

**NATIONAL RECONNAISSANCE OFFICE**

14675 Lee Road  
Chantilly, VA 20151-1715

22 August 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 22 March 2011, received in the Information Management Services Center of the National Reconnaissance Office (NRO) on 22 March 2011. Pursuant to the Freedom of Information Act (FOIA), you requested a copy of *"all unclassified portions of the NRO Congressional Budget Justification Book (CJB) for Fiscal Year 2012."*

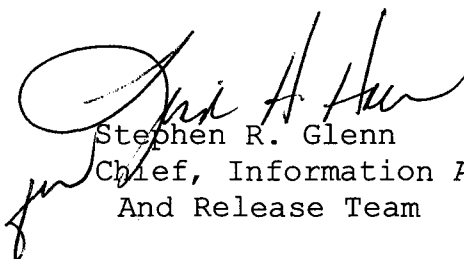
Your request was processed in accordance with the Freedom of Information Act, 5 U.S.C. § 552, as amended. A thorough search of our files and databases located one record, consisting of 546 pages, that is responsive to your request. This record is being released to you in part. Material withheld is denied pursuant to FOIA exemption (b)(3) which applies to information specifically exempt by statute, 50 U.S.C. § 403-1, 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 446 pages at .15 per page which equals \$66.90. In this case, all fees are being waived. Additional information about fees can be found on our website at [www.nro.gov](http://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 F11-0055.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen R. Glenn", is written over the typed name and title.

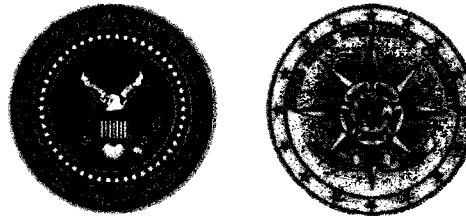
Stephen R. Glenn  
Chief, Information Access  
And Release Team

Attachment: NRO FY 2012 CBJB (546 pgs)

NRO APPROVED FOR RELEASE 21 AUGUST 2012

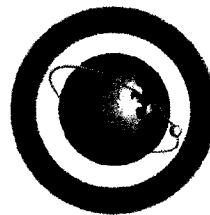
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National Intelligence Program



**FY 2012**  
**Congressional Budget Justification**

**Volume IV**



National Reconnaissance Program

February 2011

DRV FROM: NCG 6.0, 21 May 2005  
DECL ON: 25X1, 20610207  
RRG dated July 05

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DISSEMINATION CONTROL ABBREVIATIONS

NOFORN - Not Releasable to Foreign Nationals

This Component Budget of the National Intelligence Program is produced pursuant to provisions of Executive Order 12333, as amended by Executive Order 13470, and section 102A(c) of the National Security Act of 1947, as amended.



**NATIONAL SECURITY INFORMATION**

Unauthorized Disclosure Subject to Criminal Sanctions



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## (U) PROGRAM OVERVIEW

### (U) Description

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

- (U) Acquiring, launching, and operating the most capable set of satellite intelligence collection platforms ever built.
- (~~S//REL TO USA, FVEY~~) [REDACTED]
- (~~S//TK//NF~~) [REDACTED]
- (~~S//REL TO USA, FVEY~~) [REDACTED]
- (U) Providing special ground processing applications and tools to support the IC and DoD mission stakeholders.

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

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

### (U) Strategic Direction

(U) Over the past 50 years, data collected by NRO systems has provided advance warning of military aggression, supported combat operations, and assisted arms control treaty verification. More recently, data from NRO systems has been used to verify environmental treaties, support humanitarian relief efforts, identify WMD programs, and locate terrorists.

(U) Today, we face rapidly evolving threats to our national interests that are highly agile and operate without boundaries. Accordingly, we must deliver timely, relevant, and often unique capabilities that enable warfighters and policymakers to prevail decisively in the face of these emerging threats.

(U) As a part of the IC team, NRO systems must fully integrate within the national security enterprise and work to leverage opportunities to drive down costs. As such, the NRO will continue to expand the use of its acquisition model, used for decades with success in NRO SIGINT and communications development programs. The primary tenets of this acquisition model are to: ensure stable recurring engineering investments for industrial base stability and constellation health; ensure continuing non-recurring engineering investments to insert advanced capabilities and meet emerging threats; and structure these investments to reduce total program risk, improve acquisition credibility, and protect against gaps in collection capabilities. This strategy aims to stabilize production rates, strengthen our fragile industrial base, improve affordability, maximize competition, incentivize new capabilities development, and improve on-orbit constellation health. Non-recurring investments will be integrated

onto satellites only when development risk is retired, reducing total risk posture and improving acquisition success.

(U) The NRO supports all objectives for national and defense intelligence, as outlined in IC and DoD strategy and guidance. The NRP FY 2012 programmatic strategy is shaped around the following IC strategic priorities:

(S//NF) [REDACTED]

- (U) Deliver intelligence capabilities possible only through multi-INT, multiplatform, and multidomain solutions.
- (U) Integrate NRO systems across the enterprise, improving the ease, efficiency, and effectiveness of delivering new capabilities.
- (U) Improve the connectivity and integration of the NRO enterprise to other IC, DoD, and allied systems to allow a "total force" approach to solving intelligence problems.

(S//NF) [REDACTED]

- (U) Develop cutting edge systems and innovative techniques to overcome the toughest intelligence challenges and stay ahead of the threat.
- (U) Deliver rapid reaction capabilities to respond to critical user needs, and ensure customers know how to use NRO capabilities to maximum advantage.

(S//NF) [REDACTED]

- (U) Leverage security efforts to provide counterintelligence training and awareness, auditing, monitoring, and analyses for the protection of programs, technologies, and information.
- (U) Protect the integrity of US intelligence system by mitigating the risk posed by trusted insiders.

- (U) Deliver coordinated deployment of security, information assurance and human resource capabilities to provide credible identification and monitoring of anomalous employee behavior.

(S//NF) [REDACTED]

- (U) Ensure rigor and discipline in acquisition management to deliver cost-effective intelligence collection capabilities on schedule to support IC and DoD requirements.
- (U) Ensure the health, availability, and security of the current overhead constellation and associated communications networks and ground stations.
- (U) Advance promising and revolutionary technologies and demonstrate their potential to deliver groundbreaking capabilities.
- (U) Insert innovative space collection technologies and develop new techniques for NRO acquisition programs to close known collection gaps or vulnerabilities.
- (U) Leverage and implement commercial IT products and practices to reduce operating and infrastructure costs, allowing additional investment in innovative and revolutionary capabilities.
- (U) Apply engineering expertise and ingenuity to extend and expand the mission utility of on-orbit assets.
- (S//NF) [REDACTED]

(U) As we look to the NRO's next 50 years, it is important we move forward with a clear vision and an aggressive set of strategic goals. This framework is grounded in the shared values of integrity, accountability, mission excellence, and teamwork built on respect and diversity. These help to focus the NRO organization, and drive improvement across the IC. To fulfill our vision, and accomplish the DNI priorities, the NRO



must continue to strengthen and stabilize our workforce and take the lead for the IC in space.

(S//NF) [REDACTED]

- (S//SI//TK//NF) [REDACTED]

[REDACTED]

(S//NF) [REDACTED]

- (U) Expand automation of IT to provide analysis-enabling auditing and monitoring of user activity on classified computer systems to detect anomalous behavior.
- (U) Deliver a cyber security enterprise audit program to perform auditing and monitoring of classified government and contractor computer and information networks and expand cyber threat detection, mitigation and neutralization capabilities.

**(U) Annual Performance and Accountability**

(U) The NRP FY 2012 request, in concert with the FY 2010 Agency Financial Reports provided in November 2010, and "FY 2010 NIP Summary of Performance and Financial Information" dated February 2011, meets the FY 2010 annual performance and accountability requirement for the IC. The NRP is committed to demonstrating that resources produce measurable results. Relationships among resources, performance expectations, and performance results are addressed throughout the request.

**(U) FY 2012 Workforce Highlights**

(U) The central initiative for the Office of Strategic Human Capital (OSHC) will be to build on the analytical models developed for characterizing our current workforce and anticipating our future workforce requirements. Requirements will be identified in terms of skills, certifications, workforce size, etc. We will continue to seek management continuity, workforce stability, long-term perspective, and critical space-acquisition skills and experience (engineering, program management, contracting, budgeting) to execute the NRO mission. We will address these critical areas through continued engagement with our employees parent elements and agencies (CIA, NSA, NGA, USAF, USN, and USA).

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

This Exhibit is <del>SECRET//NOFORN</del>		
	Actual	Total Projected Requirements

**(U) NRP Requested Workforce Changes**

**(U) NRO Civilian Employment Plan**

(U) Innovative human resource programs are needed to support the NRO's "cradle-to-grave" approach to space systems management. The initiatives detailed below provide a comprehensive, mission-focused corporate strategy to ensure the NRO has the right workforce to meet its needs.

(U) **Strategic Staffing:** OSHC will identify NRO human capital needs and work with the parent elements to fill those needs. Activities include workforce analysis and planning, recruitment and academic

outreach, on-boarding, joint duty assignments and the Wounded Warrior program. In FY 2011, the NRO launched a 2015 Workforce Study to address workforce planning and baseline existing enterprise-wide workforce-people and positions. In FY 2012, we will continue to identify occupations of concern, develop strategies to address parent agency realities, and generate a workforce plan that is coordinated and integrated by occupation across parent agencies. We will also continue to manage the Athena Recon Scholarship Program to increase Systems Engineering expertise by offering internships to graduating college seniors.

(U) **Talent Management:** OSHC will implement talent management programs to develop and engage the workforce. Programs will focus on leadership development, organizational development, coaching, mentoring, and facilitation, and employee engagement. We will continue to work on key leadership position succession management and extend this effort to additional leadership positions within the organization.

