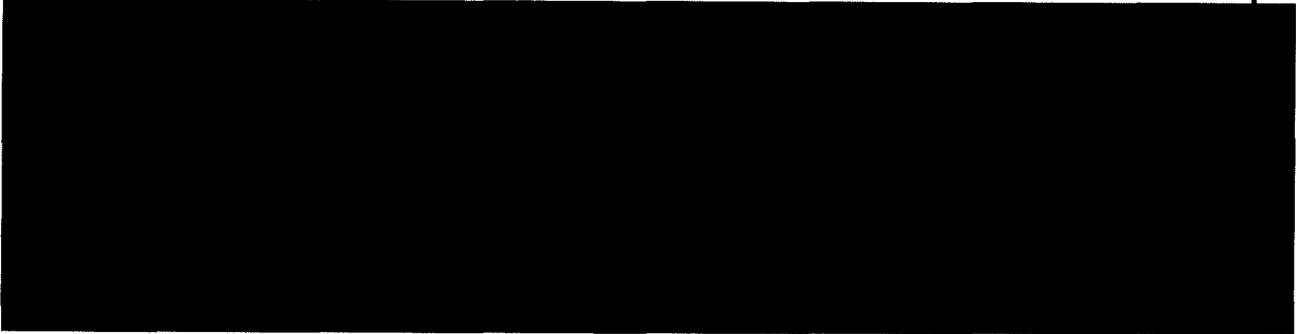
(S//REL TO USA, FVEY)   **(U) Project Description**

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(U) Base resources in this project are used to:

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• (U) ▇▇▇▇▇▇▇▇

(S//REL TO USA, FVEY) — (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) Provide NRO Mission Operations Directorate (MOD) headquarters support.

• (U) Operate and maintain the NROC, which is responsible for:

— (U) 24-hour-a-day operations to continually apprise DoD, IC, and National users of NRO system status. Maintaining awareness of, and protection of NRO systems from, environmental and man-made threats. This is accomplished through teaming with National Air and Space Intelligence Center; CIA/Weapons Intelligence, Nonproliferation, and Arms Control (CIA/WINPAC); USSTRATCOM; and the Joint Space Operations Center (JSpOC); utilizing their finished intelligence products as the baseline to conduct collision avoidance analysis, vulnerability tests, and NRO systems survivability assessments.

— (U//FOUO) Defensive space control engineering and analysis, and support to warfighter operations with laser and radio frequency deconfliction analysis.

— (U) Command and control capabilities for NRO leadership during contingency operations and exercises.

• (U) Support the OCMC which is responsible for:

— (U) 24-hour-a-day overhead SIGINT operations management capability on behalf of the IC.

— (U) Allocating SIGINT satellite collection assets against intelligence targets in accordance with priorities and guidance established by the National SIGINT Collection Subcommittee.

— (U) Timely reporting of SIGINT constellation-level collection performance to national and military customers throughout the world.

— (U) Tools and infrastructure for NRO operations at OCMC.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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• (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, 00647, 00648, 00649, 00662, 00663, 00664, 00665, 00706, PE_00004).

(U) MISSION GROUND STATIONS

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

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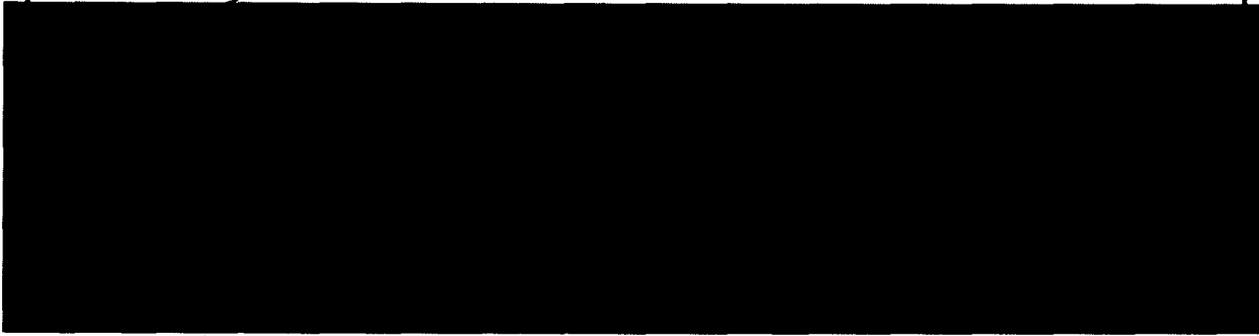
(U) Project Description
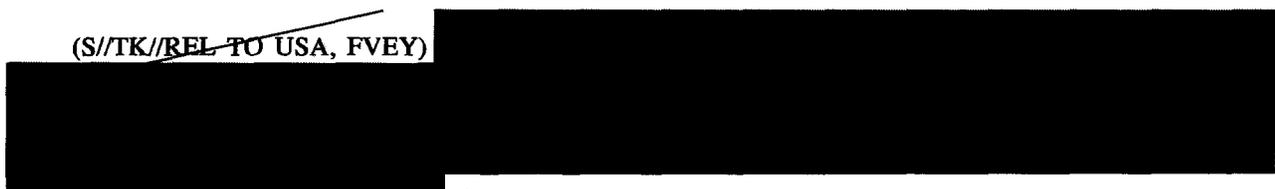
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(U) Base resources in this project are used to:
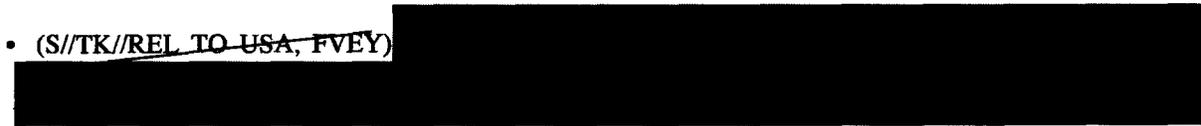
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- (U) Provide site support services: logistics, facilities O&M, medical support, and security support.

- (U) Provide infrastructure support such as networks, configuration management, and asset recapitalization.

- (U) Provide site unique core contractor support.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Enable ongoing operations of NRO satellite systems and ground stations.

- (U) Provide the projected operational availability levels shown in the Mission Ground Stations EC performance table (NRP_00557, 00645, 00646, 00704, 00705, PE_00004).

(U) MISSION GROUND STATIONS
(U) STATION INTEGRATION & SUPPORT

This Exhibit is SECRET//NOFORN

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(U) Project Description

(U) The Station Integration & Support project includes resources for systems engineering, strategic planning, and program support for the NRO Mission Operations Directorate. Government personnel in concert with Core Contractor (Contracted Advisory and Assistance Service (CAAS), FFRDC, and non-CAAS contractors) provide technical support.

(U) Base resources in this project are used for:

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

- (U) Evaluation of constellation strategy options, including impact to operations of orbit adjustments and other changes to NRO systems posture.

- (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) Security support.

(U) This project further provides funding to support Mission Operations Directorate personnel travel, permanent change of station moves to and from the NRO MGSs, mission training, and awards recognition.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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

- (U) Provide systems engineering and advisory support for Ground Enterprise Milestone 10.

(U) ENTERPRISE IT SYSTEMS
(U) CONNECTIVITY

This Exhibit is SECRET//NOFORN

(U) Project Description

(U) The Connectivity project provides resources to develop, acquire, deliver, operate, 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 Department of Defense.

(U) Base resources in this project are used for:

- (U) Enterprise Systems that deliver enterprise-wide capabilities such as access services providing data protection; hosting services providing computing and storage for the management information systems infrastructure; and user and integrated communications providing voice and desktop services, all enabling NRO and IC collaboration. The development and maintenance of an enterprise technology roadmap with the underpinning architecture and supporting policies and procedures, referred to as consolidated management services, is also provided. This project also includes the "prove it" phase of the next generation cloud computing architecture (Central Park).

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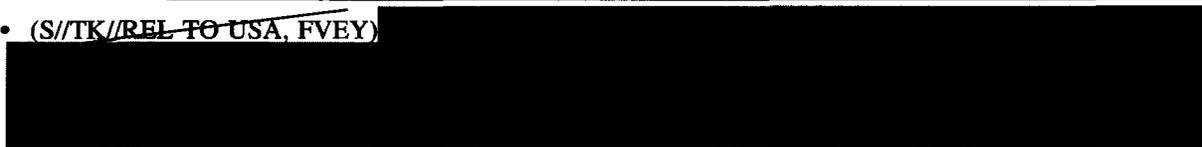
- (U//FOUO) Core systems that provide distribution services through switches and routers. This portion of the network is migrating from an asynchronous transfer mode (ATM) backbone to an Internet Protocol (b)(3) 5 (b)(3)50 USC 403-1 backbone to facilitate cross-agency, cross-department information and data sharing. Core systems will also demonstrate the Common Services Layer-Global (CSL-G), aka Quicksilver, concept which will promote collaboration and information sharing among peered networks based on community-recognized electronic credentials at the FIVE EYES dissemination level . Core also procures high-speed cryptographic devices and timing systems.

