NATIONAL RECONNAISSANCE OFFICE
14675 Lee Road
Chantilly, VA 201151-1715

2 January 2007

Steven Aftergood
Federation of American Scientists
1717 K Street N.W., Suite 209
Washington, D.C. 20036

Dear Mr. Aftergood:

In compliance with the Court's Order dated 24 July 2006, and in full satisfaction of your Freedom Of Information Act request of 22 March 2005, the National Reconnaissance Office (NRO) hereby releases to you "unclassified portions of the NRO Congressional Budget Justification Book for Fiscal Year 2006."

Please do not hesitate to contact me should you have any further questions.

E. Page Moffett
General Counsel

⁴ National Intelligence Program

ᵘ # FY 2006 – FY 2007

ᶜ\ # Congressional Budget Justification

Volume IV

⁴ National Reconnaissance Program

February 2005

(U) CONTENTS

(U) PROGRAM MANAGER'S STATEMENT

(U) Achieve Mission Success In Operations and Acquisition

(S//SI/TK) NRO systems continue to provide critical intelligence to a
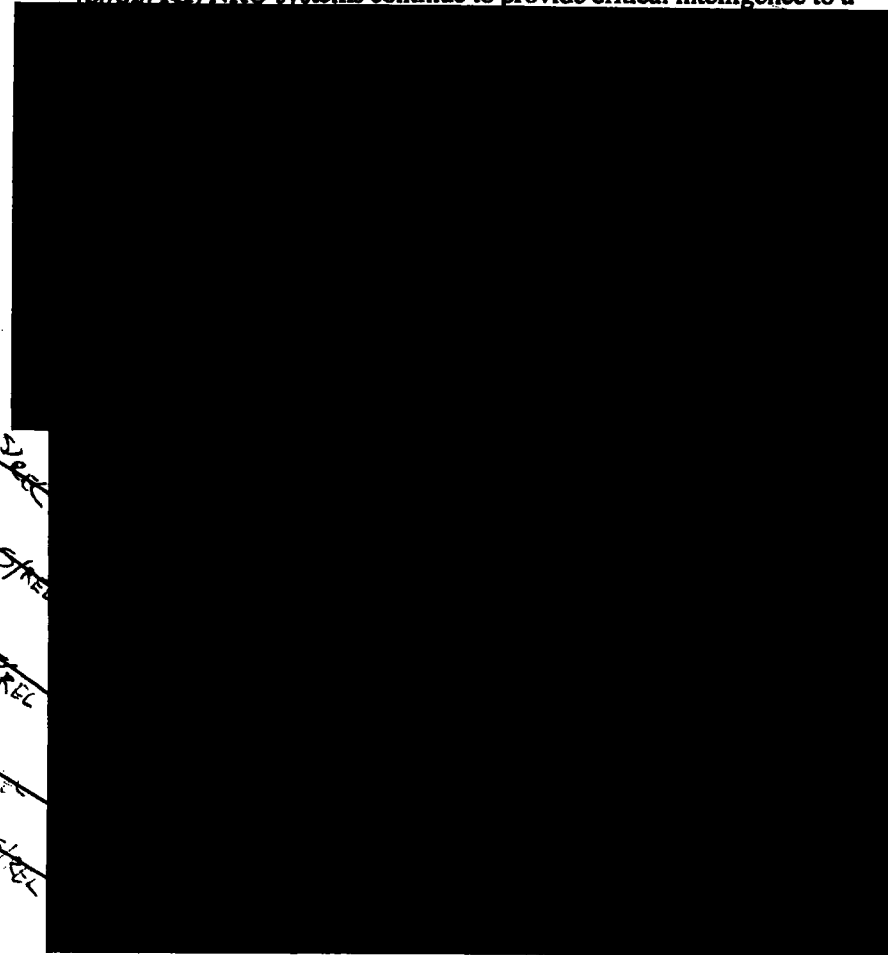
$\mathcal{U}$ • Achieve Mission Success in Operations and Acquisition—acquire and launch new systems successfully; maximize the utility of on-orbit systems in executing the Global War on Terrorism (GWOT).

$\mathcal{U}$ • Develop and Maintain a Team of Space Professionals—attract top talent, then ensure the training and career development necessary to retain that talent in the space cadre.

$\mathcal{U}$ • Integrate Space Capabilities for National Intelligence, Warfighting, and Homeland Security—ensure unity of effort and efficiency.

$\mathcal{U}$ • Produce Innovative Solutions for the Most Challenging National Security Problems—develop the new sources and methods required to defeat current and emerging threats.

$\mathcal{U}$ • Ensure Freedom of Action in Space—protect our critical space capabilities, and sustain assured access to space.

(U) Each priority is specifically advanced by the FY 2006 request.

l The FY 2005 amount includes the Hurrican Supplemental and Title IX, but excludes other supplemental funds requested in FY 2005; the FY 2006 resources do not include those requested in the Defense Space Reconnaissance Program (DSRP) in support of the NRO mission.

synchronize space cadre development plans, programs, and career paths. We are working together to ensure program managers leading critical efforts stay in place long enough to make a difference. Finally, we are working together to emphasize the development of two particularly critical career fields: space systems engineering, and program management. NRO mission success requires the full commitment and dedication of each and every member of the NRO team; I am fully committed and dedicated to ensuring each member of that team is properly trained and developed.

(U) Last year, I spoke a great deal about the strict limits on budget flexibility, and how those limits impede my ability to manage the total portfolio of NRO programs. This year, for the first time, I am requesting a Director, NRO (DNRO) Reserve. This Reserve would be used to address emerging acquisition issues on specific programs, minimizing the disruption to the total NRO program. Of course, the Congress will be notified of any transfers from the Reserve. This is not an attempt to restrict your oversight, but to improve my ability to manage. In FY 2006, the budget requested for the DNRO Reserve was specifically set to equal the difference between my FIA budget request and the most conservative of three different independent cost estimates on the program.

(U) Although absolutely critical, budget margins and robust program review processes are not the only elements necessary for acquisition success. Indeed, the most highly margined, effectively reviewed program will fail if not led by a highly trained and motivated member of a professional space cadre.

(U) There is another, specific dimension to the space cadre that must be discussed: the support provided by Federally Funded Research and Development Centers (FFRDC), such as The Aerospace Corporation. Last year, you provided a significant increase to the FFRDC resources allowed each IC agency. I can assure you the additional FFRDC resources provided to the NRO were both greatly appreciated and absolutely critical. The increase allowed additional FFRDC support to "challenged" acquisition programs (e.g., FIA), while maintaining or increasing support to new, transformational efforts managed in the Advanced Systems and Technology (AS&T) Directorate. Equally important, it allowed us to begin rebuilding critical parts assurance and certification efforts that had been allowed to atrophy under the pressures of acquisition program demands and FFRDC restrictions. I firmly believe the FFRDC increase you approved will, if continued, have a tremendously positive influence on the cost and schedule performance of ongoing programs, as well as hastening the delivery of new capabilities. I respectfully request that continued support.

(U) Develop and Maintain a Team of Space Professionals

(U) The key to the NRO's success is its people—a unique mix of government civilian and military professionals from across the DoD and the IC. The NRO workforce embraces a diversity of characteristics, backgrounds, experiences, and viewpoints which converge in the common objective just discussed: mission success.

(U) Space acquisition programs involve a degree of difficulty that simply cannot be overstated. Success requires we develop and maintain a professional space cadre able to meet that challenge—top-notch people with the right professional training, and with broad-based, real-world experience. The NRO is working with each of its parent agencies to realize this objective. We are working together to

(U) Integrate Space Capabilities for National Intelligence, Warfighting, and Homeland Security

(S//TK)

(U) OVERVIEW OF DISCIPLINES AND CAPABILITIES

(U) The Intelligence Disciplines represent a top-level aggregation of resources for a distinct intelligence source or major functional area. Capabilities are subordinate to disciplines and represent types of activities that must be accomplished to support a discipline. Capabilities also include activities that support the program as a whole such as Management, Logistics, and Administration.

(U) The NRO supports six of the 10 Intelligence Disciplines:

- IMINT.

- SIGINT.

- Counterintelligence.

- Infrastructure.

- MASINT.

- Multidisciplinary Intelligence.

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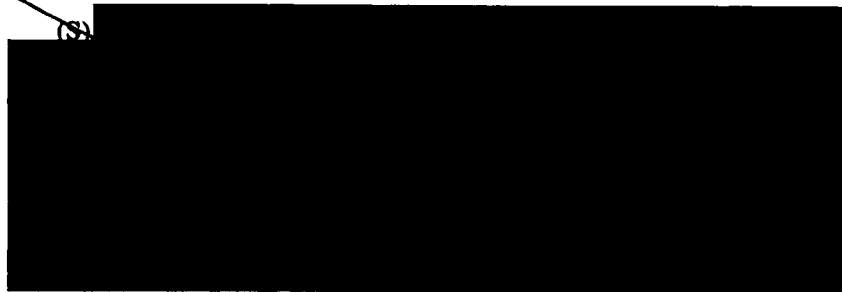
- Launch activities.

- Communications relay and Infrastructure.

- Advanced research and development.

- Analyses and assessments.

- Human resource management.

- Infrastructure and administration.

(S//TK)

(S//BYE/TK)

(U) Imagery Intelligence and Geospatial Information

(S//TK)
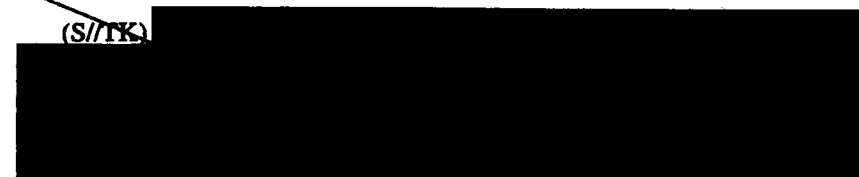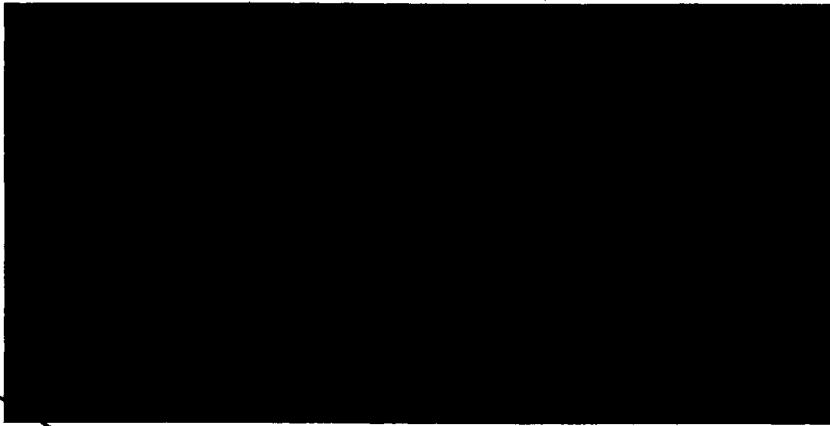
(S//TK) Overhead SIGINT systems:
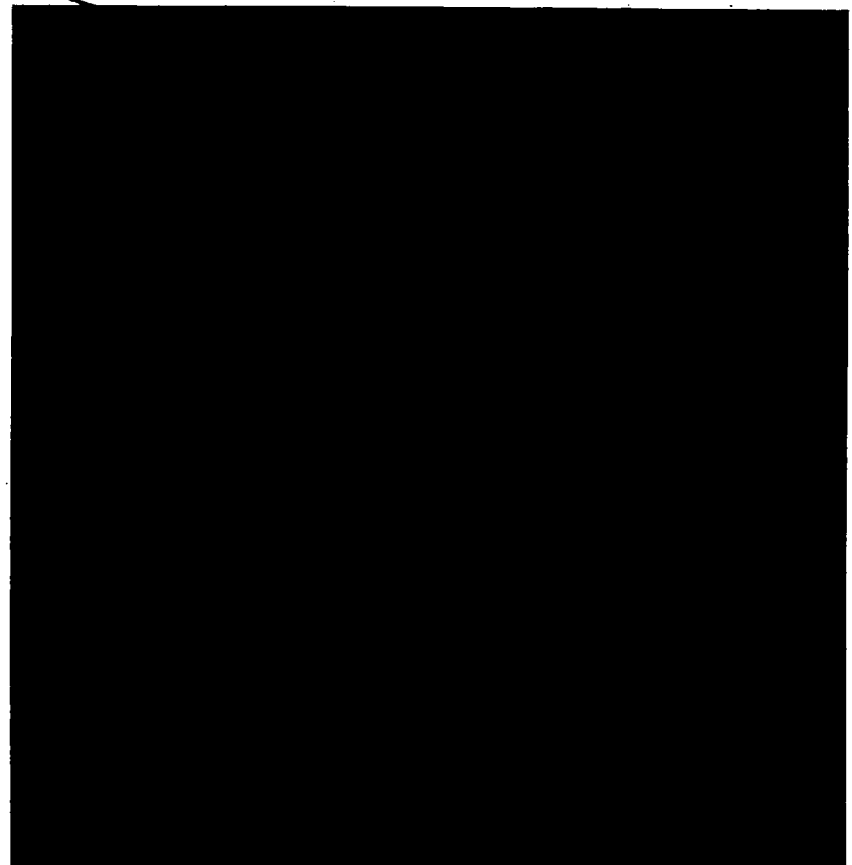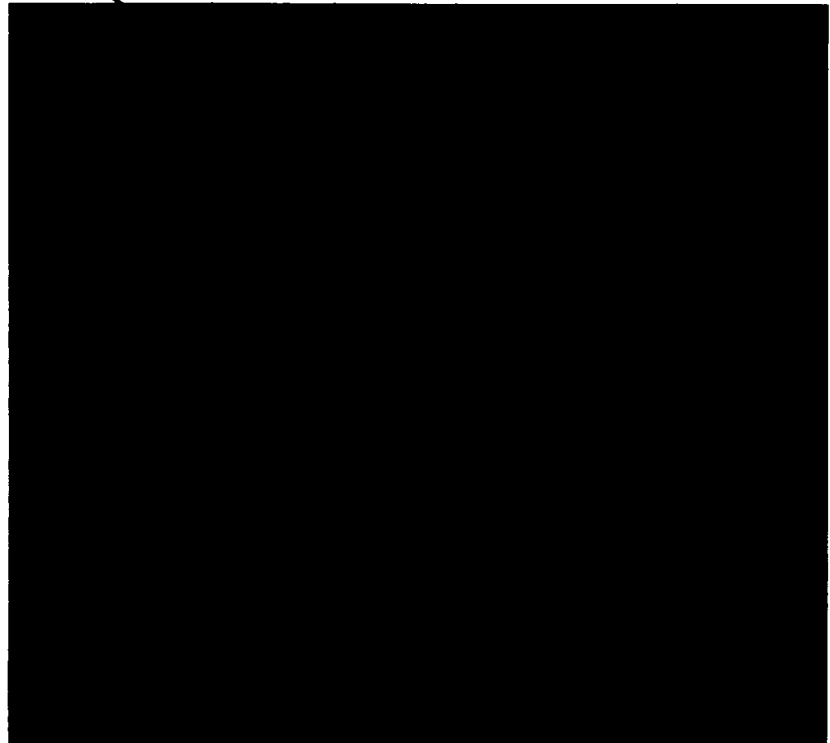
(U) SIGINT Capabilities

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- Future architecture concept development and preacquisition activities.