(U) **NRO University:** The NRO will design, develop, and deliver leadership and professional-development programs that are uniquely relevant to the NRO's mission and of general benefit to the IC. NRO University will conduct course design, delivery, and evaluation and integration. NRO-unique content areas identified for accreditation include Satellite System capabilities and limitations, Space-Centric Systems Engineering and Acquisition Source Selection.

(U) **Personnel Accountability:** The NRO will secure an automated personnel accountability system and develop processes to enable global enterprise communication, recall efforts, and ensure mission success during real world contingencies or emergencies.

(U) **Personnel Resources:** The NRO's diverse workforce requires an integrated approach to the administrative and technical efforts of the parent elements and OSHC. OSHC will focus on integrating and combining life-cycle personnel management services, enterprise position management, personnel policies and employee recognition across all parent elements. A human resource information system provides authoritative employee and position data to inform decision

makers. OSHC will continue its investment toward improving data quality and integrity of this system through tighter integration with the parent element human resource systems and will extend this investment to position management, talent management, and business intelligence.

### **(U) NRP Employment Demographics**

**(U) Grade Distribution by Age:** The NRO grade distribution reflects the expertise required to satisfy its space mission. The majority of the workforce resides in senior grades: GS-13 through senior executive. The average age of NRO employees is in the late-40's to mid-50's bracket holding senior positions with 15 plus years of service, consistent with the trend in the federal government.

**(U) Retirement:** The number of experienced officers eligible or approaching eligibility for retirement is growing. Of the current workforce, 53 percent are eligible or will become eligible to retire in the next 10 years. Mission success could be impacted if retirement-eligible government personnel retire en masse since the number of employees becoming retirement eligible is not being offset by new-hires. This scenario, however, is unlikely under current economic conditions.

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

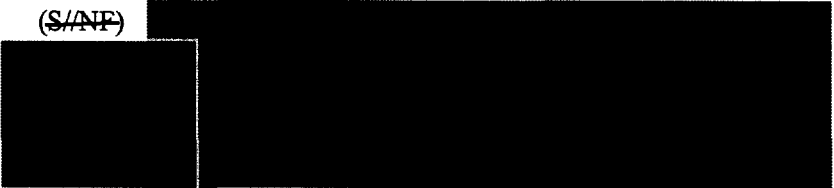
**(U)** The government civilian workforce will comprise 56 percent of the NRO government workforce by FY 2011 and grow to 58 percent by FY 2015. This projected growth will offset the reduction in the contractor workforce occurring between FY 2011 and FY 2015. Government civilians comprise 46 percent of the acquisition workforce distributed across all budget categories and are strongly represented in

the Enterprise Management and Support budget category providing a full range of services from administrative support to finance and contracting operations.

**(U)** The military workforce will comprise 44 percent and 42 percent of the government workforce by FY 2011 and FY 2015 respectively. The two percent drop is attributed to the overall growth of the government civilian personnel. The military comprises 84 percent of the NRO information technology cadre and is largely responsible for satellite communications. Additionally, the military constitutes 54 percent of the acquisition workforce, primarily serving as systems engineers and program managers in two of the largest budget categories: Collection and Operations, and Processing and Exploitation.

**(U)** NRO contractors comprise 63 percent of the total NRO workforce. The NRO relies on contractor-provided scientific and engineering expertise to augment government personnel managing highly complex systems. As government personnel resources across the IC and DoD have become stretched, recruiting people with the required occupational skills and experience has become more difficult. The resource constraints of parent agencies' have resulted in reduced fill rates and shortened tour lengths in NRO mission-critical occupations. As a result of these issues, contractors provide the technical skills that the federal workforce and military services have difficulty supplying. Contractors provide a majority of the support at mission ground stations and bring unique skill sets to the remotely-located sites. DNI-directed efficiency cuts will reduce NRO support contractors by six percent for FY 2012 – FY 2016. This cut will affect the current demographic mix and increase the need to recruit and retain a skilled government workforce.

(S//NF)





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

Resources in this project are used for:

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

• (U) Ground systems design, development, acquisition, and integration.

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

(U) The NRO expects the project to accomplish the following in FY 2012:

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

• (U) Prepare for and conduct ground systems planning and acquisition development, to include studies for future architectures, CONOPS development, capabilities definition, requirements allocation, Intelligence Capability Baseline Description/ICE development

• (U) Complete collection segment preliminary design, and begin detailed design development, engineering unit development and testing.

• (U) Following the collection segment Preliminary Design Review, prepare for and conduct a Milestone B Joint Intelligence Acquisition Board and continue technology maturation activities. Milestone B is currently scheduled for 2QFY12.

• (U) Begin Phase B activities to include procurement and production of collection segment components and subsystems including spacecraft bus elements and payloads.

(U) Changes From FY 2011 to FY 2012:

~~(S//TK//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]

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

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.

<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

(U) Project Description

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

- (U) EO risk reduction, trade studies, and analysis.
- (U) Requirements analysis.
- (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 and acquisition planning.
- (U) Travel and training.

(U) The NRO expects the project to accomplish the following in FY 2012:

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

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

(U) Changes From FY 2011 to FY 2012:

[REDACTED]

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

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

[REDACTED]

- (U) Analyses and trade studies for initial design concepts, CONOPS, and requirements for sustaining the GEOINT radar architecture and addressing emerging mission needs.
- (U) Risk reduction activities to include technology maturity assessments and development of key enabling technologies.
- (U) Contracted Advisory and Assistance Services/System Engineering and Technical Analysis (CAAS/SETA) and FFRDC support.

(U) The NRO expects the project to accomplish the following in FY 2012:

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

**(U) Changes From FY 2011 to FY 2012:**

(S//TK//NF) [REDACTED]

**(U) GEOINT RADAR  
(U) RADAR INTEGRATION & SUPPORT**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
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<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

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

[REDACTED]

- (U) Requirements analysis.
- (U) Modeling and simulation.
- (U) Transition planning and coordination.
- (U) Operations planning and 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 proposal evaluation and acquisition planning.
- (U) Space segment factory maintenance.
- (S//TK//REL TO USA, FVEY) [REDACTED]

(U) The NRO expects the project to accomplish the following in FY 2012:

- (S//TK//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]



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

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
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<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(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. Resources in this project are used for:

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

\_\_\_\_\_ [REDACTED]  
 [REDACTED]

— (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~~) [REDACTED]  
 [REDACTED]

— (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 (RCRP) activities.

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

— (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.

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

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

\_\_\_\_\_  
[REDACTED]

— (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.

\_\_\_\_\_  
[REDACTED]

— (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) The NRO expects the project to accomplish the following in FY 2012:

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

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

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

(U) Changes From FY 2011 to FY 2012:

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

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

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.

<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

(U) Project Description

[REDACTED]

(U) Resources in this project are used for:

[REDACTED]

[REDACTED]

- (U) CAAS and FFRDC support to all of the SIGINT High EC spacecraft programs. CAAS and FFRDC support is jointly funded between NRO MIP and NRP.
- (U) Trade studies, analyses, and reviews of prime contractor and subcontractor acquisition performance.
- (S//TK//REL TO USA, FVEY) [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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

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

(U) The NRO expects the project to accomplish the following in FY 2012:

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

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

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

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

**(U) Changes From FY 2011 to FY 2012:**

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

[REDACTED]

Project Budget Chart FY 2012 Budget Request by Appropriation Account This Exhibit is <del>SECRET//TK//NOFORN</del>		Funds — Dollars in [REDACTED]		
Budget Request by Appropriation*	Resourcing	FY 2010	FY 2011	FY 2012
[REDACTED]				

(U) SPACE COMMUNICATIONS  
(U) RELAY READINESS & LAUNCH

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
<sup>1</sup> Includes enacted OCO funding. <span style="float: right;">Totals may not add due to rounding.</span> <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

(U) Project Description

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

[REDACTED]

- (U) Maintain and monitor vehicles for health and safety functions.
- (U) Maintain all required test and ground equipment at factory and launch sites.
- (U) Perform all planning for spacecraft integration for launch.
- (U) Perform all systems engineering required to support launch planning, rework, and anomalies.
- (U) Perform all required test activities for call-up or readiness activities.

- (U) Perform all required rework resulting from latent problems or defects from the development contract identified after vehicle sell-off.
- (U//~~FOUO~~) Upgrade aging subsystem test equipment and perform necessary rework.
- (U) Replenish component parts inventory to accommodate vehicle call-up.
- (U) Support satellite shipments to launch site, launch vehicle system integration, and final preparation through launch of the spacecraft, both in the factory and at the launch base.

(U) The NRO expects the project to accomplish the following in FY 2012:

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

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

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
<sup>1</sup> Includes enacted OCO funding. <span style="float: right;">Totals may not add due to rounding.</span> <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

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

[REDACTED]

- (U) Requirements and CONOPS development.
- (U) Architecture development.
- (U) Independent verification and validation.
- (U) Transition to operations.
- (U) Lifecycle readiness.
- (U) Configuration, risk, and schedule management.
- (U) Technology planning and insertion.
- (U) Performance assessment.

- (U) Acquisition support activities.
- (U) Support to launch flow, readiness, and initialization activities.
- (U) Factory support for C&C.

(U) The NRO expects the project to accomplish the following in FY 2012:

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

(U) SPACE COMMUNICATIONS  
(U) MISSION SYSTEM ENCRYPTION

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

(U) Project Description

(U) The Mission Systems Encryption project provides resources to develop and deploy tailored security solutions required to support current and future spaced-based intelligence collection and special communications systems architectures. Of specific significance are the challenges of providing network-compatible encryption technologies for next generation, high-speed national security space (NSS) capabilities which enables seamless integration of space, air and ground architectures.