- (U) Edge systems that provide distribution services through classified and unclassified local area networks (previously known as the Next Generation Edge/LAN), and the newly acquired PuppetMaster program (a recapitalization of the Future Architecture for Command and Telemetry Services system) supporting satellite and launch operations (state of health/command and control).

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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- (S//TK//REL TO USA, FVEY) ███████████████████████████████
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- (U//FOUO) Complete the acquisition effort to migrate from an ATM backbone to an IP/(b)(3)(backbone.

- (U) Acquire the PuppetMaster program, supporting satellite command and telemetry requirements.

- (U) Support CSL-G technology insertion and system demonstrations while performing mission operations.

- (U) Continue migration to a unified management information system platform to support unclassified, secret/collateral, and TS/SCI enterprise environments.

- (U) Develop an automation environment to facilitate virtualized user desktops and standard storage, computing, and server load-balancing infrastructure.

- (U) Implement next generation IT and telecommunications capabilities, fundamental to the NRO's ability to ensure continuous improvement, provide cost-effective IT services, leverage the strengths of the market base, and adapt to future IT architectures and industry trends.

(U) Changes From FY 2012 to FY 2013:

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- (U) Increases:

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(U) ENTERPRISE IT SYSTEMS
(U) ENTERPRISE ARCHITECTURE AND PLANNING

This Exhibit is SECRET//NOFORN

(U) Project Description

(U) The Enterprise Architecture and Planning project provides resources to support the secure and effective management of NRO IT resources and IT workforce. The CIO advises the Director, NRO, and NRO senior managers on all IT- related matters. The CIO develops NRO IT strategy and policies that incorporate National, IC, Federal, and DoD guidance into the NRO Enterprise Architecture (EA) and into the NRO IT Architecture. The CIO develops and implements an IT portfolio management program to govern how the NRO evaluates, selects, acquires, controls, manages, operates, and maintains IT.

(U) Base resources in this project are used to:

- (U) Maintain and update the NRO IT Strategy to inform activities throughout the NRO on the vision and direction for IT.

- (U) Develop the NRO IT Strategic Plan and provide a roadmap for the development of IT capabilities needed for NRO mission and business activities.

- (U) Define the NRO EA to provide data and information useful for NRO seniors in making investment decisions and in meeting DNI and OMB EA requirements.

- (U) Maintain and update the NRO IT Architecture to identify IT capabilities and functions needed to accomplish the NRO mission and business objectives.

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

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

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

- (U) Facilitate integrated ground architecture efforts to integrate and align legacy ground and industry partner connected management information systems with IC standards for connections to NRO and IC Top Secret systems.

(U) There are two new activities in this project for FY 2013:

- (U) Begin the implementation phase of IC Federated Network information sharing project.

- (U) Increase information exchange, coordinate and develop policies, and facilitate decisionmaking for the Common Operating Environment CIO initiative in support of the Common Operating Environment Director's Statement of Strategic Intent.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Maintain and update the NRO IT Strategy.

- (U) Manage and update the NRO IT Architecture Plan/Strategy.

- (U) Maintain and update the NRO IT Standards.

- (U) Improve the NRO's ability to account for the depth and breadth of NRO IT resources across the enterprise by continuing the development and implementation of clear and concise IT policies, clear and accountable governance, and improved insight, oversight, and management of NRO IT resources, as well as expand the CIO span of influence in IT decision making and corporate governance.

- (U) Mature the IT investment portfolio for increased insight and improved decision making.

- (U) Continue enterprise integration support for agency-wide issues and IC working groups and forums.

- (U) Improve IT efficiency, effectiveness and information sharing across the NRO and the IC.

(U) Changes From FY 2012 to FY 2013:

(S//NF)

- (U) Increases:

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- (U) Decreases:

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- (U) Realignments in:

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(U) ENTERPRISE IT SYSTEMS
(U) INFORMATION ASSURANCE

This Exhibit is SECRET//NOFORN

(U) Project Description

(U) The Information Assurance (IA) project provides the resources to effectively govern the NRO enterprise IA program and guide NRO Directorates and Offices in their implementation of IA activities and solutions. The CIO plans for IA as an enterprise capability to enable and safeguard the mission. The IA program consists of a governance structure, defined IA architecture, enterprise vulnerability management, enterprise risk management, certification and accreditation (C&A), information systems security engineering, a cross-domain support office, a Privacy Office, and a comprehensive training program.

(U) Base resources in this project are used to:

- (U) Engage ad hoc assessment teams to measure success of vulnerability mitigation actions and examine mission critical/essential systems to identify specific vulnerabilities.

- (U) Further Enterprise Vulnerability Management by enhancing the Enterprise Vulnerability Assessment and Remediation process while mitigating known technical vulnerabilities and addressing inspection and audit findings.

- (U) Develop the enterprise IA Architecture; define Service Descriptions for use by NRO Directorates and Offices assigned as common service providers; and provide gap analysis on CIA architecture and way forward for meeting common services.

- (U) Lead security accreditation for all NRO systems; transition roles and responsibilities in accordance with IC Directive 503; and transition to the new NRO C&A process.

    — (U) Oversee implementation of the Continuous Monitoring Program Strategy to start continuously monitor critical controls across all NRO systems.

    — (U) Oversee transition a new formal assessment and authorization tool.

- (U) Perform enterprise information systems security engineering to include:

    — (U) IA requirements definition and refinement.

    — (U) Security Control Assessments.

    — (U) Independent Verification and Validation (IV&V) activities in support of the implementation of the Continuous Monitoring Strategy enabling network situational awareness.

- (U) Support FISMA compliance activities; produce quarterly and annual FISMA reports; and support OMB Exhibit 53/300 annual reporting requirements.

- (U) Enhance the NRO Privacy program in support of the Senior Agency Official for Privacy.

- (U) Champion IA workforce professionalization through increased skills training.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Engage ad hoc assessment teams to measure success of vulnerability mitigation actions and examine mission critical/essential systems to identify specific vulnerabilities.

- (U) Further Enterprise Vulnerability Management by enhancing the Enterprise Vulnerability Assessment and Remediation process while mitigating known technical vulnerabilities and addressing inspection and audit findings.

- (U) Continue to develop the enterprise IA Architecture; define Service Descriptions for use by NRO Directorates and Offices assigned as common service providers; and provide gap analysis on IC IA architecture and way forward for meeting common services.

- (U) Lead security accreditation for all NRO systems; transition roles and responsibilities in accordance with IC Directive 503; and transition to the new NRO C&A process.

  — (U) Oversee implementation of the Continuous Monitoring Program Strategy to start continuously monitoring critical controls across all NRO systems.

  — (U) Oversee transition a new formal assessment and authorization tool.

- (U) Perform enterprise information systems security engineering to include:

  — (U) IA requirements definition and refinement.

  — (U) Security Control Assessments.

  — (U) IV&V activities in support of the implementation of the Continuous Monitoring Strategy enabling network situational awareness.

- (U) Continue supporting FISMA compliance activities and producing quarterly and annual FISMA reports and support OMB Exhibit 53/300 annual reporting requirements.

- (U) Continue to enhance the Privacy program in support of the Senior Agency Official for Privacy.

- (U) Increase number of IA workforce members with required DoD 8570 training.

(U) Changes From FY 2012 to FY 2013:

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(U) RESEARCH & TECHNOLOGY
(U) RESEARCH & TECHNOLOGY DEVELOPMENT

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(U) Project Description

(U) The Research & Technology Development project provides resources for the NRO's advanced research and development (AR&D) activities to deny adversaries sanctuary in time and space by focusing on technology for intelligence dominance: new sources and methods, more effective utilization of on-orbit assets, and advanced multi-INT ground architectures. Our Science and Technology (S&T) efforts encompass basic research, applied research, advanced technology development, and advanced component development & prototypes. Our investment activities enable evolutionary and revolutionary improvements to current and future GEOINT, SIGINT, multi-INT, communications, and ground systems to improve our capabilities.