- SIGINT prototype development, testing, and evaluation and ground systems development.

• SIGINT processor development and performance verification; and system integration and engineering necessary to support development activities.

(S) ██

(S) ██
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(U) The Communication and Dissemination Systems provide wide area networks at the SIGINT ground stations to support development, test, maintenance, and analysis of SIGINT processing systems.

(S//TK) ██
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(U) The Education and Training capability provides SIGINT expertise to enhance military operational training, training for operational crews, and professional training for NRO personnel.

(U) The Facilities capability supports maintenance and utility costs for SIGINT ground stations.

(U) The Information Systems support the development and operations of IT systems within the SIGINT ground stations such as the ████

██

(U) The Information Systems Security capability provides personnel to perform information systems inspections and accreditation to the NRO's SIGINT information systems.

(U) The Launch and Delivery Vehicles capability supports launch base operations and services, launch vehicle procurement, and integration activities for SIGINT satellites.

(U) The Management, Logistics, and Administration capability supports SIGINT travel, awards, and ground system program office (SPO) management and logistics requirements.

(U) The Performance Studies and Operations Research capability supports SIGINT system level studies and performance simulations during development and acquisition activities. This capability also includes threat assessments to SIGINT systems.

(U) The Physical Security capability supports security requirements for SIGINT ground stations.

(U) The Requirements Management and Tasking capability supports the Overhead Collection Management Center and activities to allocate overhead SIGINT collection requirements across available resources, consistent with IC priorities.

(U) The SIGINT Collection capability supports SIGINT vehicle operations, launch integration, and factory support for ground and space systems.

(U) The SIGINT Processing capability includes life-cycle support of operational SIGINT ground processing systems.

(U) Key Changes from FY 2005 to FY 2006

(S//TK) ██
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(U) Key Changes from FY 2005 to FY 2006

(S) ███████████████████████████████████

Counterintelligence Discipline
Resource Summary by Capability
FY 2004 – FY 2011
This Exhibit is SECRET

(Dollars in Thousands)

███

(U) Infrastructure

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(U) The Infrastructure discipline includes all sustaining activities that support the entire NRO, including: facilities, communications, security, personnel, human resources support, training, information systems, financial and contract management, transportation, system engineering oversight, operational support, and all other general administrative and support functions. This discipline also includes the independent functions of the NRO Inspector General, CIO, and NRO support to the National Security Space Office.

(U) Infrastructure Capabilities

(U) The Classification Management capability supports declassification activities performed in accordance with Executive Orders 12958 and 13142.

(U) The Communications and Dissemination Systems capability supports long haul communications systems, as well as local and wide area network systems, enterprise operations, and engineering.

(U) The Education and Training capability supports the Acquisition Center of Excellence, security training, and professional development of NRO government personnel.

(U) The Facilities capability supports operation and maintenance of Westfields, and all National Capital Region leased facilities.

(U) The HQ Management capability supports staff functions such as CIO, General Counsel, Inspector General, Equal Employment Opportunity, and Public Affairs.

(U) The Information Systems capability supports IT systems utilized for facility, security, system engineering, and CIO activities.

(U) The Information Systems Security capability supports security for the NRO communications enterprise and wide area network systems, and certification and accreditation of NRO information systems.

(U) The Intelligence Policy and Coordination capability provides policy support, including guidance, preparation, coordination, and dissemination.

(U) The Management, Logistics, and Administration capability provides the corporate-level services required to support the NRO's acquisition and operations directorates, including financial and contract management, cost estimating, transportation, and other general administrative and support functions. This capability also includes the NRO funded activities of the National Security Space Office.

(U) The Performance Studies and Operations Research capability supports the planning, evaluation, and technical analysis of NRO programs, as well as independent analyses and architecture trades for NRO acquisition programs.

(U) The Personnel Management capability funds the Office of Human Resources and human capital initiatives to develop and maintain a world-class workforce.

(U) The Personnel Security capability supports investigations, polygraph support, and adjudication activities.

(U) The Physical Security capability supports all activities to ensure the security of NRO facilities and personnel.

(U) The Systems Development and Acquisition capability supports the NRO communications infrastructure and business system upgrades.

(U) Key Changes from FY 2005 to FY 2006

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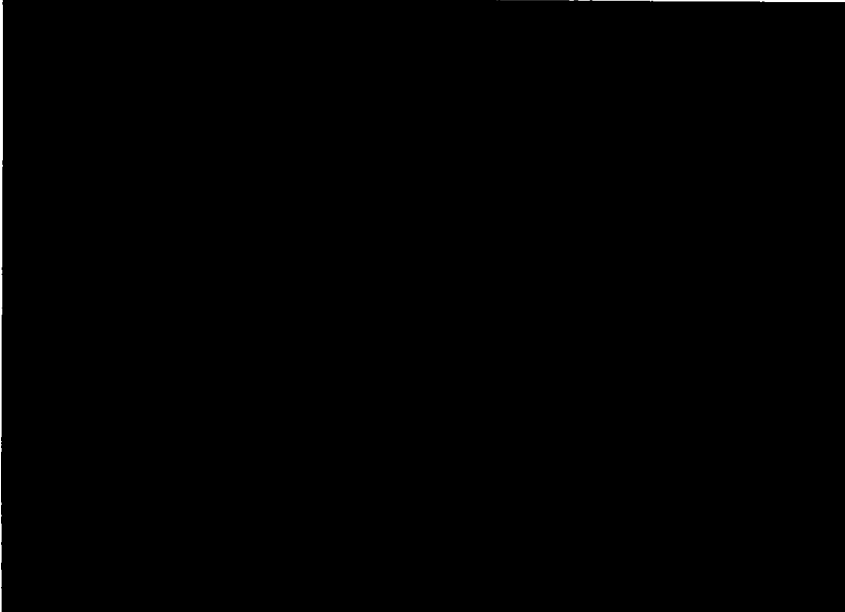
(U) IMINT

(S//BYE)

(TS//TK)

(FOUO) Current operational imagery systems are critical to satisfying today's national and military requirements. The FY 2006 program sustains those on-orbit systems and continues a more fundamental transformation in both overhead and ground system capabilities.

FY 2006 IMINT Program

(S//BYE)

(TS//BYE)

(S//TK)

(S//TK)

(S//TK)

(FOUO) The IMINT FY 2006 request delivers on our near-term program commitments while beginning the transformation of our imagery architecture. The programs described herein safeguard national security by maintaining America's information superiority in an era of increasingly complex strategic challenges. Together with our mission partner, IMINT continues to keep watch on the world, delivering essential intelligence for both our national and military customers.

(U) SYSTEMS ENGINEERING & FUTURE DEVELOPMENT
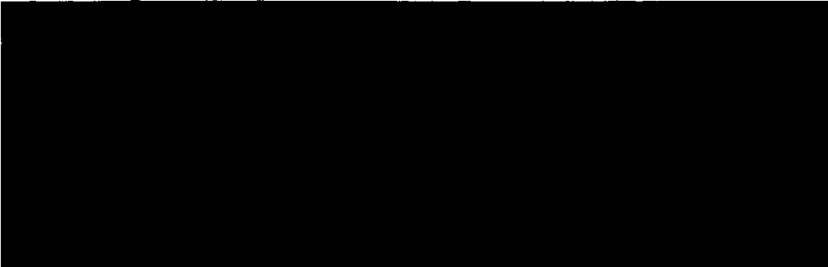
(S//TK)

(U) The SE&FD EC provides five primary functions:

• Provide system engineering and risk reduction for the SIGINT Directorate. Leverage existing overhead SIGINT systems while delivering the current IOSA baseline.

• Evolve IOSA by defining performance enhancements to respond to the demands of the national and tactical customers.

• Provide resources necessary to react to and plan for the constantly evolving international threat through identification and implementation of near-term enhancements (such as Quick Reaction Capability (QRC) deliveries and transition of emerging technologies) for both legacy and IOSA systems.

• Support information assurance and information security activities.

• Develop and maintain the SIGINT Directorate's technical and programmatic baselines and policies.

(S//TK) The major objectives of the SE&FD EC projects are to:

(U) SYSTEMS ENGINEERING & FUTURE DEVELOPMENT
(U) IOSA SYSTEMS ENGINEERING

(U) Description

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(S//TK)

(U) SIGINT Systems Engineering is leading several important efforts to manage risks across IOSA.

• Mission performance verification as IOSA segments integrate into the architecture.

• Acquisition delivery schedule analysis and schedule conflict resolution as more IOSA segments continue to be delivered to the ground stations.

• Communications link analysis to ensure enough bandwidth is available to accomplish the mission.

• End-to-end performance assessments to ensure customer satisfaction.

(U) This project funds risk reduction activities necessary to satisfy IC requirements, refine architecture costs, define risk management approaches, and work with program offices to develop acquisition strategies in the IOSA and post IOSA eras. These activities include standardization of site deliveries, definition of remote installation and maintenance for all sites, and verification and validation of critical architecture requirements.

(U) SIGINT Systems Engineering also is leading the efforts to improve current system performance and to identify near-term enhancements for IOSA in response to the emerging modern target environment. Working closely with NSA and other customer groups, this project ensures the implementation and delivery of crisis support capabilities required to satisfy real-world intelligence and military community needs. This project provides the IC interface to identify crisis requirements, define acquisition requirements to be met by the SIGINT acquisition system program offices, identify funding options for QRC efforts, and monitor developments to ensure successful implementation against user requirements. This project works with the customer community to identify critical and cost-effective improvements to IOSA acquisitions to ensure IOSA evolves to meet the changing global threat.

(S//TK)

(U) SIGINT Systems Engineering supports the SIGINT Director and the SIGINT Comptroller with technical and financial evaluation and process support for the Directorate's input to the NRO Integrated Technology Investment Process, as well as prioritizing and evaluating the impacts and alternatives of budget issues as defined by the IC.

(S//TK) Key Short & Long Term Objectives

(U) SIGINT GROUND DEVELOPMENT AND INTEGRATION
(U) SIGINT GROUND SYSTEMS ENGINEERING AND INTEGRATION
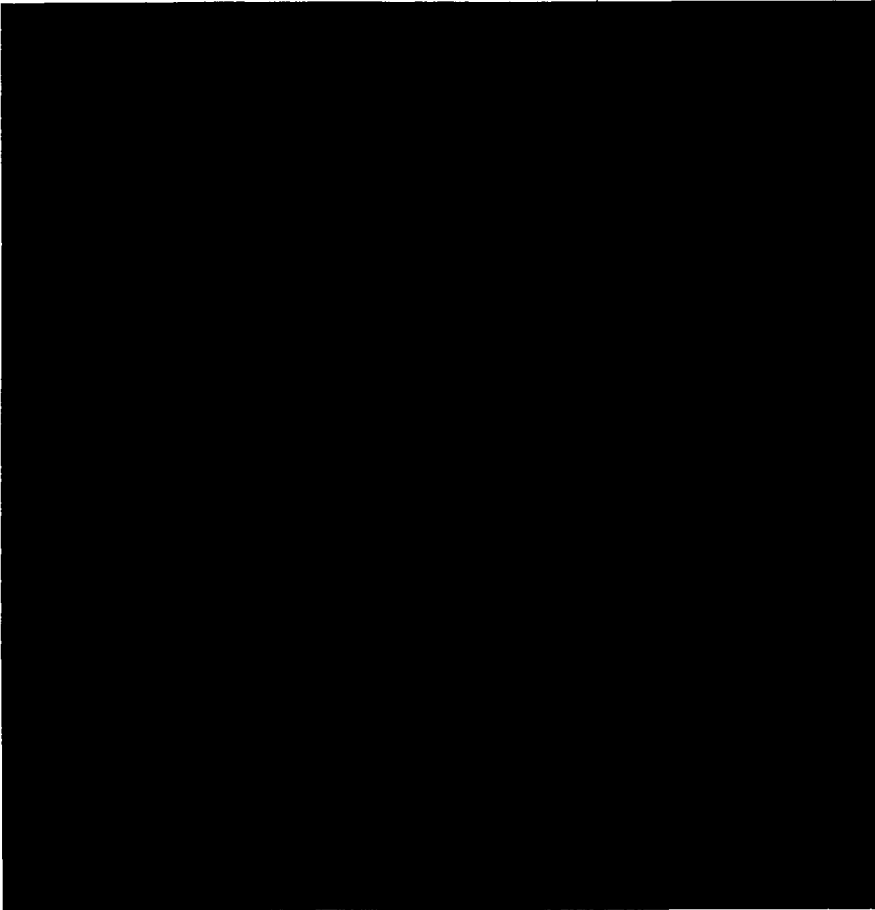
(U) Description

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(U) This project executes trade studies, prototypes, requirements analysis, and strategies to effectively and proactively implement emerging technologies, mission priorities, target sets and user needs for future mission management, mission services and signal processing systems.

(S//TK)

(S//TK)

(S//TK) Key Short & Long Term Objectives

(U) Customers/Products

• Requirements/interface documents: Ground Systems Requirements Document, Interface Control Documents, CONOPS Documents, and Refined Overhead SIGINT Ground Architecture Framework.

• Standards and specifications documents: Joint Systems Integration Document and Systems Specifications Documents.

• Test documents: Factory Acceptance Test Documents, Site Acceptance Test Documents, and Verification and Test Matrix Documents.