(U) Resources in this project are used to:

- (U) Conduct analyses of threats to, vulnerabilities of, and capabilities of future NSS space and ground systems, in order to establish future cryptographic security requirements and deliver state-of-the-art NSA-certified information assurance (IA) technologies and solutions.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- (S//TK//NF) \_\_\_\_\_

- (U) Formulate enterprise IA standards, architectures, and solutions, using information systems security engineering services, IA research, and IA engineering, for integration and implementation into information systems that support the NRO missions and programs, as well as those of other NSS customers.

(U) The NRO expects the project to accomplish the following in FY 2012:

- (U) Complete prototype development for the cryptographic core processor program.

(U) LAUNCH  
(U) LAUNCH VEHICLES

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

(U) Project Description

(U) The primary purpose of this project is to procure Evolved Expendable Launch Vehicles (EELV) and conduct integration activities for NRO satellites. The NRO procures standard EELV hardware on a fixed price basis, fully funded 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. In addition, this project funds 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. The NRO has contracting officer's technical representative authority for all NRO delivery orders on the Air Force EELV launch service contracts.

(U) The NRO is working with the Air Force to transition to a new EELV acquisition strategy for launch vehicle procurement. This strategy aims to stabilize the launch vehicle industrial base and reduce launch vehicle hardware cost growth. Funded EELV cores will be assigned to

specific launch missions and spacecraft requirements in the year they are procured.

(U) Schedules for launch vehicles are as follows:

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



~~\_\_\_\_//REL TO USA, FVEY)~~ [REDACTED]  
[REDACTED]

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

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

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

(U) The NRO expects the project to accomplish the following in FY 2012:

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

~~\_\_\_\_\_) Y)~~ [REDACTED]  
[REDACTED]

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

• (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.

**(U) Changes From FY 2011 to FY 2012:**

• (~~S//NF~~) [REDACTED]  
[REDACTED]

• (~~S//TK//NF~~) [REDACTED]  
[REDACTED]

~~\_\_\_\_)~~ [REDACTED]  
[REDACTED]

• (U) **Launch Vehicle Advanced Plans: -\$24.5 million.** Decreases due to one-time increase in FY 2011 to implement IC Launch Study recommendations.

• (U) **Heavy Lift Performance Upgrade: -\$5.3 million.** Decreases due to project completion.

**(U) LAUNCH  
(U) LAUNCH CAPABILITY INFRASTRUCTURE**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

(U) This project funds the EELV Launch Capability (ELC) contract to maintain the infrastructure and support required for the launch capability of National Security Space missions. It is separate from launch vehicle hardware, which is funded through the EELV Launch Services contracts. The funds in this project retain critical skills at the EELV contractor's facilities and at the launch sites and maintain proficiency of the EELV contractor workforce.

(U) The NRO and the Air Force maintain a relationship ensuring the EELV launch capability for the nation. This funding request represents the NRO's contribution to the ELC contract. In FY 2012, the NRO is funding 25 percent of the common launch capability infrastructure costs, instead of the 30 percent share in previous years. 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 2012:

- (~~S//TK//REL TO USA, FVEY~~) [REDACTED]
- (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 including the resolution of any and all 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) Maintain supplier readiness and subcontractor support for critical EELV launch systems (NRP\_00715, 00716).

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



(U) Changes From FY 2011 to FY 2012:



Project Budget Chart FY 2012 Budget Request by Appropriation Account This Exhibit is <del>SECRET//NOFORN</del>		Funds — Dollars in Millions		
Budget Request by Appropriation*	Resourcing	FY 2010	FY 2011	FY 2012

\* Appropriation detail lines may not add due to rounding.

**(U) LAUNCH  
(U) LAUNCH OPERATIONS AND ENGINEERING**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
<sup>1</sup> Includes enacted OCO funding. <span style="float: right;">Totals may not add due to rounding.</span> <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

(U) The Launch Operations and Engineering project provides launch-related support for NRO satellite programs. Resources in this project are used to:

- (U) Operate and maintain the NRO Payload Transportation System which provides secure transportation from factory to launch bases at either 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 support, downrange/ascent telemetry capture, and processing operations for NRO launches.
- (U) Fund Contracted Advisory and Assistance Services, Systems Engineering and Technical Analysis, and System Integration support to the Office of Space Launch.
- (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) The NRO expects the project to accomplish the following in FY 2012:

- ~~(S//TK//REL TO USA, FVEY)~~ [REDACTED]
- ~~(S//TK//REL TO USA, FVEY)~~ [REDACTED]
- ~~(S//TK//REL TO USA, FVEY)~~ [REDACTED]
- (U) Perform over 48,000 satellite support contacts from NOPS.
- ~~(S//TK//REL TO USA, FVEY)~~ [REDACTED]

**(U) Changes From FY 2011 to FY 2012:**

- ~~(S//NF)~~ [REDACTED]
- ~~(S//NF)~~ [REDACTED]
  - (U) Decreases due to completion of procurement of a second Space Cargo Transportation System (-\$10.0 million).
  - ~~(S//NF)~~ [REDACTED]
- ~~(S//NF)~~ [REDACTED]

Project Budget Chart FY 2012 Budget Request by Appropriation Account This Exhibit is <del>SECRET//TK//NOFORN</del>		Funds — Dollars in [REDACTED]		
Budget Request by Appropriation*	Resourcing	FY 2010	FY 2011	FY 2012
[REDACTED]				

**(U) GEOINT/SIGINT INTEGRATED GROUND DEVELOPMENT  
(U) COMMAND & CONTROL**

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.  
<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

**(U) Project Description**

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

[REDACTED]

(U) The Ground Element Block 1 Increment 1 Acquisition Decision Memorandum (ADM) was signed by USD/AT&L and DDNI/AT&F in November 2010. Ground enterprise milestones (GEMs) provide an end-to-end integrated perspective representing lower-level project delivery milestones necessary to achieve specific spacecraft and ground capabilities. Resources in this project are used to:

[REDACTED]

[REDACTED]

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

[REDACTED]

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

[REDACTED]

(U) The NRO expects the project to accomplish the following in FY 2012:

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

[REDACTED]

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

[REDACTED]

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

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
<sup>1</sup> Includes enacted OCO funding. <span style="float: right;">Totals may not add due to rounding.</span> <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

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



(U) The Ground Element Block 1 Increment 1 ADM was signed by USD/AT&L and DDNI/AT&F in November 2010. This approved the Block 1 Increment 1 Mission Framework MSA presented at the Joint

Intelligence Acquisition Board in July 2010. NGE GEMs provide an end-to-end integrated perspective representing project delivery milestones necessary to achieve specific spacecraft and ground capabilities. Resources in this project are used to:

- (U) Define and provide a standard IT environment and robust enterprise management capability to host enterprise applications in the development, test, and operational environments.
- (U) Continue migrating and integrating new and legacy applications, networks, and services into the common IT environment.
- (U) Rapidly identify and prototype key technologies and operational concepts related to IT processing, storage, networks, common services, and products.
- (U) Continue service oriented architecture framework development, integration, and governance to support a single, enterprise-wide information sharing and routing infrastructure.

- (U) Continue to develop and expand common LAN and WAN peering infrastructures in and across NRO and mission partner primary operations facilities.
- (U) Continue the evolution of enterprise data recording, metadata catalog, storage, access, retrieval, and distribution capabilities.
- (U) Demonstrate basic operational capabilities for data distribution services, including routing, messaging, and storage that provide timely, location independent access to NRO mission data and information.
- (U) Continue to provide factory maintenance support of the NGE mission and enterprise infrastructure.
- (U) Complete deployment of security audit logging service capability across the NGE.
- (U) Continue to develop security services for Public Key Infrastructure across the NGE.
- (U) Evolve existing capabilities to meet future spacecraft launch schedules and mission operations.

(U) The NRO expects the project to accomplish the following in FY 2012:

- (U) Provide initial implementation of the NGE common infrastructure to support national mission systems and enterprise applications [GEM 10: Application Service Provider (ASP)/Infrastructure Service Provider (ISP) Integration Phase 1].
- (U) Begin migration and integration of services into a virtualized service oriented architecture on the standard computing environment; including services such as ephemeris, information sharing, and security services (GEM 10: ASP/ISP Integration Phase 1).
- (U) Begin the consolidation, and deployment of the site networks into a common service layer (GEM 10: ASP/ISP Integration Phase 1).

- (U) Deliver an initial operational capability (IOC) for the information sharing framework. This will provide a seamless discovery, visualization, exchange, and reuse of NTM and tactical data between the larger DoD and IC enterprises.
- (U) Enable the exposure of cross-site and cross-community data and services in support of the IC Single Information Environment.

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

- (U) Develop and deploy an inter-agency information transport capability.
- (U) Continue consolidation of legacy messaging systems into a common framework.

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

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

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



- (U) Expand security services to make single sign-on capability available to mission applications and users across the enterprise.
- (U) Expand the usage of security audit logging services throughout the NGE.



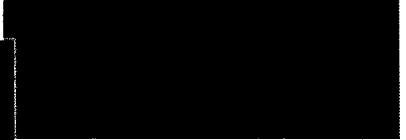
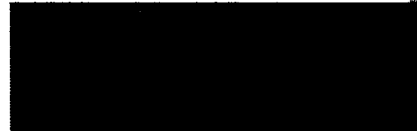


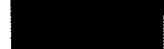


**(U) GEOINT/SIGINT INTEGRATED GROUND DEVELOPMENT  
(U) MISSION MANAGEMENT**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

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


(U) The Ground Element Block 1 Increment 1 ADM was signed by USD/AT&L and DDNI/AT&F in November 2010. This approved the Block 1 Increment 1 Mission Management MSA. NGE GEMs provide end-to-end integrated perspective representing lower-level project delivery milestones necessary to achieve specific spacecraft and ground capabilities. Resources in this project are used to:

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

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


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**(U) GEoint/SIGINT INTEGRATED GROUND DEVELOPMENT  
(U) GROUND INTEGRATION & SUPPORT**

This Exhibit is <del>SECRET//NOFORN</del>						
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request	FY 2011 — FY 2012
		Base	OCO	Total		

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.