(U) Base resources in this project are used for research and development in the following focus areas:

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- (U) Temporal Responsiveness: Ability to task ISR system elements with the appropriate speed relative to the target dynamics and optimize collection efficiencies and responsiveness to tactical users. This includes machine-to-machine tasking, tip and cue, target hand-off, and dynamic user interaction.

- (U) The Unexpected: New sources and methods employing new sensors and phenomenology, and unusual or unexpected uses of existing sensor systems.

- (U) Target Discrimination: Ability to use multiple and diverse sensors, correlated temporally and spatially, against the same target in order to more fully understand, characterize, and identify with higher confidence.

- (U) Patterns of Life: Ability to take advantage of massive data sets, multiple data sources, and high-speed machine processing to identify patterns without a priori knowledge or pattern definition; visualization and presentation of patterns for human interpretation to enable identification of normal and abnormal behaviors to detect, characterize, and identify elusive targets.

- (U) Operate-Through: Architectures, system designs, and technologies that enable continued operations in threat situations, manage threats and potential damage, and continue with significant ISR operational capabilities in space, ground and cyber domains.

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

(U) Basic Research

(U) Develop new and innovative sources and methods through the Director's Innovation Initiative (DII), Directed Basic Research efforts, 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 environment to invest in cutting edge technologies and high-payoff concepts relevant to the NRO's mission. Directed Basic Research efforts are classified solicitations that address specific technology areas that will provide the nation and the IC with actionable intelligence to solve current and enduring problems.

(U) Communications Technology

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

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- (U) Technologies, methodologies, and risk reduction activities in support of future ground terminals.

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(U) Crosscutting Technology

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

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- (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) Advanced power electronics.

- (U) Multi-INT ground processing and mission management technologies.

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- (U) Ground Research, Integration, and Development lab to facilitate software development and evaluation, and provide initial exposure of products and services to users.

- (U) International research and development partnerships (Square Dance).

- (U) Technology Forum/Technology Symposium coordination to synchronize government and industry research and development interests and priorities.

- (U) NRO advanced technology programs in partnership with the Air Force Research Laboratory and the National Laboratories.

- (U) Preserve and expand overhead collection capabilities in contested space.

- (U) Innovate cross-domain enterprise solutions for achieving architectural survivability.

- (U) Emerging opportunities for technology investment.

(U) GEOINT Technology

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

- (U) New collection sources and methods scalable to space.
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(U) SIGINT Technology

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

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- (U) Digital beam forming and processors for phased arrays.

(U) In addition, there is one new activity in this project for FY 2013—develop a set of methodologies and enabling technologies to provide a dynamically self-optimizing, user- and problem-centric, multi-INT tasking, collection, processing and dissemination architecture for current and future NRO systems.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Conduct the annual DII solicitations and Directed Basic Research to identify high potential payoff technologies for the NRO.
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- (U) Complete phased array prototype (Electronically Steered Array) antenna testing, demonstrating Technology Readiness Level 6, and exercise with breadboard processing capability.

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(U) Changes From FY 2012 to FY 2013:

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(U) RESEARCH & TECHNOLOGY
(U) RESEARCH & TECHNOLOGY SUPPORT

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(U) Project Description

(U) The Research & Technology Support project provides engineering and infrastructure support to the Director, Advanced Systems & Technology (AS&T), for research and technology activities.

(U) Base resources in this project are used for:

- (U) State-of-the-art engineering and scientific analysis.

- (U) Technology analysis and forecasting.

- (U) Contract, financial, and human resource management.

- (U) Information Technology.

- (U) Security.

- (U) Computer-aided design, simulation technology, and applications.

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

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013—continue engineering and infrastructure support to the AS&T Directorate.

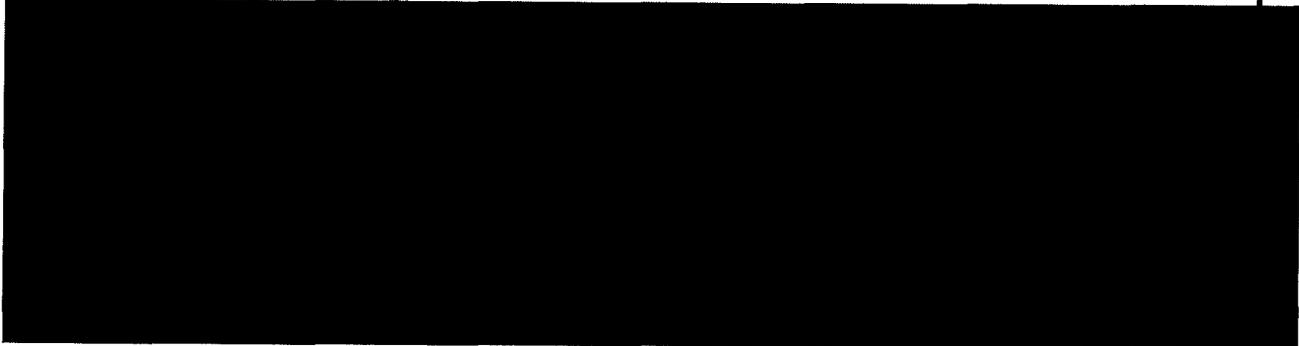(U) Changes From FY 2012 to FY 2013:

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(U) ENTERPRISE MANAGEMENT
(U) ACQUISITION MANAGEMENT

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(U) Project Description

(U) The Acquisition Management project includes acquisition support resources for the within the IMINT, SIGINT, and Communications (COMM) Directorate-level staffs.

(U) Base resources in this project are used for:

- (U) Acquisition support activities in this project include travel, training, awards, Contract Advisory and Assistance Services, and FFRDC support.

- (U) Support for directorate front office operations, financial management, and security.

(U) There are three new activities in this project for FY 2013:

- (U) COMM Directorate master schedule management and oversight was transferred from the Systems Engineering project.

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- (U) COMM Directorate risk management analysis for master schedule management.

(U) The NRO expects the project to accomplish the following in FY 2013—provide directorate-level acquisition and operations support.

(U) Changes From FY 2012 to FY 2013:

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- (U) Realignments in:

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(U) ENTERPRISE MANAGEMENT
(U) CONTINUITY OF OPERATIONS (COOP)

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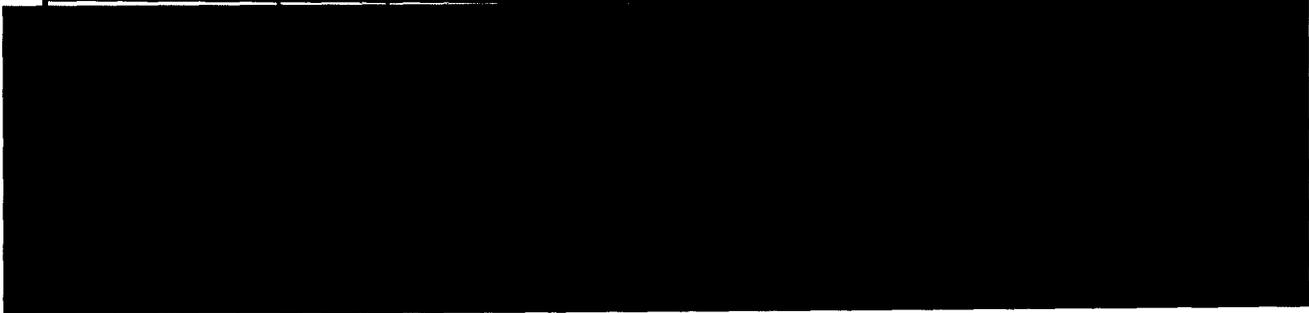
(U) Project Description

(U) The Continuity of Operations project provides oversight of program activities and funding required to ensure critical NRO systems and functions continue to operate under contingency scenarios.

(U) Base resources in this project are used for:

- (U) Development and integration of systems, procedures and processes to support continuity of operations capabilities.

- (U) Transfer of operational control of NRO assets to alternate locations.

- (U) Mission system reconfiguration and restoration.

- (U) Exercise and maintenance of governing processes.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Manage and oversee the NRO's continuity capabilities (EMS_00034).
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(U) Changes From FY 2012 to FY 2013:

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(U) ENTERPRISE MANAGEMENT
(U) EDUCATION AND TRAINING

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[REDACTED]

(U) Project Description

(U) The Education and Training project provides resources for NRO and IC corporate initiatives that focus on improving workforce performance.

(U) Base resources in this project are used for:

- (U) Training courses.

- (U) Career and professional development programs.