• Integrated Program Schedule.

• Capabilities trace: Operational requirements demonstrations.

• Resource utilization: Mission assessment studies.

• Architecture-level capabilities, plans, concepts of operations, and analyses to define future emitter mapping, signals copy and exploitation, mission management, and mission services capabilities that respond to the IC MRB POEs and are interoperable with the UCA framework.

• System end-to-end mission threads for OPELINT, TECHELINT, Communications Externals, COMINT, FISINT, and PROFORMA.

(U) SIGINT GROUND DEVELOPMENT AND INTEGRATION
(U) SIGINT PROGRAM SUPPORT

(U) Description

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(S) ███████████████████████████████
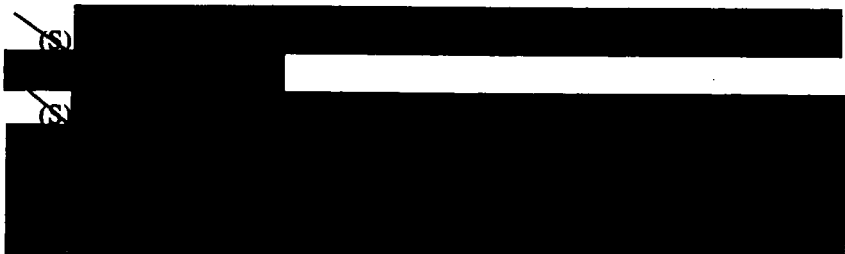
(U) Program, financial, and budget analysis expertise is essential to:

• Assess the status of ongoing programs.

• Respond to short-notice cost and schedule adjustment questions.

• Provide support to integrated SIGINT financial management, including financial execution, budgeting, and programming activities.

• Support accurate and reliable responses to Congressional and Executive Branch inquiries.

(U) SIGINT Security activities funded by this project will:

• Provide guidance on security policy issues.

• Ensure compliance with Executive Order 12958, *Classified National Security Information*.

• Produce program classification guides and program protection plans.

• Review automated information security.

• Provide industrial security oversight.

(U) Finally, this project supports activities of the SIGINT Directorate staff, including travel and training, coordination and management activities, personnel administration, and other support.

### (U) Key Short & Long Term Objectives

(U) The primary objective is to efficiently maintain required support activities for the SIGINT Directorate.

(U) Customers/Products

• SIGINT financial and plant, property, and equipment reports.

• Financial and budget analyses in support of SIGINT programs.

• Security guidelines, document classification, clearance verification, and reference materials.

- *(S//TK) SIGINT Low Altitude Operations*
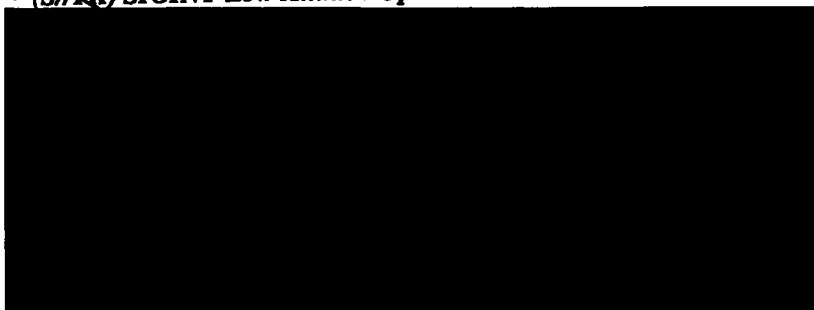
- *(U) Overhead Collection Management Center*

  — Logicon Information Solutions, Hanover, MD: Overhead Collection Management Center (OCMC) O&M.

  — Booz-Allen & Hamilton, McLean, VA: OCMC systems engineering technical assistance (SETA) support.

- *(U) SIGINT Operations Systems Engineering*

  — Northrop Grumman Information Technology–TASC, Chantilly, VA: Contract Advisory and Assistance Services (CAAS) systems engineering and other engineering support.

  — Aerospace Corporation, El Segundo, CA: Federally Funded Research and Development Center (FFRDC) for systems engineering and other engineering support.

- *(U) SIGINT Operations Travel, Awards, and Training*

(U) There are no contracts associated with this project.

(U) Management Oversight

(U) Unless otherwise indicated within individual projects, management oversight for this entire EC is:

- Director of Central Intelligence.

- Secretary of Defense.

- Office of Management and Budget

(U) SIGINT OPERATIONS
(U) SIGINT OPERATIONS SYSTEMS ENGINEERING

(U) Description

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(S//TK)

(U) This project also provides funding for CAAS and FFRDC support.

(U) Key Short & Long Term Objectives

(U) The primary objective of this project is to maximize end-to-end systems operational performance, ranging from collection of intercepted signals to data forwarding, for both the space and ground assets based on technical and fiscal constraints.

(U) Customers/Products

- SIGINT MGSs.
- SIGINT ground and development acquisition effort, and SIGINT spacecraft acquisitions.
- SIGINT spacecraft acquisition O&M support.
- NRO mission partners, military users, and policy decisionmakers.

(U) COMMUNICATIONS

(U//FOUO) The NRO Communications Systems Acquisition and Operations Directorate (COMM) enables NRO mission success by providing cost-effective communication and information system products and services to the NRO and its mission partners. Our goal is to provide products and services supporting our customers today, while evolving our architecture to effectively support them tomorrow. Through a unique combination of space, terrestrial, and enterprise assets, COMM provides an integrated, secure, and scalable architecture fulfilling worldwide user requirements while simultaneously taking advantage of economies of scale and state-of-the-art technologies. This architecture is integrated with the expertise of our system engineering and architectural development capabilities for support to NRO, IC, and DoD mission partners and national decisionmakers.

(U//FOUO) The COMM architecture provides: real-time mission critical information delivery, from sensor collection to processing and dissemination; and information services supporting messaging, collaboration, and sharing of information across the NRO, the IC, the DoD, and other federal agencies in a reliable and secure fashion giving full consideration for all Information Assurance concerns. COMM has substantially increased both space and terrestrial connectivity and capacity in an effort to remove communications as a constraint in intelligence collection activities. Finally, COMM is implementing essential alternate capabilities and operational strategies to enable and enhance continuity of operations in the event of war or terrorist acts.
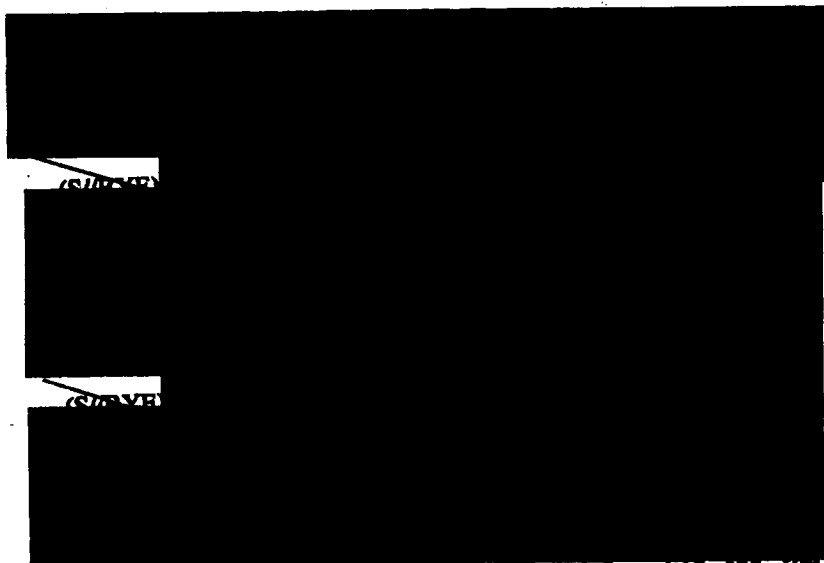
(U//FOUO) The sensitivity of intelligence information and the increasing need for timeliness and immediacy calls for world-class performance from a COMM team recognized as the "center of excellence" for end-to-end communications support. Our architectural excellence team and advanced concept engineers continue to plan for engineering team and advanced concept engineers continue to plan for development and insertion of enabling technology into future COMM systems, as well as developing strategies and architectures to develop, operate, and protect a transformational COMM enterprise in a cost-constrained environment.
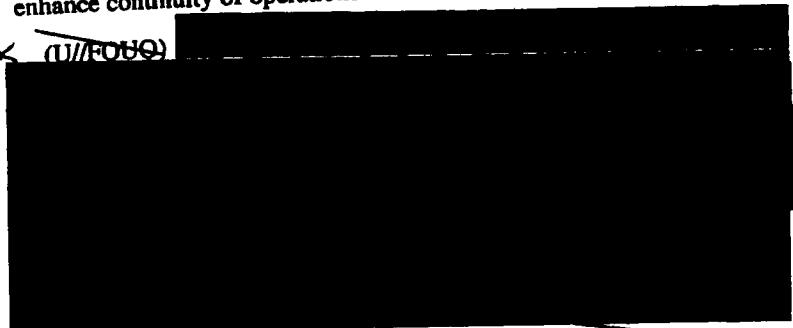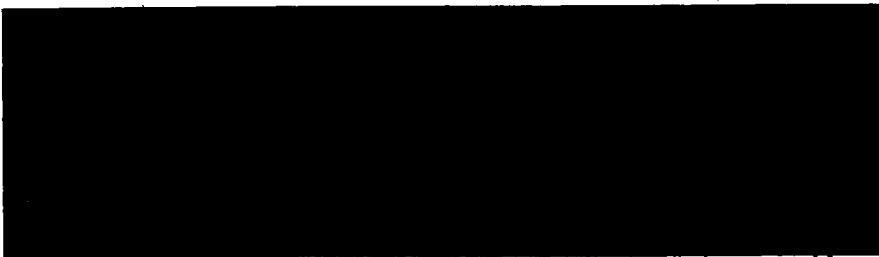
products and services. The Enabling Expenditure Center provides COMM system-level architecture, engineering, program management, and integration activities defining and managing the integrated system-of-systems.

(U//FOUO) COMM will continue to provide cost-effective products and services while supporting the customer and evolving the network architecture to remove communications as a constraint.

(U//FOUO) This budget submission reflects COMM's plan to enable NRO mission success through implementation of Space, Terrestrial, and Enterprise expenditure center capabilities into integrated COMM

(Dollars in Thousands)

Communications Summary
Funds by Expenditure Center
FY 2004 – FY 2011
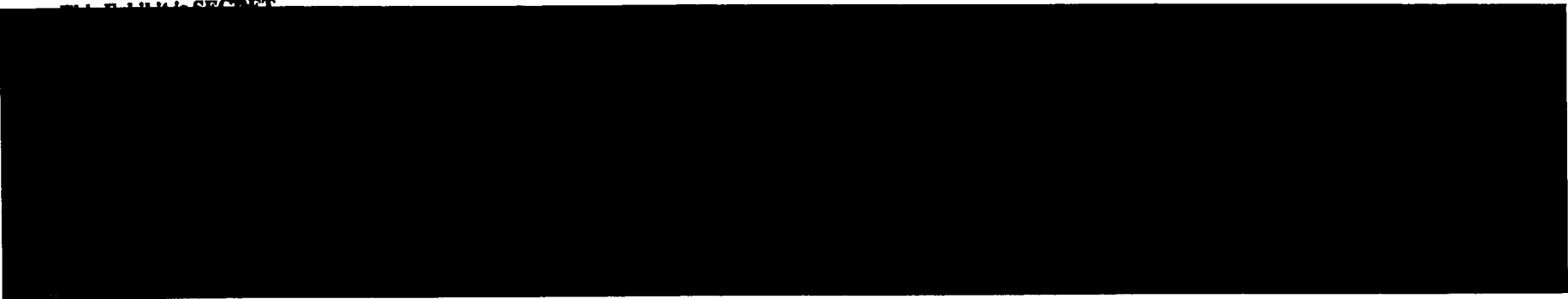
(U) Major Contractors

- *(S//BYE) Frequency Management*
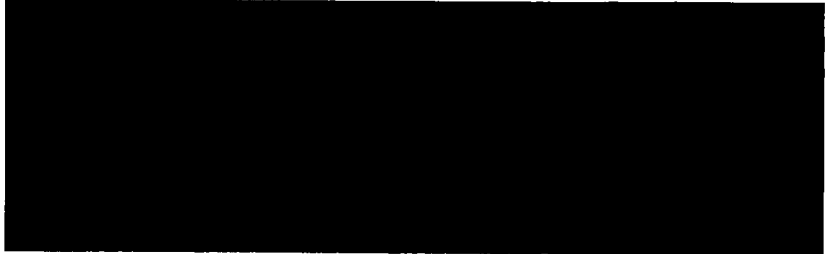
- *(U//FOUO) Modeling and Analysis*

— Northrop Grumman Information Technology—TASC, Chantilly, VA: network performance center support.

— General Dynamics, Fairfax, VA: Independent Test and Evaluation Center support.

- *(U) Directorate Management*

— Aerospace Corporation, El Segundo, CA: FFRDC for system engineering support.

— Northrop Grumman Information Technology—TASC, Chantilly, VA: system engineering and system integration.

— MITRE Corporation, Bedford, MA: FFRDC for systems engineering support.

— Syracuse Research Corporation, Chantilly, VA: information systems security management.

- *(U) Directorate Engineering*

— Aerospace Corporation, El Segundo, CA: FFRDC for initiative development and user requirements interface.

— Northrop Grumman Information Technology—TASC, Chantilly, VA: system engineering and system integration.

- *(U) Requirements Management*

— Northrop Grumman Information Technology—TASC, Chantilly, VA: system engineering/system integration.

— General Dynamics, Fairfax, VA: system engineering for network requirements.

(U) Management Oversight

(U) Unless otherwise indicated within individual projects, management oversight for this entire EC is:

- Director of Central Intelligence.

- Secretary of Defense.

- Office of Management and Budget.