<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

**(U) Project Description**

(U) The Ground Integration & Support project provides: core contractor support for the NRO Ground Enterprise (NGE). This project also provides resources for personnel to travel, receive training in support of the mission, and to recognize outstanding performance of government personnel.

(U) Core contractor support, including Contracted Advisory and Assistance Service (CAAS), non-CAAS and FFRDC support for the NGE, supplies expertise for all mission management, mission processing, C&C, and mission framework capabilities. These resources provide technical support associated with program planning, acquisition development, and integration of ground capabilities. Additionally, these resources support and conduct planning and studies for future architectures, CONOPS development, capabilities definition, and requirements allocation.

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

- (U) Define and manage systems requirements, baseline configuration, and schedule processes for the NGE.
- (U) Define functional performance and verification requirements.
- ~~(U//FOUO)~~ 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) 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 consisting of a common and standardized infrastructure, enabling ground station interoperability.

~~TOP SECRET//SI//TK//NOFORN~~

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

(U) The NRO expects the project to accomplish the following in FY 2012:

- (U) Develop systems requirements and CONOPS documentation required for development of capabilities for use against new threats.

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

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

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

- (U) Support development of requirements, documentation and planning for the Block 1, Increment 2 ground activities for Mission Management, Mission Processing, Command and Control, and Mission Framework MSAs.

(U) Changes From FY 2011 to FY 2012:

- ~~(S//NF)~~ [REDACTED]
- ~~(S//NF)~~ [REDACTED]

— ~~(S//NF)~~ [REDACTED]

— ~~(S//NF)~~ [REDACTED]

— ~~(S//NF)~~ [REDACTED]

- ~~(S//NF)~~ [REDACTED]

- ~~(S//NF)~~ [REDACTED]

— ~~(S//NF)~~ [REDACTED]

— ~~(S//NF)~~ [REDACTED]

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(U) MISSION GROUND STATIONS

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

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
[REDACTED]									

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.  
<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

(U) Project Description

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

[REDACTED]

(U) Resources in this project are used to:

- ~~(S//TK//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]

[REDACTED]

— (U) Support immediate mission restoration, conduct selected space vehicle maintenance at the mission ground stations (MGS) and [REDACTED] factories to repair failed baseline components, and implement baseline modifications.

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

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

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

[REDACTED]

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

[REDACTED]

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

[REDACTED]

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

[REDACTED]

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

[REDACTED]

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

• (U) [REDACTED]

— (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 headquarters support.

• (U) Provide O&M to the NROC which is responsible for:

— (U) 24-hour-a-day operations to continually apprise DoD, IC and National users of NRO systems' 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 [REDACTED] frequency deconfliction analysis.

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

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

— (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) The NRO expects the project to accomplish the following in FY 2012:

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

[REDACTED]

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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) Changes From FY 2011 to FY 2012:

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

- ~~(S//TK//REL TO USA, FVEY)~~ [REDACTED]
- (U) Transferred three military positions to the Station Integration and Support project.
- ~~(S//TK//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]

- (U//FOUO) • (U) SO OCMC: [REDACTED] Increases mission orbit analysis support.
- (U//FOUO) • (U) NROC: [REDACTED]
- (U//FOUO) — (U) Transferred travel, training and awards from Enterprise Management EC, NRO Mission Support project [REDACTED]
- (U//FOUO) — (U) Decreases to fund higher IC priorities [REDACTED]
- (U) Transferred one civilian position to Station Integration and Support project and two military positions from Headquarter Support.

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- (U) **Headquarter Support: +\$5.5 million, -2 military positions.**

— (U) Transferred systems engineering from Station Integration and Support project (+\$5.6 million).

— (U) Decreases to fund higher IC priorities (-\$0.1 million).

— (U) Transferred two military positions to NROC.

<b>Project Budget Chart</b> <b>FY 2012 Budget Request by Appropriation Account</b> This Exhibit is <del>SECRET//TK//NOFORN</del>		Funds — Dollars in <span style="background-color: black; color: black;">[REDACTED]</span>		
Budget Request by Appropriation*	Resourcing	FY 2010	FY 2011	FY 2012
[REDACTED]				

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(U) MISSION GROUND STATIONS

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

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
[REDACTED]									

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.  
<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

(U) Project Description

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

(U) Resources in this project are used to:

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

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

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

- (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) The NRO expects the project to accomplish the following in FY 2012:

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

- (U) Enable on-going operations of NRO satellite systems and ground stations, and provide the projected operational availability levels shown in the Mission Ground Stations EC performance table (NRP\_00557, 00645, 00646, 00704, 00705, PE\_00004).



**(U) Changes From FY 2011 to FY 2012:**

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

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

• (U) Transferred six civilian positions to the Station Integration and Support project.

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

~~\_\_\_\_\_ TO USA, FVEY)~~ [REDACTED]

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

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

• (U) Transferred seven civilian positions to the Station Integration and Support project.

**(U) Accommodation Procurement**

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

**(U) Real Estate Sales Reinvestment**

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

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

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

(Note: Real Estate sales reinvestment proceeds are not included in the project tables.)

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

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.

<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

**(U) Project Description**

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

- (U) Integration, readiness, and verification activities in support of ground developments and satellite launches.
- (U) Evaluation of IOSA constellation strategy options.
- (U) Operational need statement evaluations.
- (U) Future architecture requirements evaluations and study support.
- (U) Systems engineering configuration management boards.
- (U) Budget and contracts support.
- (U) 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) The NRO expects the project to accomplish the following in FY 2012:

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

**(U) Changes From FY 2011 to FY 2012:**

[REDACTED]

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

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(U) ENTERPRISE IT SYSTEMS  
(U) CONNECTIVITY

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.  
<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

(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 DoD. Resources in this project are used for:

- (U//FOUO) Enterprise Systems that provide enterprise-wide information assurance capabilities, management information systems, and voice and collaboration services. Enterprise Systems enables a comprehensive and cohesive IT environment by implementing protected access based on identity, standardizing domain naming, enabling collaboration and information sharing, ensuring network fault tolerance and establishing remote site IT service provisioning. The development and maintenance of an enterprise technology roadmap with an underpinning architecture and supporting policies

and procedures will be provided via this sub-project conducted by the newly created New Technology Division.

- (S//TK//NF) [REDACTED]
- (S//TK//REL TO USA, FVEY) [REDACTED]
- (U//FOUO) Core systems that direct data through switches and routers. This portion of the network is migrating from an asynchronous transfer mode (ATM) backbone to an Internet Protocol [REDACTED]

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(b)(3) backbone to facilitate cross-agency, cross-department information and data sharing. Core systems will also demonstrate the Common Services Layer-Global (CSL-G) concept which will promote collaboration and information sharing among peered networks based on community-recognized electronic credentials. Core also procures high-speed cryptographic devices.

- (U//FOUO) Edge systems that deliver data and information to end users through the Next Generation Edge/LAN, the newly acquired PuppetMaster program (a recapitalization of the Future Architecture for Command and Telemetry Services system), and the Unclassified Wide Area Network.

(U) The NRO expects the project to accomplish the following in FY 2012:

- (U//FOUO) Enhance and converge software collaboration in a more interconnected environment to improve information sharing.
- (U//FOUO) Migrate to a unified management information system platform to support unclassified, secret/collateral, and TS/SCI enterprise environments.
- (U//FOUO) Develop a service capability roadmap and underpinning architecture in support of the NRO CIO.
- (U//FOUO) Implement policies and procedures to institutionalize continuous and effective modernization of IT systems.
- (S//TK//REL TO USA, FVEY) [REDACTED]
- (U//FOUO) Continue the acquisition effort to migrate from an ATM backbone to an IP backbone.
- (U//FOUO) Continue to support CSL-G technology insertion and system demonstrations while supporting mission operations.

- (U) Continue to consolidate and converge the network infrastructure to provide higher throughput to the desktop to support enhanced services.
- (U//FOUO) Begin delivery and deployment of the PuppetMaster program, supporting satellite command and telemetry requirements.
- (U//FOUO) Continue O&M activities for the next generation IT and telecommunications, 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 2011 to FY 2012:

- (TS//NF) [REDACTED]
- (S//TK//REL TO USA, FVEY) [REDACTED]
- (S//TK//REL TO USA, FVEY) [REDACTED]
- (U//FOUO) Decreases due to realignment of funds to higher IC priorities (-\$0.8 million).
- (S//TK//REL TO USA, FVEY) [REDACTED]
- (S//TK//REL TO USA, FVEY) [REDACTED]
- (S//TK//REL TO USA, FVEY) [REDACTED]

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

— (U//FOUO) Decreases due to realignment of funds to higher IC priorities (-\$0.5 million).

• ~~(S//TK//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]

— (U//FOUO) Decreases due to realignment of funds to higher IC priorities (-\$1.9 million).

[REDACTED]

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

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

— (U//FOUO) Decreases due to realignment of funds to higher IC priorities (-\$0.5 million).