- (U) Retention initiatives.

- (U) Exploitation of joint IC training opportunities.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Improve and expand course offerings to advance acquisition professional certifications.

- (U) Integrate NRO University with ODNI-affiliated intelligence and acquisition universities and expand course offerings across the IC.

- (U) Provide leadership development courseware to support ODNI and NRO succession planning programs.

- (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 to compete for and attend external training and education courses (EMS_00018).

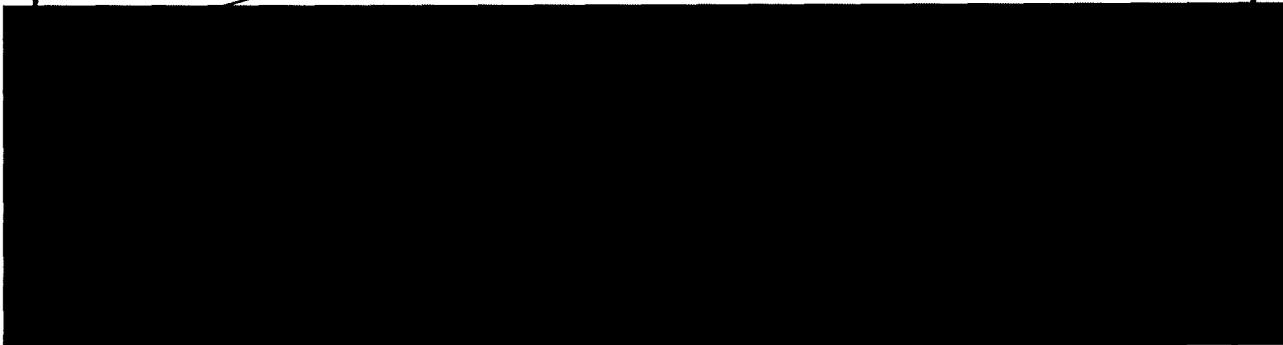(U) Changes From FY 2012 to FY 2013:

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(U) ENTERPRISE MANAGEMENT
(U) FINANCE

This Exhibit is SECRET//NOFORN

(U) Project Description

(U) The Finance project provides resources for NRO funds accounting in accordance with Generally Accepted Accounting Principles, timely and accurate processing of invoices, and preparation of external financial statements per OMB direction.

(U) Base resources in this project are used for:

- (U) Financial policy guidance for NRO programs to ensure efficient and effective financial management and financial regulation compliance.

- (U) Business IT support for NRO financial applications and systems including the NRO Financial Information System, Electronic Procurement Exchange business suite, Financial Information Requirements Tool, and electronic invoicing.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Sustain a clean audit opinion on the FY 2012 NRO financial statements.

- (U) Continue the upgrade of the NRO Financial Information System (NFIS), the NRO's enterprise-wide, web-based financial transaction management and administrative system.
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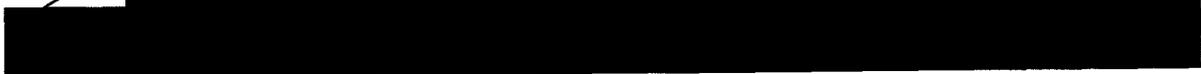(U) Changes From FY 2012 to FY 2013:

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(U) ENTERPRISE MANAGEMENT
(U) HEADQUARTERS MANAGEMENT

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(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, Office of Equal Employment Opportunity, Inspector General (IG), Business Plans and Operations, Contracts, Acquisition Center of Excellence (ACE), CAIG, Office of Policy and Strategy, Office of Strategic Communications, Center for the Study of National Reconnaissance, and Resource Management.

(U) Base resources in this project are used for:

- (U) Corporate legal counsel, contract management, contract settlement, complaint processing, reasonable accommodations for persons with disabilities, awareness training and diversity programs, program and budget analysis, budget formulation and defense, budget reporting, Strategic Communications, Business Plans and Operations, and DNRO management functions.

- (U) Acquisition best practices through support to source selection efforts.

- (U) Acquisition training for the NRO work force via seminars, formal training courses and just-in-time training.

- (U) Independent cost analysis support for NRO acquisitions including estimates, earned value assessments, trade studies, the Integrated NRO Architecture initiative, refinement of estimating analysis tools and techniques and joint cost research, methods development, and data collection.

- (U) IG provides comprehensive oversight of NRO programs and operations through audits, inspections, investigations, and special reviews. The IG fulfills the oversight role for the statutory-required annual audits of the NRO Financial Statements and the Federal Information Security Act (b)(3)50 USC 40 IG training provides travel and training of IG personnel necessary to meet professional standards and certification (b)(3)50 USC 40 IG statutory-required support for Council of the Inspector General on Integrity and Efficiency (b)(3)50 USC 403-1

(U) In the opinion of the NRO's Office of Inspector General, the IG has a strategic plan in place to manage the 37 percent budget reduction in the FY 2013 request. Future budget cuts to the IG, however, must not be greater than those commensurate with the average cuts across the NRO. There is no greater time when an organization is in need of oversight than in times of significantly decreasing budgets. It is during difficult fiscal decline that fraud is most likely to occur, when management controls weaken, and when unintended performance risks take root.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Complete the NRO Agency Financial Report, submit quarterly metrics updates to ODNI, submit FY 2014 CBJB and FY 2015 IPBS, and conduct quarterly execution reviews.

- (U) Integrate and expand earned value management support contracts and cost estimating support contracts, develop program life cycle ICEs, provide independent earned value analysis on NRO major system acquisitions, and support ad hoc cost estimation requests.

- (U) Support approximately 120 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 corporate regulatory structure to satisfy OMB, ODNI, DoD, and internal NRO requirements and standards.

- (U) Develop and implement NRO strategy and policy while advocating for NRO interests and supporting national, DoD, IC, civil space, commercial and international overhead reconnaissance policy and strategy.

- (U) Conduct comprehensive audits, inspections, investigations and special reviews of NRO programs and operations. Fulfills oversight role for the annual audit a statutory requirement of NRO financial statements and the Federal Information Security Act.

(U) Changes From FY 2012 to FY 2013:

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(U) ENTERPRISE MANAGEMENT
(U) HUMAN RESOURCES

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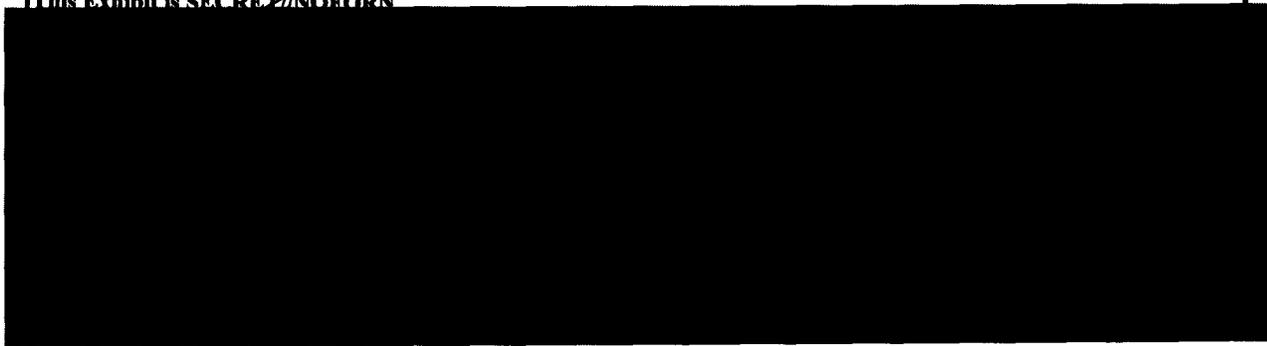
(U) Project Description

(U) The Human Resources project provides resources for NRO strategic human capital programs as well as payroll and related costs for NRO civilian personnel. The NRO strategic human capital programs include enterprise workforce analysis and planning; recruitment and academic outreach; leadership and organizational development, talent assessment and management, succession management, and employee engagement initiatives; life cycle personnel management services, enterprise position management, personnel policies, and employee recognition; and data integrity, analysis, and management.

(U) Base resources in this project are used for:

- (U) Reimbursement to the CIA for personnel support and travel costs for retirees and new employees, and other non-personal services costs.

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- (U) Enterprise workforce analysis and planning supporting a strategic initiative for workforce development, recruitment and retention of qualified personnel.

- (U) Lifecycle personnel management, to include position management, policies and employee recognition.

(U) With the exception of the 74 positions within the HR project, positions are distributed among the other ECs within the NRP.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013—continue implementing civilian pay systems and leadership development and workforce planning initiatives.