UNCLASSIFIED

Space

Terrestrial

Enterprise

System Requirements

Program Plans

Schedules Management

Integrated COMM Architectures & Requirements

Future Planning

Enabling
Cross Line of Business Integration

Business Environment Development

End-to-End Systems Engineering

Financial Management
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Policy & Regulation

Strategic & Business Planning

Frequency Management

Configuration Management

Service Management

COMM Service Needs

IMINT

UNCLASSIFIED

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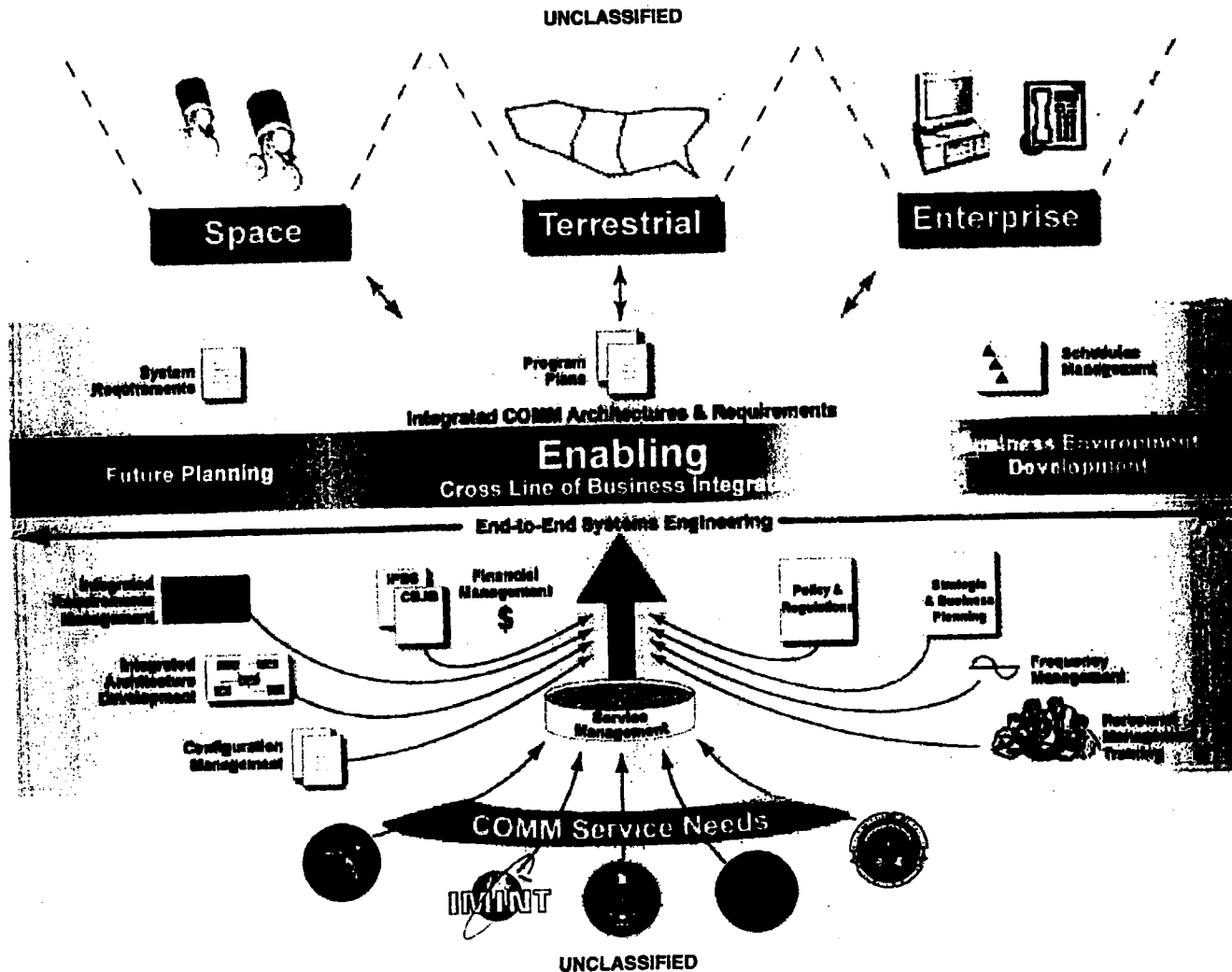
Figure 20.

(U) COMMUNICATIONS ENABLING
(U) MODELING AND ANALYSIS

(U) Description

(S) █████████████████████████████████

(U//FOUO) The Modeling and Analysis project provides the capability to collect and evaluate performance metrics (metrics include utilization, allocation, capacity, and latency). These performance metrics enable COMM to be proactive and rapidly identify and recommend correction to potential NRO network problems, averting loss of service. The modeling and simulation of existing data/voice networks enables pre-deployment simulation of changes (for example, changing network configurations, recapitalizing aging infrastructure, or introducing upgraded hardware/software) preventing inadvertent degradation to the operability, availability, and reliability of the network. This support is also essential to providing timely resolution of network anomalies and guaranteeing stability in the post-deployment environment. Modeling and Analysis provides additional engineering support from concept through implementation by managing resource reservation and circuit costing.

(U) In addition to the virtual checks available through modeling/simulation, the Modeling and Analysis project supports an Independent Test and Evaluation Center (ITEC) to perform extensive pre-deployment physical testing of hardware and software prior to introduction to the network. By providing testing capability in offline environments the NRO avoids critical and costly operational outages.

(U//FOUO) Finally, the analytical capabilities available through the Modeling and Analysis project identify high leverage opportunities for network improvements and problem resolution. Timely performance trending and long-term analysis ensure network choke points and other potential problems are resolved or identified before having impact on network performance. The performance management tools capability

exploits this raw analytical data to provide customer-readable formats and by providing the data interface between the raw data and higher level tools used in the support of modeling and simulation capabilities.

(U//FOUO) Key Short & Long Term Objectives

- Provide timely and accurate modeling of the NRO communications architecture to ensure/enhance network operability, availability, and reliability.

- Identify network choke points and opportunities for high-leverage improvements to operational area of responsibilities. Provide problem resolution through analysis and testing.

- Maintain a model of communication/IT systems allowing for long-term analysis and system engineering trades and ensuring timely support of NRO missions.

- Ensure test equipment/capabilities keep pace with emerging technologies.

- Provide independent verification and validation of new installations and upgrades of hardware, software applications, and operating systems.

- Maintain a physical representation of the communications and IT infrastructure to allow integration testing and anomaly resolution activities.

(U) Customers/Products

- An integrated Modeling and Analysis center with analytical tools capable of emulating the NRO network to ensure requirement satisfaction, network integrity, and security.

- All NRO internal and IC network customers.

(U) COMMUNICATIONS ENABLING
(U) DIRECTORATE MANAGEMENT

(U) Description

(S/BYE) ███████████████████████████

(U) The Directorate Management project funds the mission essential corporate activities necessary for COMM to maintain current operations while developing ways to optimize future operations. Specifically, this project supports COMM:

- Travel and training.

- Director's Action Group.

- Logistics and material support.

- Employee recognition programs.

- Organizational development activities.

- Financial, Human Resource, and Security management.

(U) These activities sustain current operations, support surge requirements from the IC, and assess and develop options for meeting the emerging and long-term needs of the NRO. Through strategic planning, COMM identifies opportunities to leverage economies of scale and to satisfy new requirements efficiently and affordably.

(U) Key Short & Long Term Objectives

- Support travel, training, administrative, and other business management requirements for COMM.

- Support organizational development activities focusing on culture change, employee diversity, succession planning, and organizational effectiveness.

- Recognize individual and team exceptional accomplishments and performance through numerous awards and recognition programs for military and civilian personnel.

(U) Customers/Products

(U) Integrated business and logistics management across COMM.

(U) COMMUNICATIONS ENABLING
(U) DIRECTORATE ENGINEERING

(U) Description

(S)

(U) The Directorate Engineering project funds the development of a future integrated communications architecture responsive to user requirements and mission objectives. The IC, DoD, and other federal agencies are undertaking a series of efforts to define and develop communication architectures to meet the needs of the US Government. The gap between the future and "as is" communication architectures forms the basis for budget formulation and program planning. It is imperative the NRO participate in and leverage those activities to define our future architecture.

(U//FOUO) Through the application of system engineering and integration activities (including risk management, readiness, verification, and validation), this project provides resources to:

- Monitor and integrate activities across the Enterprise, Terrestrial, and Space ECs to meet the specified and allocated (top-level) architectural requirements.

- Integrate the NRO communications architecture into the broader Integrated NRO Architecture (INA), the IC, and the DoD.

- Optimize system-of-systems for increased performance.

- Support assessment studies to identify/integrate investments necessary for NRO communications continuity of operations (COOP) and survivability.

- Interact with other NRO activities and IC partners to ensure end-to-end continuity/security of essential functions in primary and reconstituted modes.

- Support IA initiatives.

(U) Key Short & Long Term Objectives

- Maintain and update the Integrated Communications Architecture based on developments from the previous year.

- Support Deputy Director for System Engineering efforts to maintain the communications portion of the INA.

- Conduct future architectural concept studies.

- Maintain and update NRO COMM Strategic and Business plans in accordance with NRO and IC strategic plans.

- Execute risk management and readiness programs.

- Coordinate overall requirements validation and verification through the Requirements Management project.

- Participate in evolutionary communications enhancement studies, assessments of evolutionary and transformational technology performance and risk.

- Participate in definition and coordination for approval by NRO and IC CIO of space and terrestrial communications standards, interfaces, and concept of operations (CONOPS).

- Participate in establishment of communications integration and validation test beds and methods for assessment of communications architecture modifications.

- Provide leadership and support for the maintenance of the NRO and NSS communications architecture as it evolves.

- Support key cross-NRO/cross-IC and DoD processes to optimize performance of communications systems in support of national and military users.

- Develop future architectural requirements supporting NRO customer/users in response to the COMM Strategic Plan.

• Develop cross-NRO IA support requirements including developing requirements for IA tools and building a privileged user program based on recommendations/findings from NRO's internal audit program.

• Provide IA support to Information System Security Manager (ISSM) endorsement (per DCID 6/3).

• Assess and mitigate IA gaps and vulnerabilities in COMM systems through the maintenance of the IA architecture, development of an ongoing vulnerability management process, and through IA technology studies.

(U) Customers/Products

• Synchronized system engineering and integration support.

• All internal and external COMM customers.

(U) COMMUNICATIONS ENABLING
(U) REQUIREMENTS MANAGEMENT

(U) Description

(S) ████████████████████████████████

(U) The Requirements Management project provides the resources required to receive, process, and track requests for new communication systems and IT services. Service requirements are tracked from time of request through delivery of service. The Requirements Management project also supports configuration management and engineering board functions, and COMM program schedules. The following functional areas are funded by this project:

• Development and management of communications and IT requirements.

• Development and management of service level management processes to support improved customer service. Functions as the customer advocate for COMM.

• Validation, allocation, and verification of the requirements baseline, as well as providing long-term schedule and requirements definition.

• Configuration control of communication systems baselines in support of future architectural growth and network problem resolution.

• A customer satisfaction program, to include a metrics-based process, designed to reveal areas of improvement and opportunities to incorporate best practices.

• Schedule and Management Control Program within COMM, to coordinate schedules with other NRO Directorates and Offices and IC partners.

• Management Federal Managers Financial Integrity Act (FMFIA) compliance, and establishment and maintenance of management controls.

(U) Key Short & Long Term Objectives

• Ensure accountability for all customer requirements and traceability for services provided.

• Maintain the schedule baseline to include system development activities and service delivery schedules.

• Provide coordination of proposed schedule changes internal and external to the directorate.

• Provide schedule analysis and critical path assessments.

• Provide day-to-day configuration control of the communication baseline and status accounting for customer requirements.

• Provide FMFIA compliance and creation and maintenance of management controls.

(U) Customers/Products

• Integrated and synchronized requirements management across COMM.

• Customers consist of all users of the NRO communications system.

(U) COMMUNICATIONS ENTERPRISE

(U//FOUO) The Communications Enterprise Expenditure Center (EC) includes resources for the development, integration, control, and protection of the NRO global information enterprise, including voice, video, and data communications and information systems.

(U//FOUO) The major objectives of the Communications Enterprise EC projects are to:

• Ensure the user can rapidly access products and services available via the high-speed network to develop accurate and timely intelligence with confidence.

• Support the NRO workforce by providing products and services enabling communications and the exploitation and dissemination of mission data including:

— Provide life-cycle support to the Global NRO Management Information System (NMIS).

— Ensure the integrity, security, and stability of NRO's communication enterprise on a day-to-day basis.

— Enable NRO multilevel secure communications between IC, DoD, and other federal agencies through mission and organizational message processing systems, including the DoD-mandated Defense Message System (DMS).

— Provide a collaborative environment and enhancing workforce productivity through integration of communication architectures and real-time communications systems.

(U) Budget Request

(S)

(S//BYE)

(U) COMMUNICATIONS ENTERPRISE
(U) ENTERPRISE ENGINEERING

(U) Description

(S)

(U//FOUO) The Enterprise Engineering project provides resources to develop, integrate, test, and deliver enterprise management and message handling capabilities. These capabilities provide control and protection of the NRO global information enterprise and enable dissemination of critical intelligence information.

(U//FOUO) Enterprise Engineering activities are vital to improving the ability to execute the NRO mission and enabling the NRO to meet mission critical performance, availability, and security requirements. Major subsystems and elements are detailed below:

- Enterprise Management Engineering (EME) architects, designs, and delivers systems and COMM service management (SM) capabilities required to:

    — Design and enable execution and monitoring of COMM SM and Information and Communications Technology processes.

    — Enable proactive identification and resolution of communications service deficiencies.

    — Enhance security and backup capabilities for information products and resources across the organization's business and virtual workspace.

    — Automate capabilities to control, configure, provision, and maintain critical communication service levels across NRO's global information enterprise using IT Service Management Framework best practices.

    — Protect the network against insider threats.

- Enterprise Defense-in-Depth (EDiD) designs and delivers critical capabilities to monitor, detect, and defend NRO's information enterprise through a layered protection approach utilizing COTS products and government-developed special purpose software. Within EDiD, the Enterprise Security Manager (ESM) designs and delivers Enterprise Management Operations Center (EMOC) real-time collaboration and forensic analysis capabilities and incorporates all the requirements of the Enterprise Collaboration System.

- DMS, ensures NRO organizational messaging systems comply with DCI and Assistant Secretary of Defense Directives. DMS enables secure, timely writer-to-reader communication within and between DoD, IC, and other federal agencies. COMM will complete the transition to DMS and deliver DMS capabilities to the end user's desktop.

(U//FOUO) Key Short & Long Term Objectives

- Ensure reliable and responsive communications products and assured services worldwide to the NRO.