**(U) Accommodation Procurement**

[REDACTED]

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

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(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 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) Resources in this project are used to:

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

- (U) Facilitate the development of the NRO IT Strategic Plan, which will provide a very high-level roadmap for the development of IT capabilities needed for NRO mission and business activities.
- (U) Facilitate the development of the NRO EA, which will assist in providing data and information useful for NRO seniors in making investment decisions and in meeting DNI and OMB EA requirements.
- (U) Facilitate the development of NRO IT Architecture, which will identify IT capabilities and functions needed 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 effort 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) The NRO expects the project to accomplish the following in FY 2012:

- (U) Maintain and update the NRO IT Strategy.
- (U) Maintain and update the NRO IT Architecture.
- (U) Maintain and update the NRO IT Standards.
- (U) Continue to provide enterprise integration support for agency-wide issues and to IC working groups and forums.
- (U) Continue expansion of the ability to accurately account for the depth and breadth of NRO 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) Changes From FY 2011 to FY 2012:**

- ~~(S//NF)~~ [REDACTED]
- (S) [REDACTED]
- ~~(S)~~ [REDACTED]

— (S) [REDACTED]

— [REDACTED]

— [REDACTED]

— (U//FOUO) Decreases due to realignment of funds to higher IC priorities (-\$4.0 million).

- (S) [REDACTED]

- (S) [REDACTED]

— (U) Transferred Identity Access Management Services to Connectivity project (-\$2.3 million).

— (U) Transferred to CIO Program Management (-\$0.5 million).

- ~~(S//NF)~~ [REDACTED]

- ~~(S//NF)~~ [REDACTED]

(U) ENTERPRISE IT SYSTEMS  
(U) INFORMATION ASSURANCE

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

(U) The Information Assurance (IA) program provides the resources to plan and provide guidance to the NRO Directorates and Offices to plan, design, develop, implement, and operate IA activities and solutions.

(U) The CIO plans for IA as an enterprise solution that enables the mission. The IA program consists of a governance structure, defined IA architecture, enterprise vulnerability management program, certification and accreditation (C&A) program, and comprehensive IA training that ensures the IA workforce has the IA skills. To enhance information sharing, the CIO leads domain activities across the NRO enterprise and is establishing a Cross Domain Support Office.

(U) Resources in this project are used to:

- (U) Provide guidance and oversight to the enterprise IA program in the NRO and continue developing the IA architecture, drafting policies, and proposing IA standards.

- (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) Track system vulnerabilities and recommended corrective and preventative actions (EIT\_00005).

(U) The NRO expects the project to accomplish the following in FY 2012:

- (U) Continue the development and implementation of the NRO IA program.
- (U) Transition the NRO's IA strategy and architecture into development, implementation, and efficient management of the NRO IA program.
- (U) Provide program guidance to NRO Directorates' and Offices' IA initiatives to ensure they address closure of known IA gaps.
- (U) Continue transition to the new NRO C&A process for increased efficiencies.



- (U) Continue the enterprise-wide vulnerability management program and refine the Enterprise Vulnerability Assessment and Remediation process.
- (U) Evolve the Cross Domain Support Office and start identifying the way forward for enterprise cross domain services.

**(U) Changes From FY 2011 to FY 2012:**

(S//NF)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

(U) The Research & Technology Development project, managed by the Advanced Systems and Technology Directorate, funds 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, better utilization of on-orbit assets, and advanced ground processing that adds value to collected data. Our AR&D efforts encompass basic/advanced R&D and technology maturation, as well as applied R&D transitions, demonstrations, and prototypes. These AR&D activities enable evolutionary and revolutionary capability improvements to current and future GEOINT, SIGINT, multi-INT, communications, and ground systems to improve our capabilities in the following six focus areas:

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



- (U) Temporal Responsiveness: Ability to dynamically 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, and dynamic user interaction.
- (U) The Unexpected: New sources and methods employing both new sensors and phenomenology, as well as unusual or unexpected uses of existing sensor systems.
- (U) Target Discrimination: Ability to use multiple and different sensor types against the same target in order to more fully understand, identify, and characterize 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; presentation of patterns for human interpretation to enable identification of normal and abnormal behaviors to identify and characterize elusive targets.

- (U) Operate-Through: Architectures, system designs, and technologies that enable the ability to operate in threat situations, manage threats and potential damage, and yet continue with significant ISR operational capabilities in all domains where NRO assets reside: space, ground and cyber.

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

**(U) Basic Research**

(U) Develop new and innovative sources and methods through the Director's Innovation Initiative (DII), 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) GEOINT Technology**

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

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

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

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

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

• ~~(S//TK//NF)~~ [REDACTED]

**(U) SIGINT Technology**

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

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

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

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

**(U) Communications Technology**

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

[REDACTED]

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

[REDACTED]

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**(U) Crosscutting Technology**

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

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

[REDACTED]

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

[REDACTED]

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

[REDACTED]

• (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 technologies.

• ~~(S//NF)~~ [REDACTED]

[REDACTED]

• (U) Ground Research, Integration, and Development lab to provide an environment for software development and allow initial exposure of products and services to users.

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

[REDACTED]

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

[REDACTED]

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

• (U) Technology Forum/Technology Symposium coordination.

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

• (U) Investigating technologies for experimentation and potential limited scope demonstrations of cyber-enabled concepts.

• (U) Emerging opportunities for technology investment.

**(U) Phased Array Technology Maturity**

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

[REDACTED]

• (U) Horizon-to-horizon coverage.

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

[REDACTED]

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

[REDACTED]

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

[REDACTED]

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

[REDACTED]

(U) The NRO expects the project to accomplish the following in FY 2012:

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

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\_\_\_\_\_  
[REDACTED]

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

\_\_\_\_\_  
[REDACTED]

- (U) Complete phased array prototype (Electronically Steered Array) antenna testing activities demonstration at TRL 6 and exercise with breadboard processing capability.

\_\_\_\_\_  
[REDACTED]

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

**(U) Changes From FY 2011 to FY 2012:**

- ~~(S//NF)~~ [REDACTED]
- ~~(TS//TK//NF)~~ [REDACTED]

[REDACTED]

- ~~(S//NF)~~ [REDACTED]

- ~~(S//NF)~~ [REDACTED]

- ~~(S//NF)~~ [REDACTED]

\_\_\_\_\_  
[REDACTED]

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

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

~~(S//TK//NF)~~ [REDACTED]

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

(U) The NRO expects the project to accomplish the following in FY 2012—continue engineering and infrastructure support to the Advanced Systems & Technology Directorate.

**(U) Changes From FY 2011 to FY 2012:**

~~(S//NF)~~ [REDACTED]

~~(S//NF)~~ • (U) [REDACTED]

~~(S//NF)~~ • (U) [REDACTED]

- (U) Increases one civilian position to support Advanced Systems and Technology Directorate program activities.

(U) ENTERPRISE MANAGEMENT  
(U) ACQUISITION MANAGEMENT

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.

<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

(U) Project Description

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

(U) The NRO expects the project to accomplish the following in FY 2012—provide directorate-level acquisition and operations support.

(U) Changes From FY 2011 to FY 2012:

- (S//NF) [REDACTED]

[REDACTED]

— (U) Decreases due to ending NRO Chief Operating Officer studies and assessments activities (-\$1.9 million, -1 civilian position).

- (S//NF) [REDACTED]

[REDACTED]

[REDACTED]

— (U) Decreases to realign funding to better support NRO program priorities (-\$0.7 million).

— (U) Decreases to fund higher IC priorities and due to revised economic assumptions (-\$0.5 million).

• ~~(S//NF)~~ [REDACTED]

[REDACTED]

— (U) Transfers field IA responsibility from the Mission Ground Stations EC, Station Integration and Support project due to organizational changes (+\$0.3 million).

— (U) Increases to realign and expand acquisition support to the Non-Traditional SIGINT program office (+\$0.3 million, +2 positions).

Project Budget Chart FY 2012 Budget Request by Appropriation Account This Exhibit is <del>SECRET//TK//NOFORN</del>		Funds — Dollars in [REDACTED]		
Budget Request by Appropriation*	Resourcing	FY 2010	FY 2011	FY 2012
[REDACTED]				



(U) ENTERPRISE MANAGEMENT  
(U) EDUCATION AND TRAINING

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

(U) Project Description

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

(U) The NRO expects the project to accomplish the following in FY 2012:

- (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 for employees to compete for and attend external training and education courses (EMS\_00018).

(U) Changes From FY 2011 to FY 2012:

~~(S//NF)~~ [REDACTED]

- (U) Transferred Enterprise Workforce Planning and Leadership Development initiatives to the Human Resources project (-\$0.8 million).
- (U) Decreases to fund higher IC priorities and due to revised economic assumptions (-\$0.2 million).
- (U) Transferred positions from other projects to better support NRO education and training program priorities (+1 civilian position).

**(U) ENTERPRISE MANAGEMENT  
(U) FINANCE**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
<sup>1</sup> Includes enacted OCO funding.								Totals may not add due to rounding.	
<sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(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 regulations. The project provides financial policy guidance for NRO programs to ensure efficient and effective financial management. In addition, Finance provides business information technology 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) The NRO expects the project to accomplish the following in FY 2012:

- (U) Sustain a clean audit opinion on the FY 2011 NRO financial statements.

- (U) Upgrade the NRO Financial Information System, the NRO's enterprise-wide, web-based financial transaction management and administrative system.

• ~~(S//NF)~~ [REDACTED]

• ~~(S//NF)~~ [REDACTED]

**(U) Changes From FY 2011 to FY 2012:**

~~(S//NF)~~ [REDACTED]

- (U) Increases to support system upgrades and sustainment of Enterprise financial reports audit capability (+\$3.0 million, +4 positions).

**(U) ENTERPRISE MANAGEMENT  
(U) HEADQUARTERS MANAGEMENT**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(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, Cost Analysis Improvement Group, Office of Policy and Strategy, Office of Strategic Communications, Center for the Study of National Reconnaissance, and Resource Management.