(U) Changes From FY 2012 to FY 2013:

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(U) ENTERPRISE MANAGEMENT
(U) NRO MISSION SUPPORT

This Exhibit is SECRET//NOFORN

(U) Project Description

(U) The NRO Mission Support (NMS) project directly supports national decisionmakers, Combatant Commanders, and deployed military forces by developing and delivering quick reaction capabilities, as well as innovative tactics, techniques, and procedures and material solutions, to improve the ability of the NRO to satisfy emerging IC and DoD information needs. The NMS project places top priority on developing capabilities that provide multi-INT, multiplatform, and fully integrated information in timeframes actionable by the users. These capabilities are developed in concert with Mission Partners (NSA, NGA, CIA, etc.) and users to solve the customers' operational and intelligence needs/problems. 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 and integrating NRO-wide enterprise solutions to quickly respond to their urgent operational and intelligence needs. 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 pursue and capture high-value targets.

(U) Base resources in this project are used to:

- (U) Proactively engage customers by providing:

    - (S//REL TO USA, FVEY)

    - (U) Real-time direct technical support to operations and integration of new capabilities to assist operations via the Forward Presence Program.

    - (U) Timely understanding of NRO operational systems status, technical capabilities, collection mitigation strategies, and system acquisition schedules to senior DoD leadership.

    - (U) Services that facilitate the planning, concepts of operations development, tactics, techniques, and procedures development, and integration of technology capabilities into DoD and IC agency operations.

- (U) Rapidly develop and deliver capabilities that provide actionable operational and intelligence information by:

  — (U) Enabling appropriate user access to all pertinent NRO collected data in an operationally relevant timeframe.

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  — (U) Developing and deploying multi-INT, multi-domain, multi-platform, and multisensor data fusion and integration capabilities that improve the quality and timeliness of ISR systems and data collection, processing, exploitation, and dissemination for military, national, and civil customers.

(U) These developments will focus on:

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

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

- (U) Evolving NRO capabilities to support Personnel Recovery and Combat Search and Rescue.

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

- (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) Leveraging existing and emerging information sources and methods, including multi-INT technologies in imagery and geospatial information, to implement new community initiatives focused on system integration, tool development and integration, information sharing, fusion, and quick product delivery to address complex problems.

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

- (U) Analyzing the performance of missile warning systems, including configuration assessments at each of the COCOMs.

- (S//TK//NF) ██████████████████████████████

- (S//TK//REL USA, FVEY) ████████

- (S//NF) ████████████████████████████████████

- (S//TK//NF) ████████████████████████████████

- (S//TK//NF) ████████████████████████████████

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

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

- (U) Provide intelligence data to warfighters in the field using mobile devices.

- (U) Enhance the detection and tracking of maritime vessels.

- (S//TK//NF) ████████████████████████████████

(U) Changes From FY 2012 to FY 2013:

(S//NF) ████████████████████████

- (U) Increases:

  - (S//TK//NF) ████████████████████████████

  - (S//TK//NF) ████████████████████████████

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- (S//NF) ████████████████████████████

(U) ENTERPRISE MANAGEMENT
(U) SECURITY

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(U) Project Description

(S//NF)

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(U) Base resources in this project are used for:

- (U) Development and distribution of security policy guidance.

- (U) Identification, analysis, and dissemination of information on terrorist and foreign intelligence service threats.

- (U) Planning long-range security initiatives.

- (U) Security clearance investigations (EMS_00030, 00032).

- (U) Polygraph examinations.

- (U) Adjudication and granting of NRO accesses (EMS_00031).

- (U) Physical security, inspection, and accreditation of secure facilities and information systems.

- (U) Security, information assurance, and CI training and awareness products for NRO employees.

- (U) Counterintelligence.

- (U) Dedicated cyber CI program to protect information systems from exploitation and potential insider threat

(S//NF)

██

(U) The NRO expects the project to accomplish the following in FY 2013:

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

- (U) Complete 15,000 initial and periodic clearance reviews to stay within the ODNI 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) Perform facility accreditations and site assessments on NRO and contractor facilities and sites and complete the implementation of Intelligence Community Directive (ICD) 503 IT systems security risk management, certification, and accreditation policy.

- (U) Continue the Cyber-CI program for proactive detection and neutralization of insider threat.

(U) Changes From FY 2012 to FY 2013:

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- (U) Decreases:
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    - (S//NF) ████████████████████████████████

- (S//NF) ██

(S//NF) ███████████████████████████████

- (S//NF) █

- (U) Decreases:
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    - (S//NF) ████████████████████████████████████

- (U) Realignments out:
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    - (S//NF) █████████████████████████████████

(S//NF) ████████████████████████████

- (U) Increases:
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- (S//NF) █████████████████████████████████

(U) ENTERPRISE MANAGEMENT
(U) SPECTRUM MANAGEMENT

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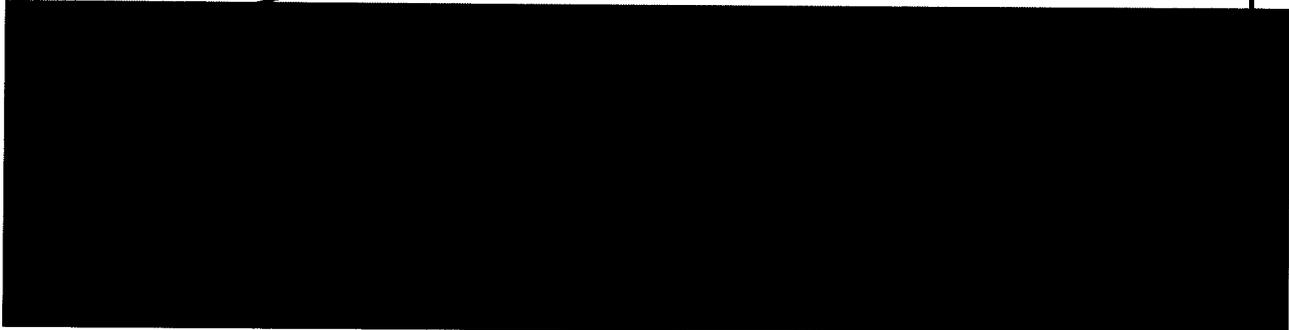
[REDACTED]

(U) Project Description

(S//TK//REL TO USA, FVEY) [REDACTED]

(U) Base resources in this project are used to:

- (S//TK//REL TO USA [REDACTED]

- (S//TK//REL TO USA [REDACTED]

- (S//TK//REL TO USA [REDACTED]

- (U) Guide evolving NRO program offices on space and terrestrial spectrum matters relating to future acquisitions, innovation, and experiments.

- (U) Give immediate, emergency support in response to real-world frequency interference issues in operational scenarios.

- (S//TK//REL TO USA [REDACTED]

- (S//TK//REL TO USA [REDACTED]

- (S//TK//REL TO USA [REDACTED]

- (S//TK//REL TO USA [REDACTED]

- (S//TK//REL TO USA [REDACTED]

- (S//TK) ████████████████████████████

(S//TK//NF) ████████████████████████████

(U) The NRO expects the project to accomplish the following in FY 2013:

- (S//TK//REL TO USA ████████████████████

- (U) Serve as the lead IC element for spectrum related equities.
- (S//TK//NF) ████████████████████████████

(U) Changes From FY 2012 to FY 2013:

(S//NF) ████████████████████████████

- (S//TK//NF) ████████████████████████████

- (S//NF) ████████████████████████████
- (S//NF) ████████████████████████████

Spectrum Management Project Budget Chart
FY 2013 Budget Request by Appropriation Account
This Exhibit is SECRET//NOFORN

(U) ENTERPRISE MANAGEMENT
(U) SYSTEMS ENGINEERING

This Exhibit is SECRET//NOFORN

[REDACTED]

(U) Project Description

(U) The Systems Engineering project provides enterprise systems integration and architecture systems engineering activities in support of the NRO. The NRO Systems Engineering Directorate (SED) utilizes government personnel and core contractors (CAAS/SETA and FFRDC) 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. SED ensures 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) Base resources in this project are used to:

- (U) Interface directly with the IC to ensure space intelligence collection needs are met. Develop system-level architectures for GEOINT, SIGINT and communication systems. Specific functions include requirements management, architecture management, risk management/mitigation, schedule management, and configuration management.

- (U) Lead and drive new and innovative strategic solutions that leverage mission partner efforts and build upon multi-INT information with enhanced data access, content, and delivery timelines. Push efficiency initiatives across the NRO to enable more capability with current systems.