- Protect the NRO communication enterprise against unauthorized access, denial-of-service attacks, and malicious code activities through an enterprise strategy (EDiD) coupled with real-time collaboration and forensic analysis capabilities.

- Enhance availability, security, and integrity of information systems supporting mission critical NRO activities and information sharing across the IC and DoD community networks.

- Continue the development, integration, and implementation of DMS throughout the NRO.

(U) COMMUNICATIONS ENTERPRISE
## (U) ENTERPRISE OPERATIONS

(U) Description

(S)

(U//FOUO) The Enterprise Operations project is critical to sustaining a reliable, secure, global network providing essential communications and information products and services to the NRO workforce and to a growing number of mission partners systems.

(S//TK)

(U//FOUO) The Enterprise Operations project also includes resources for life cycle support to multimedia communication systems. It enables a geographically dispersed workforce to accomplish its mission and collaborate with NRO mission partners at minimum cost. Specifically, this project:

• Maintains and improves the NRO's worldwide collaborative architecture, by upgrading or replacing legacy multimedia systems and services, consistent with evolving IC and DoD standards.

• Continues site deployments of the Mission Critical Conferencing System (MCCS), replacing the unsupported and obsolete Secure Mission Conferencing System.

• Continues installation of Voice over Internet Protocol (VoIP) systems at sites, where appropriate, to reduce total cost of ownership.

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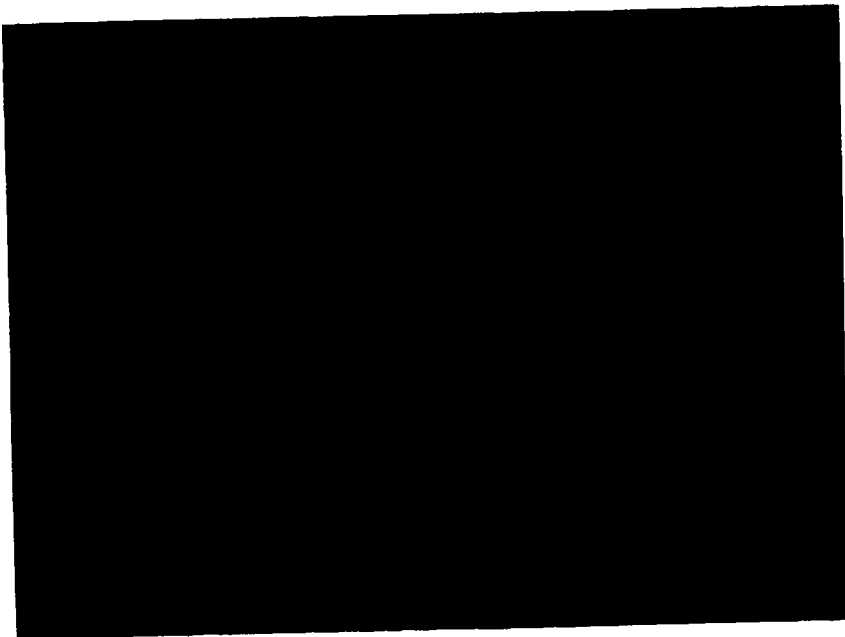
- Provide web development tools, web authoring, and web applications.

- Provide and maintain robust, reliable, and secure NRO global voice and video capability.

- Deploy technologically current multimedia collaboration tools combining voice, video, and data capabilities in a single application.

- Coordinate with IC and mission partners to provide a seamless interagency videoconferencing network utilizing existing network components.

- Sustain the NRO SOCOMM network ensuring uninterrupted secure, timely, and accurate messaging capabilities.

- Continue to supply high-speed data dissemination services and capabilities via the XOCOMM system to meet rapidly increasing customer requirements.

- Maintain SCP II system, continue support for the AUTODIN closure timeline, and maintain compatibility with the DMS development and implementation.

(U//FOUO) Key Short & Long Term Objectives

- Provide reliable and responsive communications products and assured services to global NRO customers and mission partners through centralized planning and distributed execution.

- Protect the NRO communication enterprise against unauthorized access, denial-of-service attacks, and malicious code activities by using improved enterprise security features.

- Enhance the availability, security, and integrity of information systems supporting mission critical NRO activities and information sharing across the IC and DoD community networks.

- Provide life-cycle support for the NRO's global management information system network at operational facilities worldwide.

(U) Milestones/Schedules

- Assume O&M responsibility for SIGINT ▮▮▮▮▮▮ ▮▮▮▮▮▮ (1QFY06).

- Upgrade one-third of NMIS workstations to sustain capabilities supporting customer requirements (2QFY06).

- Upgrade one-third of NMIS data centers (1QFY07).

- Begin migration of legacy NMIS custom applications to standard.

- COTS/GOTS products (4QFY06).

(U) Major Contractors

• **(S//TK)**

[REDACTED]

• **(S//TK)**

[REDACTED]

• **(U//FOUO)** *Ground Segment*

— L3 Communications Analytics Corporation, Inc., Vienna, VA: Automated Message Broadcast O&M contractor.

— Lockheed Martin Corporation, Philadelphia, PA: space systems engineering support.

— Raytheon Company, Aurora, CO: prime contractor for DCCS.

— Raytheon Company, Aurora, CO: O&M contractor for MTOC.

— Scitor, Chantilly, VA: DCCS systems engineering support.

• **(S//TK)**

[REDACTED]

• **(U//FOUO)** *Information Systems Security*

— Aerospace Corporation, El Segundo, CA: FFRDC for space systems engineering support.

— ARGOTEK, South Riding, VA: information assurance systems engineering.

— MITRE Corporation, Reston, VA: FFRDC for systems security engineering support.

— Syracuse Research Corporation, Syracuse, NY: information assurance program and space systems security engineering support.

(U) Management Oversight

(U) Unless otherwise indicated within individual projects, management oversight for this entire EC is:

• Director of Central Intelligence.

• Secretary of Defense.

• Office of Management and Budget.

(U) COMMUNICATIONS TERRESTRIAL
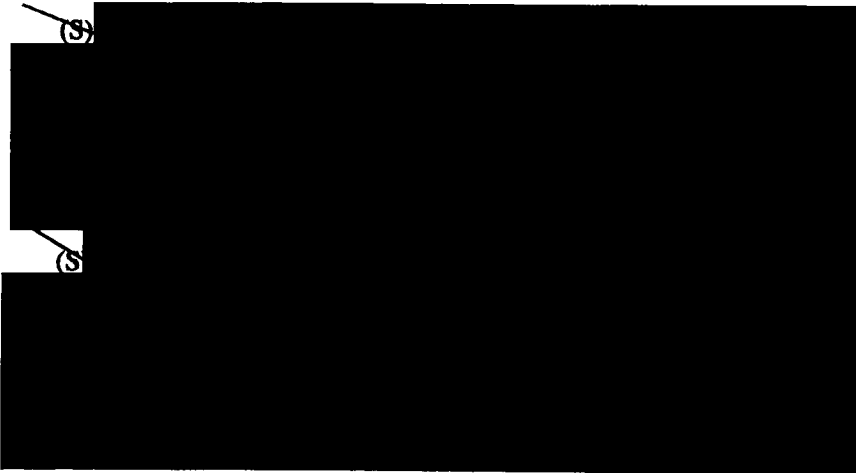## (U) TRANSPORT

(U) Description

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(U//FOUO) The Transport project supports the engineering, procurement, and integration of new leased telecommunications circuits. This includes the resources required to maintain and manage leased terrestrial circuits providing connectivity from over 300 NRO contractor locations to major NRO operating locations.

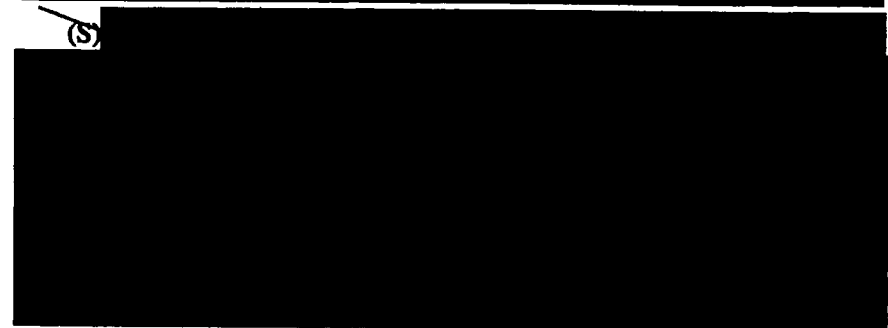(S//BYE

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(U) ADVANCED SYSTEMS AND TECHNOLOGY

(S) [redacted]

(S) [redacted]

(U) Working within the construct of National Security Presidential Directive (NSPD)-26 Intelligence Priorities and the associated National Intelligence Priorities Framework (NIPF), the NRO's technology enterprise specifically supports the DCI *Imperative* to "Leverage Technology to Transform Intelligence." Some of the salient features of the technology enterprise include:

• Designing roadmaps to focus programs on developing new sources and methods and adapting to the new threat environment, ensuring alignment with NSPD-26, NIPF, and NRO strategic intent.

• Focusing NRO investment on the most challenging intelligence problems, consistent with DCI and Secretary of Defense priorities.

• Strengthening the NRO outreach program to provide access to revolutionary R&D concepts.

• Participating in joint working arrangements, ensuring collaboration across the IC for improved intelligence interoperability, and strengthening interfaces with the DoD to wisely leverage other agencies' R&D efforts.

• Investing in people; ensuring staffs have the right talent; and continuing to train, develop, and motivate a diverse workforce.

(S) [redacted]

(S) [redacted]

(S) [redacted]

(U) The Technology Demonstrations and Support EC also includes Advisory and Assistance Services (A&AS) support. AS&T relies on the Aerospace Corporation and other technical experts to mature a multitude of evolutionary and revolutionary technologies and integrate them into various space and ground systems. Support personnel ensure that performance parameters for proposed systems and subsystems represent significant and realizable improvements from today's systems. This in turn produces systems more quickly, at lower cost, and with higher performance to provide exquisite intelligence.

(U) ADVANCED TECHNOLOGY

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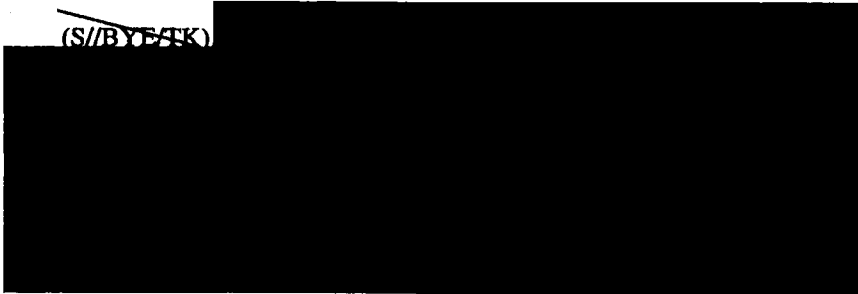
(U) The major objectives of the Advanced Technology EC projects are to:

• Deliver technologies, proof-of-concept experiments, new concepts, and new processes focused on new intelligence sources and methods.

• Explore revolutionary concepts and technologies in direct support of the NRO goal "Revolutionize Global Reconnaissance," and the DCI *Imperative* "Leveraging Technology to Transform Intelligence."

(U) Budget Request

(S)

(S//BYE)

333

(U) ADVANCED TECHNOLOGY
(U) ADVANCED CONCEPTS

(U) Description

(U) The Advanced Concepts project pursues innovative system concepts, components, subsystems, and processing techniques offering new capabilities and enabling new collection concepts for space-based intelligence. This project supports concept exploration, definition, and development of innovative sources and methods, including candidate joint activities with other organizations.

(U) Advanced Bus Research and Development

(U) The advanced bus technology development area pursues power, propulsion, structures, and radiation hardening advances that can significantly reduce spacecraft size, weight, power, and cost, enabling new generations of spacecraft design.

(U) Advanced Radar Research and Development

(U) Concept Exploration

(U//FOUO) The concept exploration activity funds the search for new and innovative sources and methods through the DII, the ISI, and white papers proposed by industry, academia, internal organizations, and labs.

(U//FOUO) DII provides unclassified access to revolutionary R&D concepts; encourages participation by nontraditional developers of advanced technology; and provides a risk-tolerant environment for the startup and evaluation of new technologies, processes, and applications.

(U//FOUO) ISI is a classified solicitation that analyzes advanced sensor and component concepts to include unknown, unwarned and unpredictable capabilities. These efforts examine scientific and intelligence utility to produce technology and architecture concepts which may culminate in proof-of-concept experiments.

(U//FOUO) Concept exploration activities now also include continued development and testing within the DII and ISI environment.

(U) Futures Laboratory

(U//FOUO) The Futures Lab modeling and simulation environment conducts virtual experiments, demonstrations, studies, and physics-based modeling and simulation of concepts and technology applications.

(U) International Programs

(U//FOUO) The international programs effort funds joint activities with governments of other nations to further cooperation in R&D for intelligence.

(U) Advanced Concepts Studies and Technology

(U) Advanced concepts studies and technology efforts focus on emerging concepts and opportunities for technology investment. As industry, academia, and government agencies report advances that provide new or unanticipated development opportunities, studies and technology funds provide a short-term bridge allowing the NRO to evaluate whether, when, and how to insert new technologies and concepts into existing plans. It also funds the Technology Fellows Program, stimulating industry R&D in areas critical to the NRO and the IC, and supporting the development of future technology leaders.

(U) Key Short & Long Term Objectives

(S//BYE(TK) Advanced Bus Research and Development

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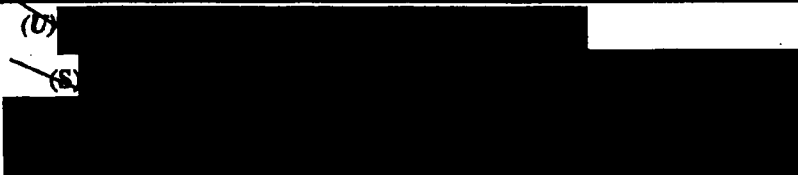
(U//FOUO) Concept Exploration

- Provide a risk-tolerant environment for new technologies enabling the sensing of new phenomenology and new spectrum.

- Provide a point-of-entry for nontraditional contractors.