(U) The NRO expects the project to accomplish the following in FY 2012:

- (U) Complete the NRO Agency Financial Report, submit quarterly metrics updates to DNI, submit FY 2013 CBJB and FY 2014 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 110 NRO and mission partner source selections and offer 100 formal and 60 informal Streamlined Timely Acquisition Topics, Just in Time, and graduate program training courses.
- (U) Expand ethics training to all NRO employees and monitor and review 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) Increase NRO workforce quality through continuation of improvements to workforce diversity and by increasing the NRO's disabled employee workforce rates to meet the IC average by the end of FY 2012.

**(U) Changes From FY 2011 to FY 2012:**

- ~~(S//NF)~~ [REDACTED]
  - (U) Transferred Acquisition Programs & Policy support from Acquisition Management project (+\$3.9 million).
  - (U) Decreases to fund higher IC priorities and due to revised economic assumptions (-\$2.8 million).
  - (U) Transferred FFRDC support from Systems Engineering project due to organizational changes (+\$1.2 million).

— (U) Transferred support costs from the Security project and Facilities and Logistics EC, Logistics project to consolidate them into a single project (+\$0.6 million).

— (U) Transferred OMB Circular A-123 Internal Control compliance team support to Finance project (-\$0.6 million).

— (U) Increases to support Equal Employment Opportunity initiatives and programs (+\$0.5 million).

— (U) Transferred positions to other projects to align with NRO program priorities (-26 positions).

- ~~(S//NF)~~ [REDACTED]
  - (U) Decreases to fund higher IC priorities and due to revised economic assumptions (-\$0.4 million).
  - (U) Increases to support IG enterprise auditing to sustain clean financial audits (+\$0.2 million).

Project Budget Chart FY 2012 Budget Request by Appropriation Account This Exhibit is <del>SECRET//NOFORN</del>		Funds — Dollars in [REDACTED]		
Budget Request by Appropriation*	Resourcing	FY 2010	FY 2011	FY 2012
[REDACTED]				

**(U) ENTERPRISE MANAGEMENT  
(U) HUMAN RESOURCES**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(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. In addition to the activities listed above, resources in this project are used to:

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

[REDACTED]

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

(U) With the exception of the 107 positions within the HR project, positions are distributed among the other ECs within the NRP.

(U) The NRO expects the project to accomplish the following in FY 2012—continue implementing civilian pay systems.

**(U) Changes From FY 2011 to FY 2012:**

- ~~(S//NF)~~ [REDACTED]

- (S//NF) [REDACTED]
  - (S//NF) [REDACTED]
  - (S//NF) [REDACTED]
  - (U) Increases to realign support from Payroll Miscellaneous subproject (+\$0.6 million).
- (S//NF) [REDACTED]
  - (U) Increases to sustain the Enterprise Workforce Planning and Leadership Development initiatives (+\$1.2 million).

- (U) Transferred Enterprise Workforce Planning and Leadership Development initiatives from Education and Training project (+\$0.8 million).
- (U) Decreases to fund higher IC priorities and due to revised economic assumptions (-\$0.2 million).
- (U) Transferred positions to other projects to better support NRO program priorities (-2 military positions).
- (U) Transferred positions from other projects to better support NRO program priorities (+1 civilian position).

- (S//NF) [REDACTED]
  - (U) Decreases to realign support to the NRP Personnel subproject (-\$0.6 million).
  - (U) Decreases to better support higher NRO program priorities (-\$0.6 million).

Project Budget Chart FY 2012 Budget Request by Appropriation Account This Exhibit is <del>SECRET//NOFORN</del>		Funds — Dollars in [REDACTED]		
Budget Request by Appropriation*	Resourcing	FY 2010	FY 2011	FY 2012
[REDACTED]				

**(U) ENTERPRISE MANAGEMENT  
(U) NRO MISSION SUPPORT**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

(U//~~FOUO~~) The NRO Mission Support (NMS) project directly supports the Director, NRO and the NRO Senior Leadership 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) Resources in this project are used to:

- (U) Proactively engage customers by providing:

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

— (U//~~FOUO~~) Real-time direct technical support to operations and facilitate integration of new capabilities to assist operations with 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//~~FOUO~~) Services that facilitate the planning, integration, concepts of operations development, tactics, techniques, and procedure development of technology capabilities into DoD and IC agency operations.

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

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

— (U//~~FOUO~~) Enhancing the utility of the data through fusion and integration across platforms and domains to enable multi-INT and integrated intelligence products.

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

— (U//~~FOUO~~) Improve actionable intelligence quality and timeliness through multi-platform (Air/Space/Ground)/multi-INT data fusion and reporting tools. Rapidly develop and deploy multi-INT, multiplatform, and multi-sensor data fusion and integration capabilities that improve the utility of ISR systems and data collection, processing, exploitation, and dissemination for military, national, and civil customers.

(U) These developments will focus on:

[REDACTED]

• (~~S//TK~~) [REDACTED]

• (U//~~FOUO~~) Evolving NRO Personnel Recovery and Combat Search and Rescue support and capabilities.

• (~~S//TK//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]

[REDACTED]

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

(U) The NRO expects the project to accomplish the following in FY 2012:

[REDACTED]



- (U//~~FOUO~~) Provide intelligence data to warfighters in the field using mobile devices.
- (U//~~FOUO~~) Enhance the detection and tracking of maritime vessels.

(U) Changes From FY 2011 to FY 2012:

— [REDACTED]

— [REDACTED]

— (S//NF) [REDACTED]

— (S//NF) [REDACTED]

- (S//NF) [REDACTED]

— [REDACTED]

— (S//NF) [REDACTED]  
to activities [REDACTED]

- (S//NF) [REDACTED]

— [REDACTED]

— (S//NF) [REDACTED]

— (S//NF) [REDACTED]

- (S//NF) [REDACTED]

— [REDACTED]

— (S//NF) [REDACTED]

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**(U) ENTERPRISE MANAGEMENT  
(U) SECURITY**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total		
[REDACTED]									
<sup>1</sup> Includes enacted OCO funding.								<sup>2</sup> Totals may not add due to rounding.	
<sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

(S//NF) ~~(U//FOUO)~~ [REDACTED]

(U) Resources in this project are used to:

- (U) Develop and distribute security policy guidance.
- (U) Identify, analyze, and disseminate information on terrorist and foreign intelligence service threats.
- (U) Plan long-range security initiatives.
- (U) Conduct security clearance investigations (EMS\_00030, 00032).

- (U) Perform polygraph examinations.
- (U) Adjudicate and grant NRO accesses (EMS\_00031).
- (U) Inspect and accredit secure facilities and information systems.
- (U) Provide security and CI training and awareness products to NRO employees.

(U) The NRO expects the project to accomplish the following in FY 2012:

- (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.

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- (U) Conduct daily CI activities to include auditing, monitoring, and analyses in support of the insider threat, information assurance, and technology protection programs.
- (U) Perform facility accreditations and site assessments on NRO and contractor facilities and sites.

**(U) Changes From FY 2011 to FY 2012:**

• ~~(S//NF)~~ [REDACTED]

— ~~(S//NF)~~ [REDACTED]

— (U) Decreases to fund higher IC priorities (-\$0.5 million).

• ~~(S//NF)~~ [REDACTED]

— (U) Decreases to fund higher IC priorities and due to revised economic assumptions (-\$3.0 million).

— (U) Realigned to Personnel Security subproject to support Security project priorities (-\$1.7 million, -3 civilian, -2 military positions).

— (U) Increases to support contract transitions of NRO Security contracts resulting from competitive source selections during FY 2011 and FY 2012 (+\$1.4 million).

— (U) Transferred positions to other projects to support NRO program priorities (-3 military positions).

— (U) Decreases to fund higher IC priorities and due to revised economic assumptions (-\$2.4 million).

— (U) Realigned resources from Physical Security subproject to better support Security project priorities (+\$1.7 million, +3 civilian, +2 military positions).

— (U) Transferred support costs to the Headquarters Management project to consolidate into a single project (-\$0.3 million).

— (U) Increases to accommodate program inflationary phasing (+\$0.2 million).

— (U) Transferred civilian positions to support NRO program priorities (+3 civilian).

(U) ENTERPRISE MANAGEMENT  
(U//~~FOUO~~) SPECTRUM MANAGEMENT

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.

<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

(U) Project Description

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

[REDACTED]

• ~~(S//TK//REL TO USA, TEYE)~~ [REDACTED]

[REDACTED]

• ~~(S//TK//REL TO USA, TEYE)~~ [REDACTED]

[REDACTED]

[REDACTED]

• (U//~~FOUO~~) Provide guidance to evolving NRO program offices on space and terrestrial spectrum matters relating to future acquisitions, innovation, and experiments.

• (U//~~FOUO~~) Provide immediate, emergency support in response to real-world frequency interference issues in operational scenarios.

• ~~(S//TK//REL TO USA, TEYE)~~ [REDACTED]

[REDACTED]

• ~~(S//TK//REL TO USA, TEYE)~~ [REDACTED]

[REDACTED]

[REDACTED]

• ~~(S//TK//REL TO USA, TEYE)~~ [REDACTED]

[REDACTED]

**(U) ENTERPRISE MANAGEMENT  
(U) SYSTEMS ENGINEERING**

This Exhibit is <del>SECRET//NOFORN</del>									
	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change
								Totals may not add due to rounding.	
<sup>1</sup> Includes enacted OCO funding. <sup>2</sup> In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.									