- (U) Prepare for and execute review functions independent from program offices to include, but not limited to, conducting major system level reviews such as System Requirements Reviews, Preliminary Design Reviews, and Critical Design Reviews.

- (U) Conduct major cross-departmental decision boards including, but not limited to, moving capabilities from the development phase into every day operations that make intelligence data available for worldwide use.

- (U) Perform enterprise mission assurance to prevent on-orbit satellite failures.

- (U) Inform and provide the technical basis for enterprise-level programmatic decisions. Provide the NRO Technical Planning Guidance which enables budget resource trades across the NRO.

- (S//TK//REL TO USA, FVEY) [REDACTED]

- (S//TK//REL TO USA, FVEY) ███████████████████████████
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- (S//TK//NF) ██
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- (U) Perform end-to-end integration and end-to-end testing to assure the each system can perform as planned for launch and operations from both a ground and vehicle perspective. Perform final enterprise reviews prior to FY 2013 NRO launch campaign.

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

- (U) Develop NRO satellite and ground requirements and maintain/run system-level modeling and simulation to ensure satellites meet performance commitments and IC/warfighter needs.

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

- (U) Implement effective NRO-level engineering and industrial base policies, processes, and initiatives. Execute industrial base efforts to retain key capabilities.

- (U) Perform enterprise-level analysis supporting requirements and architecture development and interface definition.

- (U) Provide technical analyses and represent the NRO for overhead-related IC and DoD interactions.

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

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

- (U) Conduct NRO enterprise level analyses addressing protection, survivability, and counter denial and deception.

- (U) Work with IC partners to ensure end-to-end continuity and security of essential functions in primary and reconstituted modes to ensure access to critical capabilities across IC agencies and customers.

- (U) Provide oversight and management of NRO enterprise-level systems engineering processes and tools.

(U) There are no new activities in this project for FY 2013.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Perform enterprise end-to-end testing and reviews prior to and after launches to ensure that the planned FY 2013 NRO launches are successful.
- (S//TK//REL TO USA, FVEY) ████████████████████████████
- (S//TK//REL TO USA, FVEY) ████████████████████████████
- (S//TK//NF) ████████████████████████████
- (S//TK//REL TO USA, FVEY) ██████████████████████████
- (U) Mitigate risks to NRO systems by ensuring that critical technologies developed and produced by space industrial base industry partners are protected as part of the NRO's strategic planning efforts.

- (U) Translate capabilities into mission architecture requirements and standards through the Mission Architecture Requirements Document to allocate mission architecture requirements to NRO systems.

- (U) Publish NRO Enterprise Plan to establish and document architecture thrusts and vectors.

- (U) Produce mission architecture metrics and perform analysis including Functional Availability and Mean Life Estimates to ensure capabilities meet mission needs.

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

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

- (U) Implement a standardized NRO enterprise requirements, schedule, and configuration management tool suite.

(U) **Changes From FY 2012 to FY 2013:**

(S//NF) █████████████████████████████████

- (S//TK//NF █████████████████████████████

- (S//NF) ██████████████████████

- (U) Realignments in:

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- (U) Increases:

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- (U) Realignments out:

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(U) FACILITIES AND LOGISTICS
(U) FACILITIES

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(U) Project Description

(S//TK//REL TO USA, FVEY) ████████████████████████████████
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(U) All NRO enterprise facilities design and construction funds are consolidated in the Facilities project, consistent with NRO guidance for construction budgeting consolidation and construction classification reporting. Major construction is defined as any new construction, capital improvement, refurbishment, repair or replacement with a cost of $2 million or higher. Minor construction is defined as any new construction, capital improvement, refurbishment, repair or replacement with a cost of less than $2 million.

(U) Base resources in this project are used to:

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

- (U//FOUO) Provide O&M for essential leased space in support of NRO HQ requirements within the National Capital Region. Leased facilities include ██████████████ (b)(3)50 USC 403-1 (NRP_00721).

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

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

(U) In addition, there are seven new activities in this project for FY 2013:

- (S//TK//NF) ████████████████████

- (U) ADF-Colorado (ADF-C) building 413 warehouse renovation for the Infrastructure Operation and Control Center.

- (U) ADF-C Remote Terminal Facility equipment recapitalization project, phase 2.

- (U) ADF-C Environmental Protection Agency Quad Z requirement emissions control installation.

- (U) ADF-C fuel distribution system power plant refurbishment.

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

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

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Continue progress toward the achievement of FCI of 10 percent by FY 2016 for all mission critical NRO enterprise facilities per DNI direction to improve IC foundation and infrastructure and to meet mission ground station recapitalization requirements.

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

- (U) Complete the Eastern Processing Facility (EPF) construction at CCAFS.

- (S//TK//NF) ██████████████████████

- (U) Begin renovation of the ADF-E Primary Security Operations Center and security suite.

- (U) Conduct design activities for facility recapitalization projects beginning in FY 2014, aimed at improving FCI and capacity shortfalls (NRP_00721, 00723).

(U) FACILITIES AND LOGISTICS
(U) LOGISTICS

This Exhibit is SECRET//NOFORN

(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) Base resources in this project are used for:

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

- (U) NRO environmental, safety, and system safety support, comprehensive emergency management program, fire protection program, logistics/warehousing operations, wellness support to include mental health services, records life cycle 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, process reengineering and reception and representational funds.

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

- (S//TK//NF)

- (U) Administration of the centralized NRO vehicle program to include vehicle leases, procurement, maintenance, inventory management, policy, and procedures.

(U) In addition, there are 3 new activities in this project for FY 2013:

- (U) Transition to Systems, Applications, and Products in data processing (SAP) Enterprise Resource Program (ERP) to integrate business functions, resources, and information into a unified, enterprise system for standardization of services, reduced maintenance, and better reporting capability.

- (U) Deploy an enterprise-wide electronic records management system.

- (U) Transferred the Employee Assistance Program from the Enterprise Management EC, Human Resources project to be consistent with IC deployed services support.

(U) The NRO expects the project to accomplish the following in FY 2013:

- (U) Perform sustainment efforts for hardware and software to ensure interoperability and standardization for business systems across all NRO Enterprise facilities.

- (U) Improve the Enterprise Resource Planning system relative to the functionality of the supplier-customer relationship.

- (U) Deploy an enterprise-wide electronic records management system.

- (U) Enhance the travel system functionality program including expanding its interface to the NRO's financial system.

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

- (U) Operate and maintain the Global Material Tracking System with business intelligence capabilities.

(U) Changes From FY 2012 to FY 2013:

(S//NF) ████████████████████████████████

- (S//NF) ████████████████████████████

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- (U) Increases:

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- (S//NF) ███████████████████████████████████████

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(U) ACQUISITION SUMMARIES CONTENTS

TOP SECRET//SI/TK//NOFORN

(U) SHARP

(U) Acquisition Summary
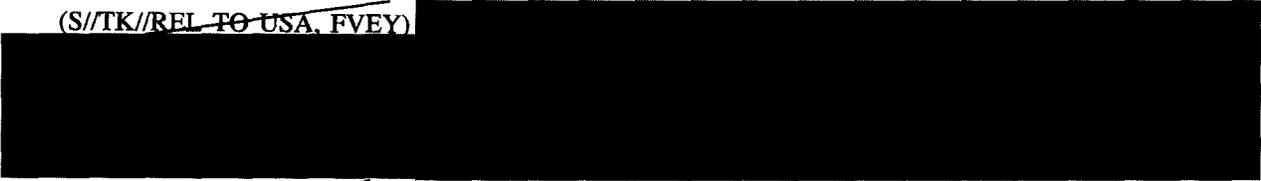
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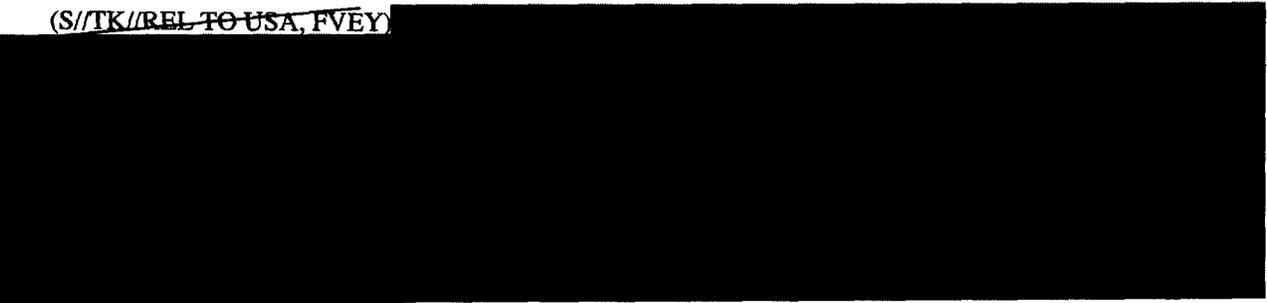(S//TK//REL TO USA, FVEY)

(U) Independent Cost Estimate

(U) The NRO CAIG SHARP ICE was completed in July 2009. To be consistent with the scope of the ICE, the budget shown in the LCC table includes space acquisition, ground command and control acquisition, system integration, and other government costs.