(U) Futures Laboratory

(U) Model future concepts and technology applications.

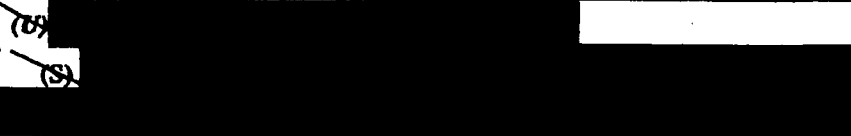*(S) International Programs*

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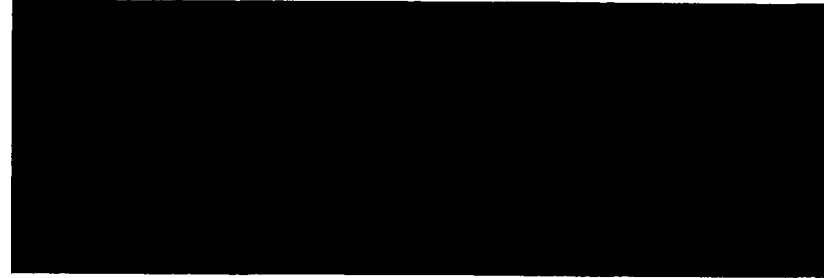
(U) Advanced Concepts Studies and Technology

- Identify new technologies and concepts for insertion into the NRO's long-term R&D plans.

- Continue the Technology Fellows Program.

(U) Customers/Products

(S) Advanced Bus Research and Development

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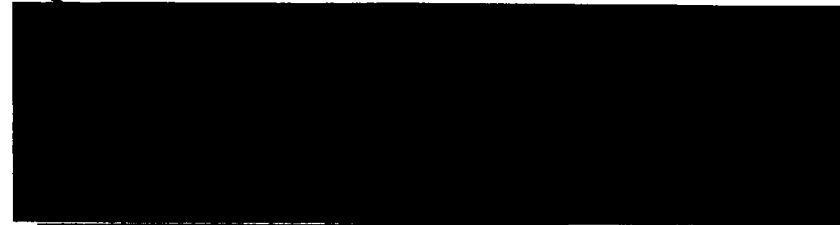
(U) Concept Exploration/Futures Laboratory

(U) Feasibility studies, proof-of-concept experiments, engineering models for high risk, potentially high payoff concepts and technologies.

(U) ADVANCED TECHNOLOGY
(U) TECHNOLOGY DEVELOPMENT

(U) Description

(S)

(S//BYE)

(U) Advanced Optical Systems Research and Development

(S//BYE)

(U//FOUO) Mirror technology development focuses on a new approach that uses replicated nanolaminate foils mounted on an actuated backing structure. The result is a lightweight, scalable mirror that can be rapidly manufactured. The nanolaminate foils offer excellent optical performance that can be fine-tuned with actuators while on orbit. Scalability allows applications ranging from low Earth orbits (LEO) to large optics for longer-dwell, higher orbits.

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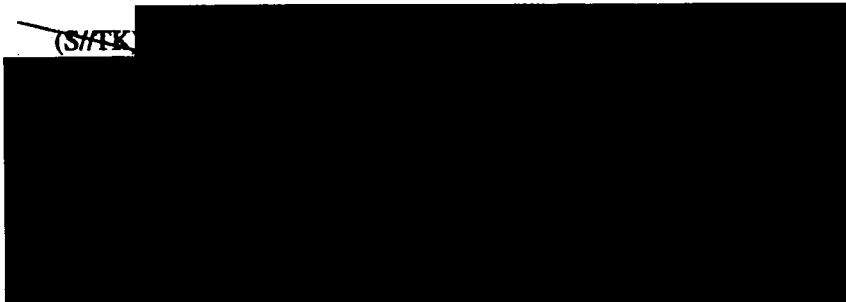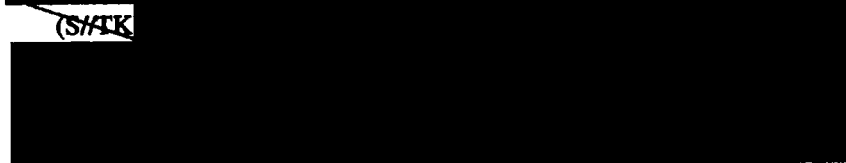
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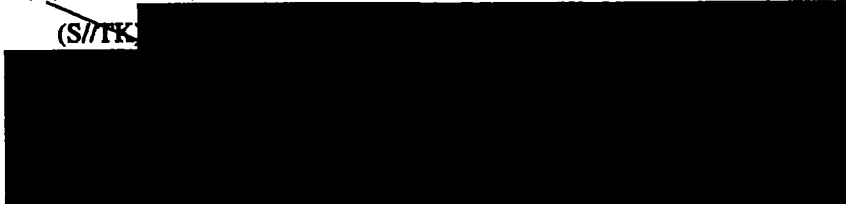
(U//FOUO) In addition to technology development, this project conducts ground and airborne demonstrations of new technology. The demonstrations provide additional confirmation of capabilities prior to transition to space demonstration programs, or NRO operational programs.

(U) Advanced SIGINT Research and Development

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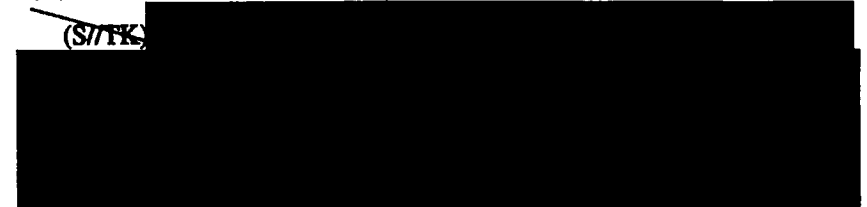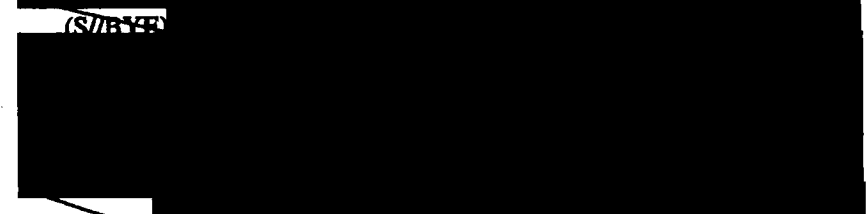
(U) Advanced Processing Research and Development

(S//TK)

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(U//FOUO) In addition to technology development, this project conducts demonstrations of new processing techniques using operational satellite and airborne platform data collections. These de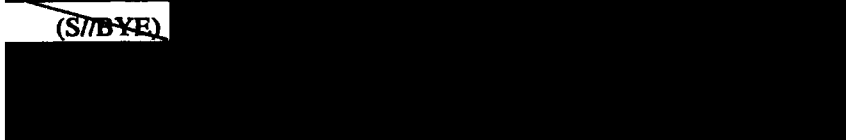monstrations provide the additional confirmation of capabilities needed for transition to space demonstration or NRO acquisition programs.

(U) Advanced Communications Research and Development

(S//TK)

(S//B-YE)

(S//TK)

(U) APPLIED TECHNOLOGY

(U) The Applied Technology Expenditure Center (EC) includes resources for developing technologies for future overhead SIGINT and IMINT architectures, and for communications technologies and new design approaches for space and ground applications.

(U) The Applied Technology EC applies unique area expertise to improve the performance of current NRO programs and advance future programs and concepts. This is accomplished by:

* Working closely with NRO program offices to understand problem areas and develop innovative solutions.

* Supporting technology demonstration programs.

* Collaborating with Advanced Systems and Technology Directorate (AS&T) advanced technology teams on the application of technology to new concepts.

* Aggressively reducing risk on next generation systems.

(U) The applied technology groups within the SIGINT, IMINT, and Communications (COMM) Directorates receive funding and top-level technology guidance from the Director, AS&T. These groups focus on projects within the general scope of their respective directorates' missions and support specific programs requiring their unique expertise. The primary goal of the Applied Technology projects is to support the NRO program plan by developing technologies for transition to approved and planned acquisition programs and operational customers.

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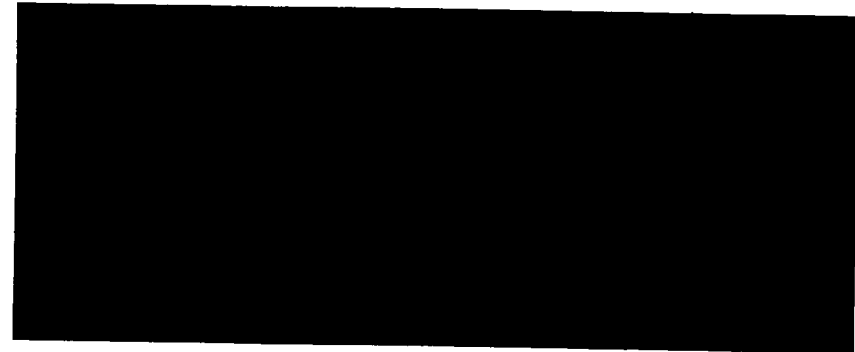
(U) Budget Request

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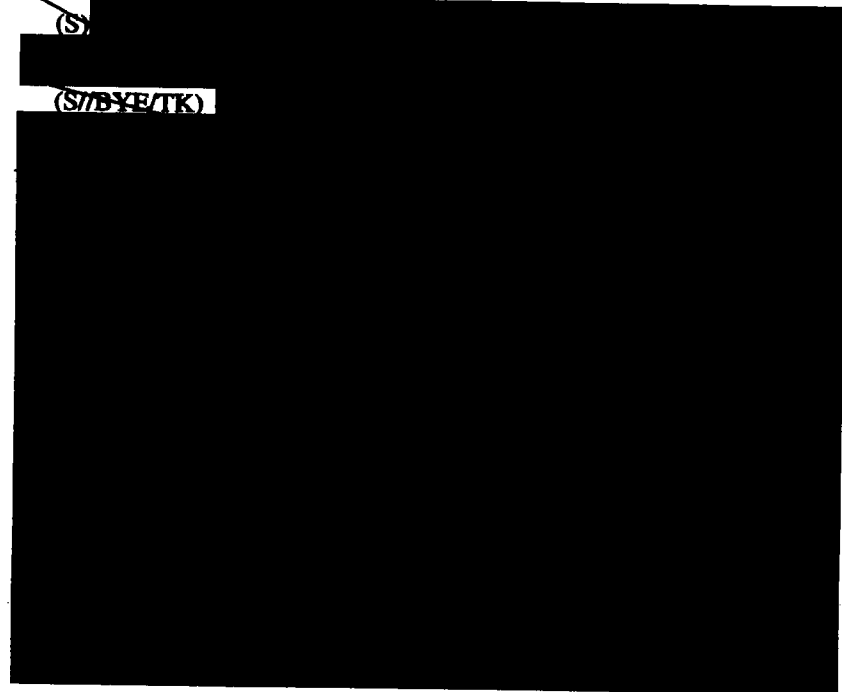
(U) APPLIED TECHNOLOGY
(U) COMMUNICATIONS TECHNOLOGY

(U) Description

(S//BYE)

(U) The COMM Technology project develops new communication technologies and design approaches for space, ground, and network applications and supports virtually all NRO mission areas. Technology efforts focus in four key areas:

* Applied Wideband Communication Technology.

* Information Assurance Research and Development.

* Information Applications.

* Ultra-Sensitive Communications Technology.

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(U//FOUO) Information Applications examines communications phenomenology, concepts, and technologies with the potential to significantly enhance the NRO's mission. This program couples space sensors and systems to networked information processing and control centers. The area includes unique technology applications and techniques required to significantly increase the ability of communications systems to support ultra-high-rate space information

transfer and new operational concepts. It also includes techniques for ephemeris determination and precision navigation and timing to improve geolocation. This program will provide the scientific examination, validation, and demonstration of high-value, high-potential technology concepts in support of future NRO needs.

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(S//BYE) Key Short & Long Term Objectives
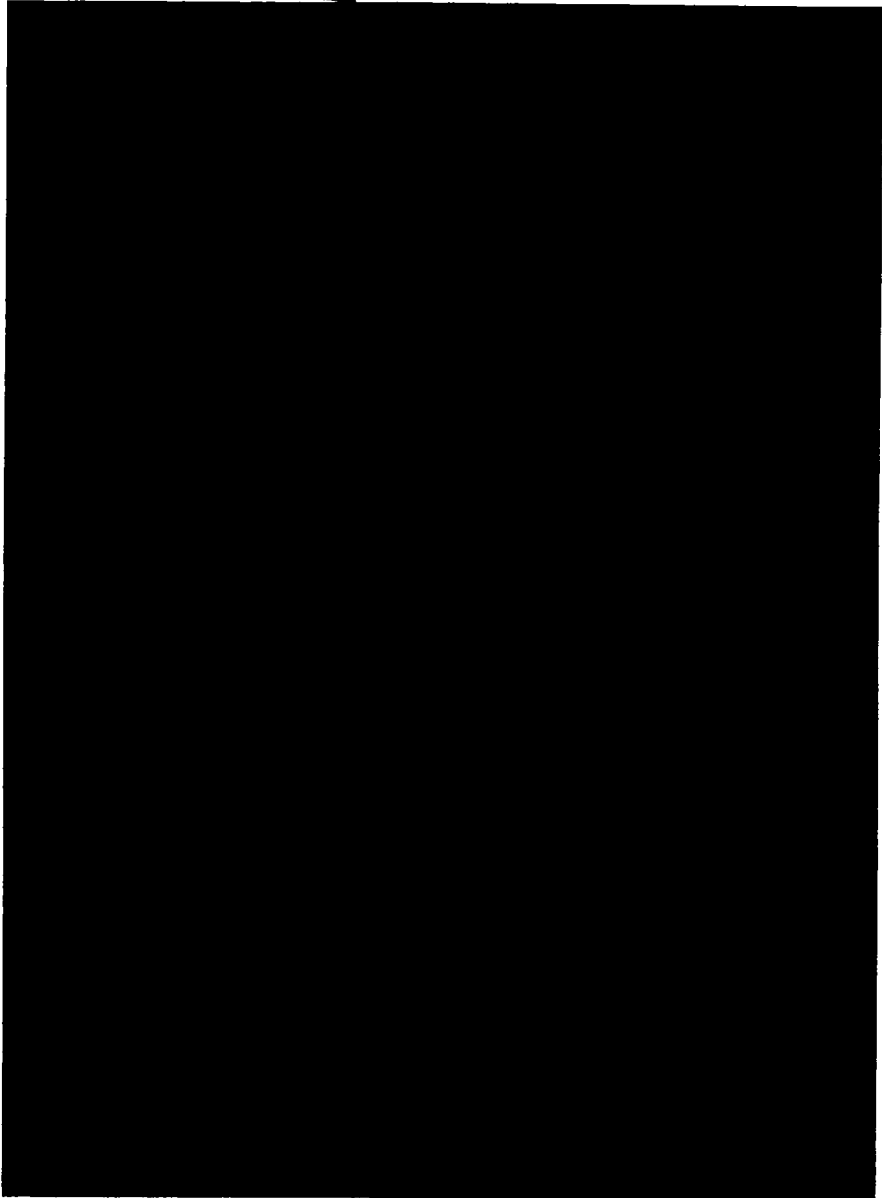
(U) TECHNOLOGY DEMONSTRATIONS AND SUPPORT
(U) ADVANCED TECHNOLOGY DEMOS