**(U) Project Description**

(U//~~FOUO~~) The Systems Engineering project provides enterprise systems integration and architecture systems engineering activities in support of the NRO. The NRO Systems Engineering Directorate utilizes government personnel, CAAS/SETA, and FFRDCs 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. Systems Engineering Directorate 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) Resources in this project are used to:

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

- (U//~~FOUO~~) Develop and manage an integrated NRO architecture to produce new and innovative solutions that leverage mission partner efforts and build upon multi-INT information with enhanced data access, content, and delivery timelines.
- (U) Create enterprise-level strategic and investment plans, including development of technology roadmaps.
- (U) Implement effective NRO-level engineering and industrial base policies, processes, and initiatives.
- (U) Inform and provide the technical basis for enterprise-level programmatic decisions.
- (U) Perform enterprise-level trade studies supporting requirements and architecture development and interface definition.
- (U) Run system-level modeling and simulation.
- (U) Provide technical analyses and represent the NRO for overhead-related IC and DoD studies.

- (U) Raise the performance level of systems engineering and program management expertise across the NRO.
- (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) Perform end-to-end GEOINT, SIGINT, and Communications space and ground systems requirements management, architecture management, risk management/mitigation, schedule management, and configuration management.
- ~~(S//REL TO USA, FVEY)~~ [REDACTED]
- (U) Support pre-acquisition architecture development for new programs and candidate concepts, including requirements definition and concept of operations studies.
- (U) Plan and execute full system life cycle readiness, to include definition of acquisition readiness schedules and milestones, data reporting requirements, and supporting engineering assessments.
- (U) Assure end-to-end integration and test management, including readiness assessments for the transition and deployment of new capabilities to operations.
- (U) Support preparation for and execution of acquisition milestone decisions.
- (U) Conduct studies and analyses addressing protection, survivability, and counter denial and deception.
- (U) Interact with other NRO activities and IC partners to ensure end-to-end continuity and security of essential functions in primary and

reconstituted modes in order to ensure access to critical capabilities across IC agencies and customers.

(U) The NRO expects the project to accomplish the following in FY 2012—provide systems engineering to reduce risk and improve mission assurance for the following program events:

- ~~(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]

(U) Changes From FY 2011 to FY 2012:

- ~~(S//NF)~~ [REDACTED]
- ~~(S//NF)~~ [REDACTED]
- ~~(S//NF)~~ [REDACTED]
- ~~(S//NF)~~ [REDACTED]
- ~~(S//NF)~~ [REDACTED]

— (U) Transferred one civilian position from NRO Systems Engineering project to better align resources with mission priorities (+1 civilian position).

— (S//NF) [REDACTED]

• (S//NF) [REDACTED]

— (S//NF) [REDACTED]

— (S//NF) [REDACTED]

— [REDACTED]

— [REDACTED]

— [REDACTED]

— (U) Transferred one civilian position to NRO System Architecture project and one civilian position to Systems Engineering Management to better align resources with mission priorities (-2 civilian positions).

• (S//NF) [REDACTED]

— (S//NF) [REDACTED]

— (S//NF) [REDACTED]

— [REDACTED]

— (S//NF) [REDACTED]

— (S//NF) [REDACTED]

— (U) Received one civilian position from NRO Systems Engineering offset by the elimination of three civilian positions by IC efficiency initiatives (-2 civilian positions).

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**(U) FACILITIES AND LOGISTICS**  
**(U) FACILITIES**

This Exhibit is ~~SECRET//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012
		Base	OCO	Total	Base	OCO	Total	

includes enacted OCU funding. Totals may not add due to rounding.

<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

**(U) Project Description**

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

[REDACTED]

(U) Resources in this project are used to:

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

[REDACTED]

- (U//FOUO) Provide O&M for essential leased space supporting NRO HQ requirements within the National Capital Region to include [REDACTED]

(b) [REDACTED]

- (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)~~ [REDACTED]

[REDACTED]

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

[REDACTED]



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

[REDACTED]

(U) The NRO expects the project to accomplish the following in FY 2012:

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

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

[REDACTED]

- (U) Complete Hangar Little J renovations at Cape Canaveral Air Force Station, FL.

• ~~(S//NF)~~ [REDACTED]

[REDACTED]

- (U) Conduct design activities for facility recapitalization projects beginning in FY 2013, aimed at improving FCI and capacity shortfalls (NRP\_00721, 00723).

(U) Changes From FY 2011 to FY 2012:

• ~~(S//NF)~~ [REDACTED]

[REDACTED]

~~(S//TK//REL TO FVEY)~~ [REDACTED]

[REDACTED]

~~(S//TK//REL TO FVEY)~~ [REDACTED]

[REDACTED]

- (U//FOUO) Repair and recapitalize utility electrical power load centers for ADF-C [REDACTED]

- (U//FOUO) Complete phase 1 repairs of the ADF-E facility monitoring control system human-machine interface consolidation program [REDACTED]

- (U//FOUO) Replace ADF-SW operations building raised flooring [REDACTED]

- (U//FOUO) Repair and recapitalize ADF-C Remote Terminal Facility mechanical and civil equipment infrastructure [REDACTED]

• ~~(S//NF)~~ [REDACTED]

[REDACTED]

— ~~(S//NF)~~ [REDACTED]

[REDACTED]

— ~~(S//NF)~~ [REDACTED]

[REDACTED]

• ~~(S//NF)~~ [REDACTED]

[REDACTED]

~~TOP SECRET//SI//TK//NOFORN~~

**(U) FACILITIES AND LOGISTICS  
(U) LOGISTICS**

This Exhibit is ~~TOP SECRET//SI//TK//NOFORN~~

	FY 2010 <sup>1</sup> Actual	FY 2011 Request <sup>2</sup>			FY 2012 Request			FY 2011 — FY 2012	
		Base	OCO	Total	Base	OCO	Total	Change	% Change

<sup>1</sup>Includes enacted OCO funding. Totals may not add due to rounding.  
<sup>2</sup>In the absence of full-year FY 2011 appropriations, the table shows the FY 2011 request.

**(U) Project Description**

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

[REDACTED]

(U) 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; medical and fitness support; 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; and process reengineering.
- (U) Reception and Representational funds.

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

[REDACTED]

• ~~(S//TK//NF)~~ [REDACTED]

[REDACTED]

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

(U) The NRO expects the project to accomplish the following in FY 2012:

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

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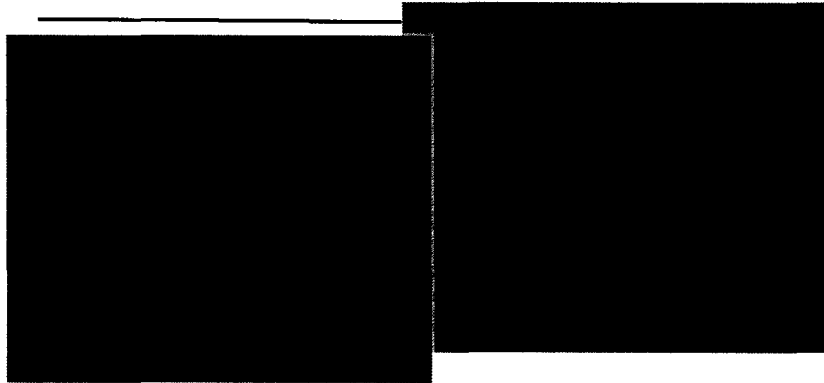
- (U) Continue improving the Enterprise Resource Planning system relative to the functionality of the supplier-customer relationship.
- (U) Continue expanding the virtual records center pilot program to a small subset of the NRO population.
- (U) Continue enhancing the travel system functionality program including expanding its interface to the NRO's financial system.
- ~~(S//TK//REL TO USA, FVEY)~~ [REDACTED]
- (U) Continue O&M of Global Material Tracking System with business intelligence capabilities.

(U) Changes From FY 2011 to FY 2012:

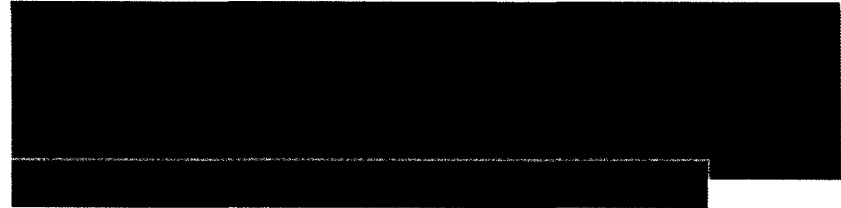
- ~~(S//NF)~~ [REDACTED]
- (S//NF) [REDACTED]
- (U//FOUO) — (U) Decreases due to revised economic assumptions [REDACTED]
- (U//FOUO) — (U) Transferred and consolidated support costs into the Headquarters Management project [REDACTED]
- (U//FOUO) — (U) Transferred positions from the Facilities project and other projects to provide mission support services to NRO ground stations [REDACTED]

**(U) COMMAND & CONTROL 1.1  
(U) LIFE CYCLE COST SUMMARY**

**(U) Acquisition Summary**



(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.