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

(U) Major Performers

This Exhibit is SECRET//TALENT KEYHOLE//REL TO USA, FVEY

TOP SECRET//SI//TK//NOFORN

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

(U) Acquisition Summary

(S//TK//NF) ███████████████████████████████
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(U) Independent Cost Estimate

(U) To be consistent with the scope of the ICE, the budget shown in the LCC table includes space acquisition, system integration, and other government costs.

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(U) Major Performers

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This Exhibit is SECRET//TALENT KEYHOLE//REL TO USA, FVEY

(U) COMMAND & CONTROL 1.1

(U) Acquisition Summary
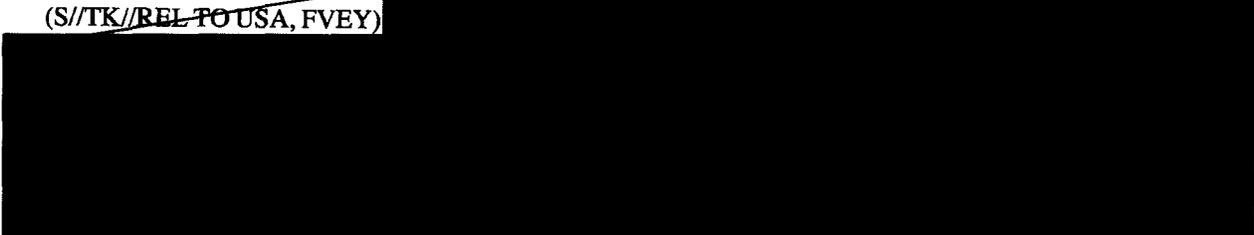
(S//TK//REL TO USA, FVEY)

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(U) The program consists of multiple contracts structured to develop and integrate new capabilities into the GEOINT command and control operational baseline. This program also contains the necessary sustaining development functions required to maintain the full operational capability of these systems.
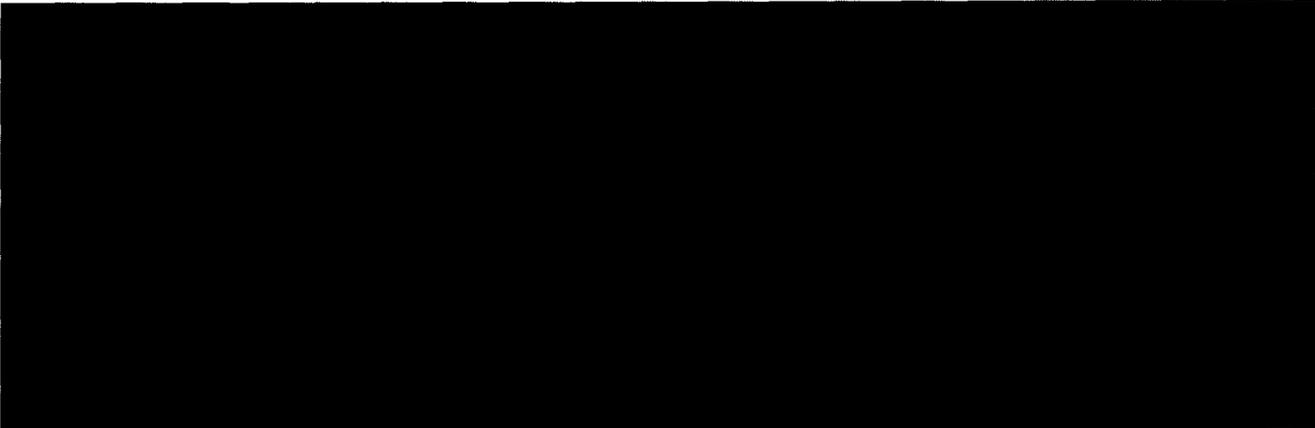
(S//REL TO USA, FVEY)

██

(U) The ODNI and OSD approved the Command and Control Block 1 Increment 1 MSA baseline in September 2010 and November 2010, respectively.

(U) Independent Cost Estimate

(U) A joint NRO/DNI CAIG ICE was completed for Command and Control Block 1 Increment 1 program in July 2010. The JIAB evaluated and accepted funding the MSA to the Program Manager's estimate based on the nature and scope of work required to complete development. This request funds the C&C 1.1 MSA to its acquisition baseline and these funds are required to successfully complete the acquisition.

(U) Major Performers

██

This Exhibit is SECRET//TALENT KEYHOLE//REL TO USA, FVEY

(U) MISSION FRAMEWORK 1.1

(U) Acquisition Summary

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

(U) The program consists of multiple contracts structured to develop and integrate new capabilities into the Mission Framework operational baseline, as well as the necessary sustaining development functions required to maintain the full operational capability of these systems.

(U) Mission Framework is segmented into four mission activities: data services and storage, focused on increasing content and improving the timeliness; messaging and information sharing, increasing external access to collected data; core enterprise mission services (e.g. security and ephemeris); and infrastructure and network services, developing a multifunctional computing environment hosting Mission Framework applications.

(S//REL TO USA, FVEY)

(U) The ODNI and OSD approved the Mission Framework Block 1 Increment 1 MSA baseline in September 2010 and November 2010, respectively.

(U) Independent Cost Estimate

(U) A joint NRO/DNI CAIG ICE was completed for Mission Framework Block 1 Increment 1 program in July 2010. In FY 2013, Mission Framework is funded to the Program Manager's estimate. The JIAB evaluated and accepted the risk associated with funding the MSA to the Program Manager's estimate based on the nature and scope of work required to complete development of NRO Ground Enterprise Block 1 Increment 1.
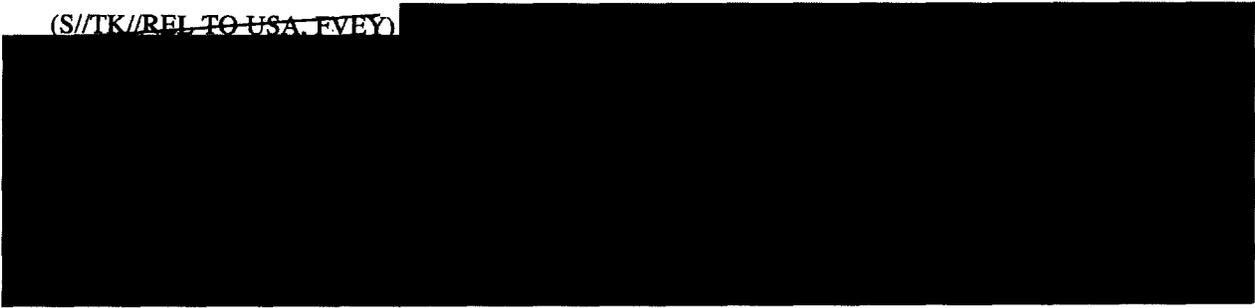
(U) MISSION MANAGEMENT 1.1

(U) Acquisition Summary

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

[REDACTED]

(U) The program consists of multiple contracts structured to develop and integrate new capabilities, including COTS hardware and software as well as custom software, into the Mission Management operational baseline. This program also contains the necessary sustaining development functions required to maintain the full operational capability of these systems.
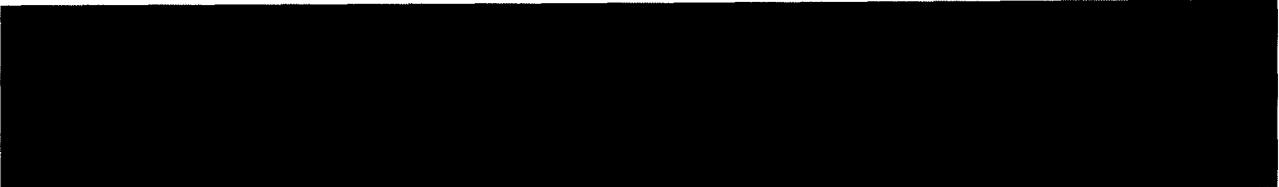
(S//TK//REL TO USA, FVEY)

[REDACTED]

(U) The Mission Management Block 1 Increment 1 MSA baseline was approved by the ODNI and OSD in September 2010 and November 2010, respectively.