(U) Description

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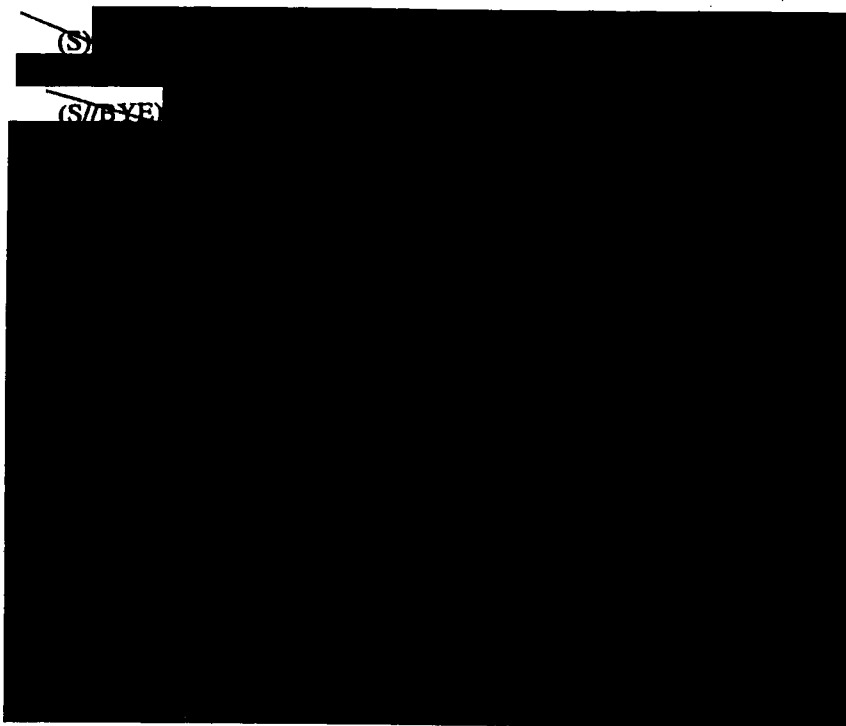
(U) Key Short & Long Term Objectives

• Develop promising candidate programs for experiments and demonstrations.

• Identify and demonstrate, with the commercial sector and academia, crosscutting new business practices with the potential to revolutionize the way future systems and architectures are planned, designed, acquired, built, and operated.

• Provide demonstrations of advanced space technology in the space environment.

• Leverage investment technologies and demonstrations being developed by NRO and other members of the Space Technology Alliance.

(U) Customers/Products

(U) Flight and ground experiments that prove and/or reduce risk on advanced reconnaissance technologies.

(U) TECHNOLOGY DEMONSTRATIONS AND SUPPORT
(S//TK) ███████████

(U) Description

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(S//TK)(U//FOUO) The ██████████████████████ led IC activities to prepare for JEDHI demonstration operations and utility assessment. The NRO is responsible for ensuring that the JEDHI collection performance is accurately coordinated and reflected in the IC's end-to-end modeling, algorithm developments, demonstration, and utility assessment planning activities.

(S//TK) ███████████████

(S//TK) Key Short & Long Term Objectives

███████████████████

(U) TECHNOLOGY DEMONSTRATIONS AND SUPPORT
(U) AS&T TECHNOLOGY SUPPORT

(U) Description

(S) ██████████████████████████████

(U) This project provides system engineering and infrastructure support for the NRO R&D activities. AS&T Technology Support funds:

- State-of-the-art engineering and scientific analysis.

- Technology analysis and forecasting.

- Contracting and financial management.

- Human resource management.

- Security.

- Computer-aided design and simulation technology and applications.

- Graphics production, multimedia products, and administrative support.

- AS&T Technology Forum and Technology Symposium coordination.

(U) Key Short & Long Term Objectives

- Maintain and update AS&T strategic, outreach, and management plans.

- Provide support to the Space Technology Alliance.

- Provide efficient and effective support to the NRO technology enterprise.

- Prepare for and conduct the next Technology Forum.
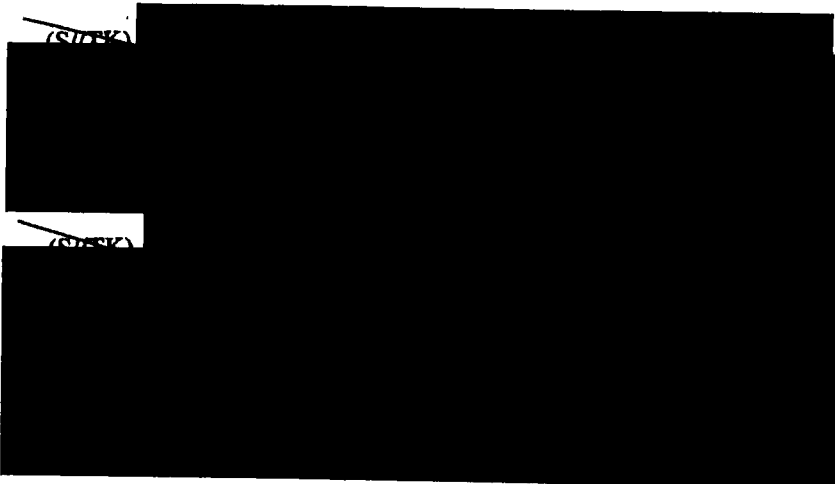
(U) Customers/Products

(U) The primary product is support to the entire NRO technology enterprise.

(U) LAUNCH

(U) The Launch Expenditure Center (EC) provides funding for NRO space launch systems, with the goal of ensuring the successful launch and deployment of NRO satellites. Projects within the Launch EC include Current Launch Vehicles, Evolved Expendable Launch Vehicle (EELV) Program, Launch Ops & Engineering, and Advanced Plans.

(U) FY 2006 Launch Program

(U) In summary, the FY 2006 request provides the resources required to process NRO payloads, support EELV operations, and acquire the EELV launch systems required to support scheduled launch dates.

Launch Summary
Funds by Expenditure Center
FY 2004 – FY 2011

(Dollars in Thousands)

(U) LAUNCH

(U) The Launch Expenditure Center (EC) includes resources to process and launch NRO satellites. The NRO is transitioning to the Evolved Expendable Launch Vehicle (EELV) to meet its mission needs for all heavy and medium payloads. This EC captures NRO funding requirements for Delta II and EELV launches, launch operations at the launch bases, telemetry collection at the NRO Operations Squadron, as well as for advanced plans activities.

(U//FOUO) The major objectives of the Launch EC are to:

* Secure and support EELV launch systems for NRO spacecraft.

* Provide general launch support and NRO payload processing services at the launch bases.

* Fund NRO requirements for US Air Force range support services at the launch bases.

* Provide resources for systems engineering—Federally Funded Research and Development Center (FFRDC).

* Provide resources for systems integration—Contracted Advisory and Assistance Services (CAAS).

* Provide resources for mission assurance.

* Ensure adequate NRO launch facilities and assets.

* Perform early integration activities for EELVs and other launch systems that have potential NRO use.

* Perform strategic planning for NRO launches.

* Analyze future launch requirements.

* Evaluate launch systems and alternative strategies for providing launch capability.

(U) Budget Request

(S)

(S)

(U) Major Contractors

* *(U) Current Launch Vehicles*

(U) Aerospace Corporation, El Segundo, CA: NRO share of system engineering support for the Delta II at Los Angeles Air Force Base (AFB), Space and Missile Systems Center (SMC).

* *(U) EELV Program*

— Aerospace Corporation, El Segundo, CA: NRO share of system engineering support for the EELV System Program Office at SMC.

— Analex Corporation, Cleveland, OH: independent validation and verification for EELV activities.

— The Boeing Company, Huntington Beach, CA: EELV launch systems.

— Lockheed Martin Space Systems Company, Denver, CO: EELV launch systems.

* *(U) Launch Ops & Engineering*

— Aerospace Corporation, El Segundo, CA: system engineering and mission assurance.

— Brown & Root Services, Houston, TX: design and on-call construction, modifications, and repairs.

— L-3 Communications, Santa Maria, CA: mission director support.

— Lockheed Martin Space Systems Company, Denver, CO: common launch systems integration and payload processing activities.

— Northrop Grumman, Redondo Beach, CA: maintenance of Launch and Network Control Equipment (LANCE).

— Scitor, Herndon, VA: systems integration.

— Spaceport Systems International, Lompoc, CA: commercial satellite vehicle processing.

— General Dynamics, Falls Church, VA: information technology/information systems requirements.

• *(U) Advanced Plans*

— The Boeing Company, Huntington Beach, CA: EELV Delta program risk reduction.

— Lockheed Martin Space Systems Company, Denver, CO: EELV Atlas program risk reduction.
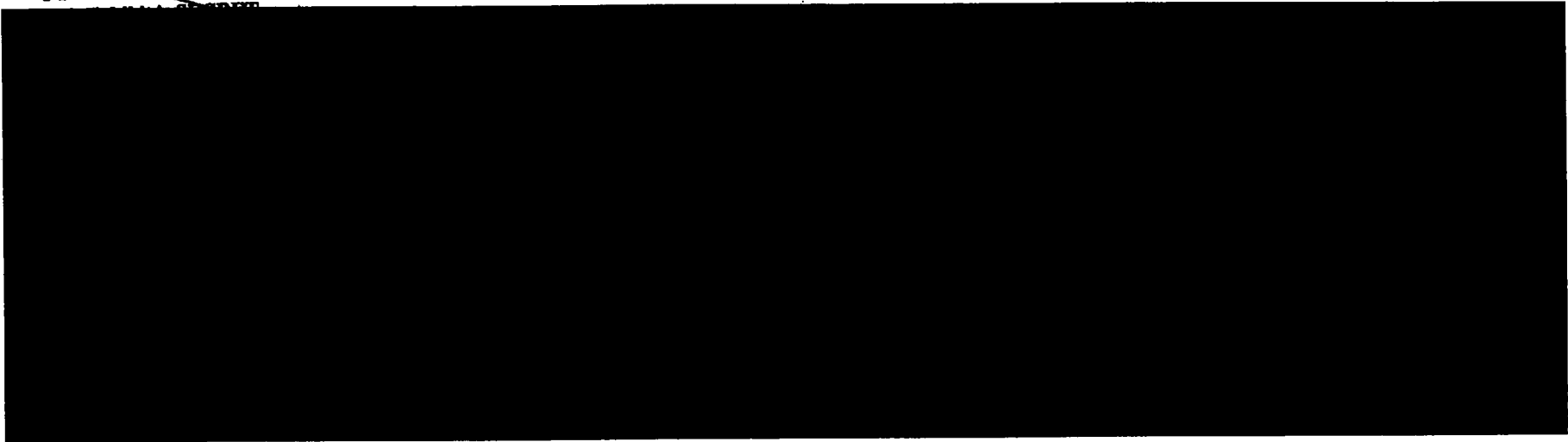
(U) Management Oversight

(U) Unless otherwise indicated within individual projects, management oversight for this entire EC is:

• Director of Central Intelligence.

• Secretary of Defense.

• Office of Management and Budget.

(Dollars in Thousands)
(Number of Positions)

Launch Expenditure Center [1]
Resource Summary by Project & Appropriation
FY 2004 – FY 2011

(U) LAUNCH
(U) EELV PROGRAM

(U) Description

(S) ███████████████████████████████████

(U) The primary mission of this project is to procure EELV launch systems and conduct integration activities for NRO satellites. Standard EELV hardware plus well-defined mission unique hardware are procured as fixed price delivery orders and fully funded two years prior to launch, with incremental funding for integration efforts two to five years in advance of the launch date. The structure of the EELV contract allows separate funding and accounting for NRO missions. The NRO has procuring contracting officer and contracting officer's technical representative authority for all NRO delivery orders on the Air Force EELV contracts.

(U) In the 21 December 2004 National Security Presidential Directive 40 (NSPD-40) outlining national security space transportation policy, the President directed that "The Secretary of Defense shall maintain overall management responsibilities for the Evolved Expendable Launch Vehicle program and shall fund the annual fixed costs for both launch service providers ...". In order to accomplish this, the FY 2007 request will show all EELV infrastructure funding in the Air Force budget instead of the current practice of being programmed in both the Air Force and National Reconnaissance Program (NRP) budget requests based on the proportionate share of EELV missions for each organization. Over the next several months, the NRO will work with the Air Force and the EELV contractors to identify and quantify those elements that are clearly EELV related infrastructure.

(U) For FY 2006, the NRO will continue to program for all launch vehicle hardware, mission integration activities (for example, mission assurance, launch vehicle certification, mission certification, and satellite vehicle processing and transportation), and other NRO-specific mission requirements.

(U) Key Short & Long Term Objectives

(U) The primary objective is to ensure the successful launch of all NRO satellites on the EELV.

(S//TK) Milestones/Schedules

██
██
██
██
██
██
██

(U) LAUNCH
(U) LAUNCH OPS & ENGINEERING

(U) Description

(S) [REDACTED]

(U) The Launch Ops & Engineering project provides base support for all NRO satellite programs. Specifically, this project funds:

- Receiving and processing services for NRO satellites.

- NRO launch base facilities.

- Operation and maintenance (O&M) of satellite ground support equipment, satellite fuel loading pads, satellite support stands, and pneumatic control servicing systems.