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

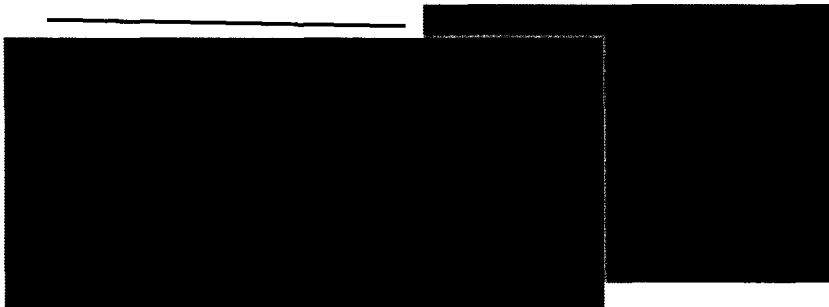
**(U) Independent Cost Estimate**

(U) A joint NRO/DNI CAIG ICE was completed for Command and Control Block 1 Increment 1 program in July 2010. In FY 2012, Command and Control was 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 FRAMEWORK 1.1  
(U) LIFE CYCLE COST SUMMARY**

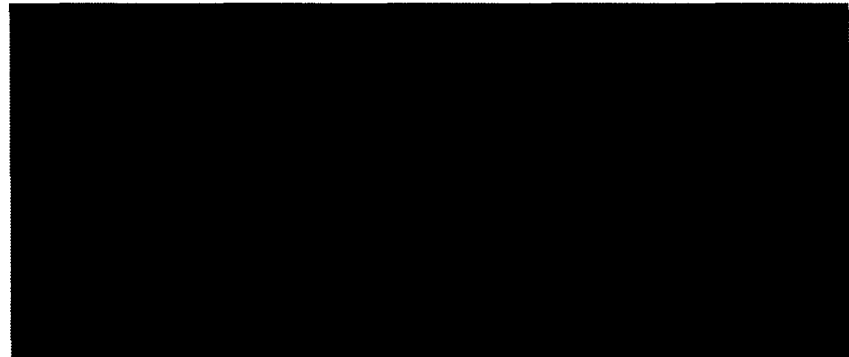
**(U) Acquisition Summary**



(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 applications.

USA, FVEY)



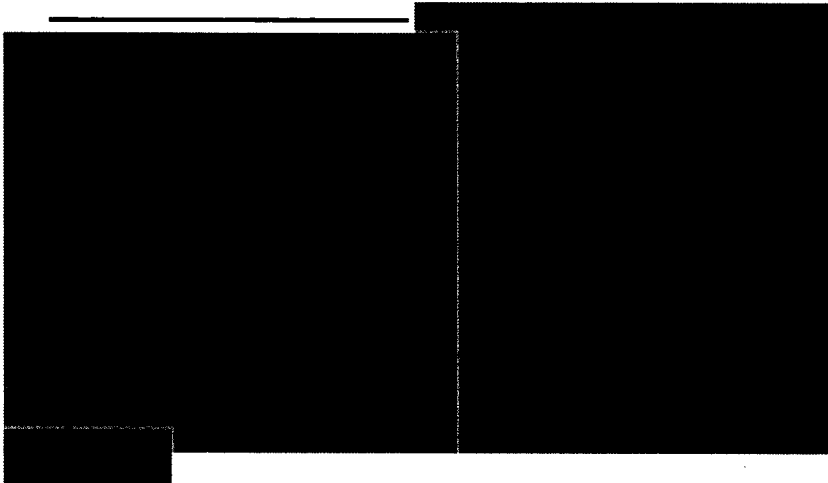
(U) The ODNI and OSD approved the Mission Framework MSA Block 1 Increment 1 baseline in September 2010 and November 2010, respectively. In FY 2012, Mission Framework was funded below the Joint NRO/DNI CAIG ICE.

**(U) Independent Cost Estimate**

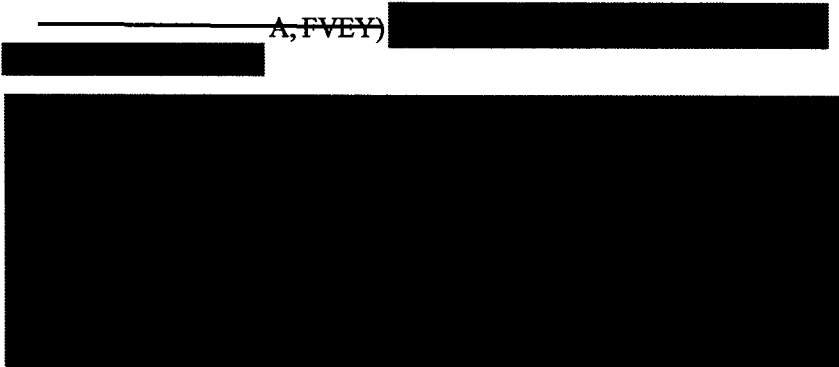
(U) A joint NRO/DNI CAIG ICE was completed for Mission Framework Block 1 Increment 1 program in July 2010. In FY 2012, Mission Framework was funded to the Program Manager's estimate. The JIAB evaluated and accepted the risk associated with funding the MSA to the Program Manager's estimate based on the nature and scope of work required to complete development of NRO Ground Enterprise Block 1 Increment 1.

**(U) MISSION MANAGEMENT 1.1  
(U) LIFE CYCLE COST SUMMARY**

**(U) Acquisition Summary**



(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.



(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 2012, Mission Management was 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) 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)~~ [REDACTED]

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

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

**(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.

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(U) GLOSSARY

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

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

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

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

(U) ADM—Acquisition Decision Memorandum.

(U) AGI—Advanced GEOINT derived from imagery.

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

~~(S//TK//NOFORN)~~ [REDACTED]

[REDACTED]

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

[REDACTED]

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

~~(S//TK//NF)~~ [REDACTED]

[REDACTED]

(U) ASP/ISP—Application Service Provider/Infrastructure Service Provider.

(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)~~ [REDACTED]

[REDACTED]

(U) BOL—beginning-of-life.

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

(U) C&A—certification and accreditation.

(U) C&C—command and control.

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

~~(S)~~ ~~(U)~~ [REDACTED]

(U) CCAFS—Cape Canaveral Air Force Station.

(U) CCS—constellation calibration services.

(U) CDR—critical design review.

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

~~(S)~~ [REDACTED]

[REDACTED]

enhancing situational awareness where no other tracking capability exists.

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

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

(U) COMM—NRO Communications Directorate.

(U) COMSAT—communications satellite.

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

~~USA, FVEY)~~ [REDACTED]

(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.

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

(U) DCGS—Distributed Common Ground System.

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

(U) DLA—Defense Logistics Agency.

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

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

(U) EAAF—enterprise architecture assessment framework.

(U) EC—expenditure center.

[REDACTED]

[REDACTED]

[REDACTED]

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

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

(U) ELC—EELV Launch Capability contract.

(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 final preparations, testing and status monitoring just prior to launch.

(U) ERP—enterprise resource planning.

(U) ESD—earliest service date.

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

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

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

\_\_\_\_\_  
[REDACTED]

(U) FCI—facilities condition index.

\_\_\_\_\_  
[REDACTED]

(U) FOC—full operational capability.

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

\_\_\_\_\_  
[REDACTED]

(U) FSC—functional success criteria.

(U) FSR—final spacecraft review.

(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.

\_\_\_\_\_  
[REDACTED]

(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.

\_\_\_\_\_  
[REDACTED]

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

[REDACTED]

(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.

TOP SECRET//SI//TK//NOFORN

(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.

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

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

(U) INMARSAT—International Maritime Satellite. International telecommunications company that operates multiple geosynchronous telecommunications satellites. Provides worldwide telephony and data services to users.

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

(U) IOC—initial operational capability.

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

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

(U//FOUO)

(U) [REDACTED]

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

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

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

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

(U) KDP—key decision point.

(U) KPP—key performance parameter.

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

(U) LCC—life cycle cost.

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

(U) LON—launch-on-need.

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

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

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

~~TOP SECRET//SI//TK//NOFORN~~

[REDACTED]

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

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

(U//FOUO) [REDACTED]

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

(U) MGS—mission ground station.

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

(U) MIPS—million instructions per second.

(U) MLE—mean life estimate. Estimate of remaining lifetime of a space asset taking into account current state and system reliability.

(U) MMD—mean mission duration.

~~(S//NF)~~ [REDACTED]

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

(U) MSA—major system acquisitions.

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

[REDACTED]

(U) NAB—NRO Acquisition Board.

(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.

(U) NGEN—Next Generation Electro-optic system.

(U) NIIRS—National Imagery Interpretability Rating Scale. Standardize system for describing the intelligence tasks that can be performed using an image.

(U) NMS—NRO Mission Support.

(U) NOPS—NRO Operations Squadron.

(U) 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.

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

(U) OPELINT—Operational Electronic Intelligence.

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

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

(U) OSHC—Office of Strategic Human Capital.

(U) OSL—Office of Space Launch.

~~(S//TK//NF)~~ [REDACTED]

(U) PATRIOT—NRO Communications Directorate contract.

~~(S//TK//NF)~~ [REDACTED]

~~(S//TK//NF)~~ [REDACTED]

(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.

\_\_\_\_\_  
[Redacted]

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

\_\_\_\_\_  
[Redacted]

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

\_\_\_\_\_  
[Redacted]

(U) R/S—relay satellite.

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

(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.

\_\_\_\_\_  
[Redacted]

\_\_\_\_\_  
[Redacted]

(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.

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

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



(U) SCMIS—Secret collateral management information system.

(U) SDR—system design review.

~~(TS//SI//TK//REL TO USA, FVEY)~~ [REDACTED]

(U) SETA—system engineering and technical analysis.

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

(U) SIW—strategic indications and warning.

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

(U) SPP—Space Protection Program. Joint NRO and Air Force Space Command program to provide decision makers in the DoD and IC a comprehensive national strategy for protecting our national security space systems.

~~(S//REL to USA, FVEY)~~ [REDACTED]

(U) SRR—system requirements review.

(U) SV—space vehicle.

(U) TECHELINT—Technical Electronic Intelligence.

(U) TI—technical intelligence.

~~(S//NF)~~ [REDACTED]

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

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

(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 booster systems.

(U) UMIS—unclassified management information system.

(U) VAFB—Vandenberg Air Force Base.

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

\_\_\_\_\_ )  
\_\_\_\_\_

(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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