(U) Independent Cost Estimate

(U) A joint NRO/DNI CAIG ICE was completed for Mission Management Block 1 Increment 1 program in July 2010. In FY 2013, Mission Management is funded to the Program Manager's estimate. The JIAB evaluated and accepted the risk associated with funding the MSA to the Program Manager's estimate based on the nature and scope of work required to complete development of NRO Ground Enterprise Block 1 Increment 1.

(U) Major Performers

[REDACTED]

This Exhibit is SECRET//TALENT KEYHOLE//REL TO USA, FVEY

(U) NRO MISSIONS AND FUNCTIONAL AVAILABILITY

(U) NRO MISSIONS

(U) The NRO acquires and operates satellites that provide constant global access to critical information otherwise unavailable to the President, his cabinet, other national leaders and numerous customers in the Defense and Intelligence communities. These satellites provide services in three broad categories: GEOINT, SIGINT, and Communications.

(S//REL TO USA, FVEY)

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

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

(U) Functional Availability

(U) Functional Availability (FA) employs a combination of probability theory, manufacturer's wear-out data, on-orbit experience, and constellation mission satisfaction (functional success criteria/FSC) to determine constellation replenishment requirements. **FA is the probability that a *constellation of satellites* will meet specific mission requirements at a future point in time.** Different measures of FA aligned to different missions of the same constellation may be defined.

(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. The budgeted constellation replenishment plan should ensure that FA levels remain above minimum thresholds.

(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.

(U) **Mean Life Estimate (MLE).** The satellite's MLE represents the expected average life and is derived from its reliability function. Typically, a satellite has about a 50 percent chance of operating beyond its current MLE. Decisionmakers should be cautious about drawing conclusions based on MLE. MLE measures satellite "life" without considering all the key aspects of satellite functionality: payload(s) performance, requirement satisfaction, communication throughput, ground capability.

(U) The following pages present FA data on the GEOINT, SIGINT, and Communications constellations. Each section contains an FA summary, defines the functional success criteria, explains changes from last year's CBJB, and provides vehicle highlights and is accompanied by graphics displaying the constellation FA curve, a horizontal "stoplight" bar to show overall constellation status over time, and reliability data for each satellite and its MLE.

(U) RESOURCE EXHIBITS CONTENTS

(U) GLOSSARY

(U) ACE—Acquisition Center of Excellence.

(U) ACP—agency cost position. ODNI nomenclature for IC Agency Cost Assessment Improvement Group generated ICEs.

(U) ADF-C—Aerospace Data Facility-Colorado, located at Buckley Air Force Base, Denver, CO.

(U) ADF-E—Aerospace Data Facility-East, located at Fort Belvoir, Springfield, VA.

(U) ADF-SW—Aerospace Data Facility-Southwest, located at White Sands, NM.

(U) ADM—Acquisition Decision Memorandum.

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

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

(S//TK//NF)

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

(U) ARB—Acquisition Review Board.

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

(U//FOUO) (U) Ardent Gunslinger— (b)(3) 50 USC 403-1

(b)(3) 50 USC 403-1

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

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

(U) ATP—authorization to proceed.

(U) BOL—beginning-of-life.

(S//REL TO USA, FVEY)

(U) C&A—certification and accreditation.

(U) C&C—command and control.

(U) C&T—command and telemetry.

(U) CAIG—Cost Analysis Improvement Group.

(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.

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(U) CCAFS—Cape Canaveral Air Force Station, the eastern launch range, located near Cocoa Beach, FL and adjacent to NASA's Kennedy Space Center.

(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.

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(U) COMSAT—communications satellite.

(U) COMSEC—communications security.

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

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(U) CSL—Common Services Layer.

(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.

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(U) DCGS—Distributed Common Ground System.

(U) DI2E—Defense Intelligence Information Enterprise. A component of the Defense Information Enterprise that transforms information collected to satisfy intelligence needs or into forms suitable for further analysis or action. It involves integration, evaluation, and interpretation of information from available databases for use in the development of intelligence products.

(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) EC—expenditure center.

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

(U) EKMS—Electronic Communications Management System.

(U) ELC—EELV Launch Capability contract.

(U) ELS—EELV Launch Services contract.

(U) E2E—End-to-End. See Mission Communication Service.

(U) EO—electro-optical.

(U) EPF—Eastern Processing Facility. The new NRO space vehicle processing facility, currently being built at CCAFS. This facility provides the necessary support for spacecraft processing at the launch base including final preparations, testing and status monitoring prior to launch.

(U) ERP—enterprise resource planning.

(U) ESD—earliest service date.

(U) EVM—earned value management. Project management method used throughout the IC and DoD.

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

(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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(U) FCI—facilities condition index.

(U) FlexCrypto—flexible cryptographic equipment. Program to replace obsolete KG-247 cryptographic hardware.

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(U) FOC—full operational capability.

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

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(U) Gbps—Gigabits per second (10^9 bits per second).

(U) GED—NRO Ground Enterprise Directorate.

(U) GEM—ground enterprise milestone.

(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.

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(U) HVAC—heating, ventilation and cooling systems.

(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.

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(U) IOC—initial operational capability.

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

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

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

(U) JIAB—Joint Intelligence Acquisition Board.

(U) KDP—key decision point.

(U) KPP—key performance parameter.

(U) LAIS—Low Altitude Integration and Support. SIGINT Low EC budget project.

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(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) LPI/LPD—low probability of intercept/low probability of detection.

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

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(U) Mbps—Megabits per second (10^6 bits per second).

(U) MC—mission center. Functional mission are construct to organize ground development.

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

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(U) MGS—mission ground station.

(U) MHz—megahertz (10^6 Hertz or cycles per second).

(U) MIPS—million instructions per second.

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(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.

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(U) MPLS—Multiprotocol Label Switching. Data carrying mechanism that belongs to the family of packet-switching networks.

(U) MSA—major system acquisitions.

(U) MS-B—milestone B.

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(U) NAB—NRO Acquisition Board.

(U) NFIS—NRO Financial Information System.

(U) NGE—NRO Ground Enterprise. NRO ground architecture that includes all hardware and software required for command and control, mission management, and data processing for NRO spacecraft.

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(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, located at Schriever Air Force Base, Colorado Springs, CO.

(U) NROC—NRO Operations Center.

(U) NSS—National Security Space.

(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.

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(U) OPELINT—Operational Electronic Intelligence.

(U) OPIR—overhead persistent infrared. A subset of MASINT focused on infrared signatures.

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(U) OSHC—Office of Strategic Human Capitol.

(U) OSL—Office of Space Launch.

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(U) PATRIOT—NRO Communications Directorate contract.

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(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 preempt 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) PKI—public key infrastructure.

(U) PR/CSAR—personnel recovery/combat search and rescue.

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(U) PROFORMA—weapons related, machine-to-machine signals intelligence and information.

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(U) PuppetMaster – Replacement to the Future Architecture for Command and Telemetry Services (FACTS).

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(U) R/S—relay satellite.

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(U) RC-IED—radio controlled IED.

(U) RCRP—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.

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(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.

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(U) SDR—system design review.

(U) SED—Systems Engineering Directorate.

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(U) SETA—system engineering and technical assistance.

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(U) SIW—strategic indications and warning.

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(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.

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(U) SRR—system requirements review.

(U) SV—space vehicle.

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(U) TECHELINT—Technical Electronic Intelligence.

(U) TI—technical intelligence.

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(U) TRR—Test Readiness Review. A multidisciplined technical review to ensure that a subsystem or system is ready to proceed into formal test.

(U) TT&C—telemetry, tracking, and commanding.

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(S) ███████████████████████

(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 V and Delta IV EELV systems.

(U) UMIS—unclassified management information system.

(U) VAFB—Vandenberg Air Force Base, the western launch range, located near Lompoc, CA.

(U) VHF—very high frequency. Portion of radio frequency range from 30 MHz to 300 MHz.

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(U) VSAT—very small aperture terminal. Small earth station that transmits or receives satellite signals. Examples include satellite TV, shipboard communications, distance learning, and telemedicine.

(U) VWB—very wide band.

(U) WAN—wide area network.

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