- Covers/containers to conceal and transport NRO satellites.

- Range support provided by Air Force Space Command, to include: support during transportation of payloads (security vehicles and guards); use of forklifts, tractors, trailers, and other mechanical hardware; processing of requirements and range documentation; and Eastern and Western Range instrumentation support.

- Communications equipment used during processing activities, launch rehearsals, and actual launch events.

- Launch ascent telemetry processing operations, and Launch and Network Control Equipment (LANCE) maintenance at NRO Operations Squadron (NOPS), Schriever AFB.

- Systems engineering, analysis, and program support by booster contractors for generic integration of EELV launch systems.

- Technical and mission rehearsal support of the launch team in preparation for all NRO launches.

- O&M and engineering services for NRO launch base satellite facilities to include repairs to critical NRO satellite processing and support facilities on both coasts.

- Mission assurance and systems integration support provided by FFRDC and CAAS.

- A new Spacecraft Processing and Encapsulation Facility to support NRO satellite vehicle processing at Cape Canaveral AFS.

- Design for a replacement Spacecraft Transportation System.

(U) Key Short & Long Term Objectives

- Provide satellite launch operations and engineering services at the launch bases necessary to receive, process, and launch NRO satellites.

- Provide critical systems engineering, systems integration, mission assurance, and program support to ensure successful launch of all NRO satellites.

- Ensure the successful launch of all NRO satellites.

(U) Milestones/Schedules

- Support the NRO launch schedule documented in the Current Launch Vehicles and EELV Program projects.

- Deliver the NRO Cape Spacecraft Processing and Encapsulation Facility by FY 2008.

- Deliver the Spacecraft Transportation System by FY 2009.

(U) INFRASTRUCTURE

(U) NRO infrastructure activities provide the foundation for all NRO acquisitions and operations. A fully funded infrastructure enables the NRO to accomplish its mission and deliver a world-class reconnaissance capability. The NRO infrastructure expenditure centers (EC) include: Corporate System Engineering and Operations, Operational Support, Mission Support, Facilities, and Personnel.

(U) The Corporate System Engineering and Operations EC guides the development of NRO systems and architectures by overseeing enterprise system engineering activities and ensuring conformity with the NRO strategic direction. In addition, the Chief Information Officer oversees all NRO IT matters, including certification and accreditation of information systems and development of an information assurance program to ensure compliance with legal mandates and DCI Directives.

(S)

(U) The Mission Support EC ensures effective business management of, and continuous support to, the NRO's acquisition and operations process. Mission Support includes Business Operations and Staff Support (BOSS), the Inspector General, Counterintelligence, Security, National Security Space Office (NSSO—formerly the National Security Space Architect), Transportation Management, and Support Services projects. NSSO is an independent, jointly funded IC/DoD organization chartered to develop and integrate future space architectures and capabilities across the entire range of national security space missions.

(U) The Facilities EC provides funds for the operation and maintenance (O&M) and lease costs of NRO HQ facilities.

(U) The Personnel EC provides National Reconnaissance Program (NRP) funding for all military and civilian salaries and benefits, reimbursement to the CIA for personnel support costs, and Office of Human Resources operations.

(U) FY 2006 Program

(S)

(S)

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(U) CORPORATE SYSTEM ENGINEERING AND OPERATIONS

(U) The Corporate System Engineering and Operations (CSE&O) Expenditure Center (EC) includes resources for overseeing all NRO enterprise system engineering activities and IT resources. This allows CSE&O to ensure program development and implementation are consistent with DCI guidance and NRO strategic thrusts and that Directorates are accountable in terms of cost, schedule, performance, and risk.

(U) The major objectives of the CSE&O EC are:

• Corporate System Engineering (CSE)

— Define and maintain a single NRO Integrated Technical Investment Process (ITIP) that reflects the NRO's strategic direction and accounts for all technical, architectural, and resource aspects.

— Translate and incorporate IC and DoD requirements, priorities, and guidance into the NRO's ITIP and strategic management processes.

— Develop, implement, and manage a mature, institutionalized performance-based strategic management system for the NRO that ties the strategic planning process to the ITIP.

— Implement rigorous, disciplined mission assurance practices to enable efficient and effective program management and preclude preventable cost overruns and schedule delays, as well as optimize mission capability and performance.

— Perform rapid analyses to support the mission assurance program, enable acquisition excellence, and provide analytic support to independent reviews.

— Promote community coordination and acceptance of the NRO Architectural Vision and Investment Strategy (AVIS) through participation in community studies and strategic gaming activities.

— Develop and maintain a program management and system-engineering work force to ensure that personnel in key NRO positions are properly trained and certified.

• Chief Information Officer (CIO)

— Advise the NRO's senior leaders on issues pertaining to the planning, acquisition, management, and assurance of IT as well as the development of IT related policies.

— Act as the NRO's Information Assurance (IA) program manager and Designated Accreditation Authority (DAA) for NRO information systems (IS).

— Establish accountability for IT resource management as directed by the Information Technology Management Reform Act of 1996.

— Establish IS/IT governance boards to leverage government and industry best practices, including portfolio management and an enterprise IT architecture, to enable NRO senior leadership to execute their decision-making responsibilities.

(U) Budget Request

(U) Major Contractors

- *(U) Corporate System Engineering*

  — Aerospace Corporation, El Segundo, CA: Federally Funded Research and Development Center (FFRDC) system engineering and integration, architecture, and technical analysis.

  — MITRE Corporation, McLean, VA: FFRDC visualization, modeling and simulation.

  — Northrop Grumman Information Technology—TASC, Chantilly, VA: integrated planning, decision-making analysis, and strategic planning.

  — Booz Allen and Hamilton, Inc., McLean, VA: strategic planning.

- *(U) Chief Information Officer*

  — MITRE, Reston, VA: FFRDC IT support, analysis, and evaluation.

  — Scitor, Chantilly, VA: IA and cyber security.

(U) Management Oversight

(U) Unless otherwise indicated within individual projects, management oversight for this entire EC is:

- Director of Central Intelligence.

- Secretary of Defense.
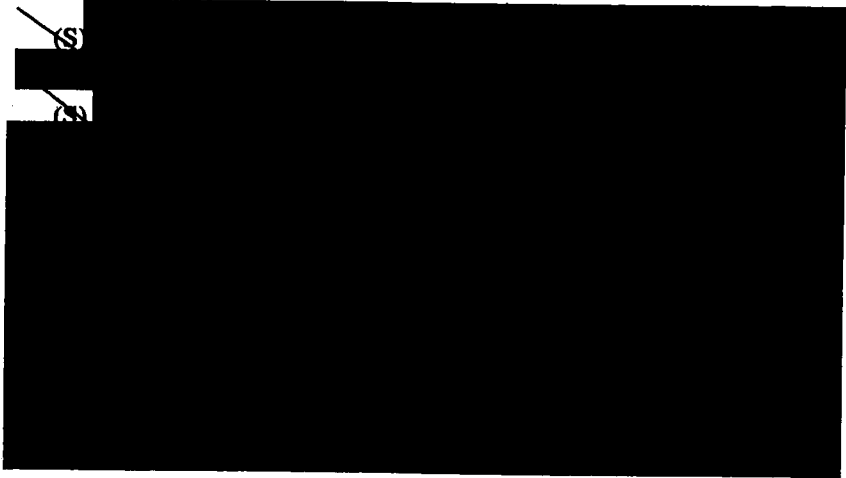
- Office of Management and Budget.

Corporate System Eng. & Ops Expenditure Center
Resource Summary by Project & Appropriation
FY 2004 – FY 2011

(Dollars in Thousands)
(Number of Positions)

(U) CORPORATE SYSTEM ENGINEERING AND OPERATIONS
(U) CORPORATE SYSTEM ENGINEERING

(U) Description

(U) Key Short & Long Term Objectives

- Implement Young Panel and NRO Testing Review Study recommendations.

  — Establish corporate control of test and verification processes throughout the acquisition process within the NRO.

  — Develop a long-term strategy to reduce parts risk across the program life cycle.

- Develop a strategy to ensure that appropriate threat considerations have been included in the risk management decision process.

- Define and maintain a single NRO ITIP that reflects the strategic direction of the NRO and accounts for all technical, architectural, and resource aspects.

- Implement a horizontally integrated cross-intelligence, cross-program NRO overhead reconnaissance and ground architecture for IC/DoD intelligence, surveillance, and reconnaissance (ISR).

- Provide the engineering interface for integration, coordination and collaboration of NRO systems development with the National Security Space (NSS) community.

- Undertake multi- and cross-intelligence collection capability analyses to define the best path for acquiring and operating future overhead collection programs and capabilities.

- Re-institute Military Specifications (MIL-SPEC) and industry standards, including spacecraft test and evaluation standards.

- Lead transition from today's national reconnaissance architecture to future architectures with fully integrated ground, space, and infrastructure components for greater efficiency and effectiveness.

- Translate IC and DoD requirements, priorities, and guidance into a coherent and prioritized package that will support the NRO strategic management process and ITIP.

- Institutionalize the use of Integrated NRO Architecture (INA) products for investment planning, acquisition management and operational assessments throughout the NRO.

- Incorporate an integrated critical infrastructure protection (CIP) strategy across the enterprise to include a recommended corporate CIP risk mitigation investment strategy.

- Solve denied area collection problems with NRO systems and architectures to counter denial & deception (D&D).

- Refine NRO acquisition policies and conduct Independent Technical Assessments (ITA) and Independent Program Assessments (IPA) to enable better corporate NRO acquisition decisionmaking.

- Develop and implement an NRO-wide system engineering training and certification program.

- Provide the policies, tools, and program business analysis, such as Earned Value Management (EVM), that will facilitate efficient and effective management of all NRO major acquisition programs.

- Conduct both annual and five-year corporate level strategy assessments to produce updated five-year NRO Strategic Plans.

- Develop and manage a single set of corporate performance measures that minimize impacts to NRO programs.
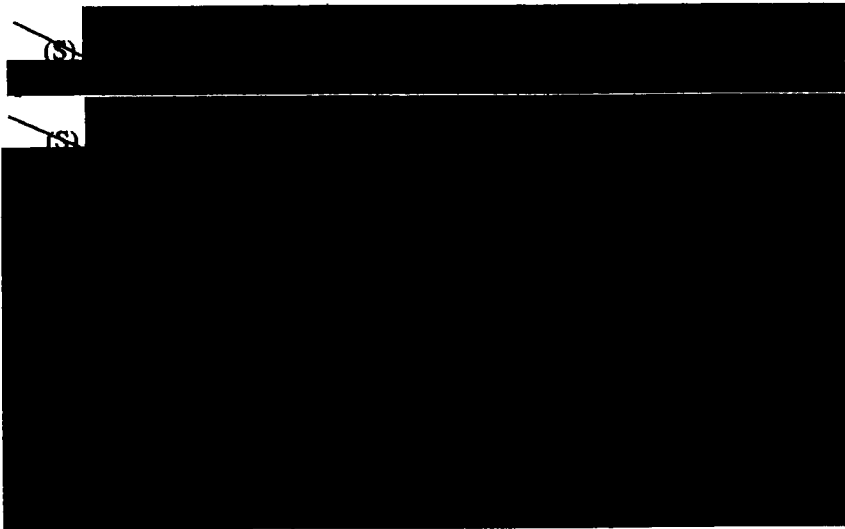
(U) Customers/Products

- NRO INA: Set of products that provide the unified NRO intelligence, surveillance, and reconnaissance overhead and related ground architectures. Principle customers are:

  — The NRO community: Investment planning, acquisition management, and operations analysis.

  — Mission partners: National security architecture studies.

- Requirements database, capturing all NRO enterprise functional, information, and performance needs and requirements.

- NRO Standards Document.

- D&D reports and seminars for various DoD and IC customers.

- NRO acquisition planning documentation:

  — Policies and procedures.

  — IPA and ITA review reports.

  — NRO Master Schedule.

  — Baseline Agreement and Acquisition Reports (BAAR): Documents an acquisition program's key cost, schedule, and performance goals.

- NSS documents to include the respective NSS Strategy, Plan, and Performance Assessment.

- Integrated Program Strategy and ITIP: Optimizes performance of future programs against NRO, DCI, and DoD strategic guidance and budget constraints.

- Protection policy, planning and investment documentation:

  — Protection Investment Analysis and Prioritization Report.

  — Corporate Protection Activities Database.

  — Critical Infrastructure Protection Database.

- Corporate enterprise-level system engineering documentation and education:

  — System Acquisition Threat Summaries.

  — Annual NRO Counterspace Threat Conference.

  — Requirements Management Plan.

  — Corporate system engineering training courses.

  — Functional Requirements Document.

  — Assessment of Capabilities and Performance Database.

  — Visualization products for decision analysis support.

  — NRO Configuration Management Plan.

- Satellite system performance analysis: Uses advanced models, simulations, strategic gaming, and experimentation methodologies to assist NRO decisionmakers in making more effective and informed decisions on system trades.

- NRO Strategic Planning Program:

  — Annual strategy updates and annual performance reports.

  — NRO Strategic Operating/Performance Plans.

  — Corporate level performance measures.

(U) CORPORATE SYSTEM ENGINEERING AND OPERATIONS
(U) CHIEF INFORMATION OFFICER

(U) Description

(U) Key Short & Long Term Objectives

• Develop and implement an information resources management strategic action plan and related policies, including those supporting NRO collaboration and information sharing initiatives.

• Develop and protect the NRO's integrated IT enterprise architecture, provide for Continuity of Operations, and create processes to secure the IT infrastructure. Securing the IT infrastructure includes addressing deficiencies that exist within the current IA and Information Resource Management programs identified and reported in both the FY 2001 and FY 2003 Annual Statement of Assurance.

• Integrate information resources management components, including security and capital planning and investment control, into the NRO's acquisition, management, and operations processes.

• Identify, assess, and deliver emerging IT to support internal NRO needs and to achieve seamless information sharing and collaboration with external agencies.

• Establish an IT portfolio management process to guide NRO investments through their selection, acquisition, control, and evaluation lifecycles. Portfolio management also will enhance the NRO's capability to satisfy reporting mandates.

• Continue addressing deficiencies that exist within the current IA and Information Resource Management programs identified and reported in both the FY 2001 and FY 2003 Annual Statement of Assurance.

• Create and manage the NRO's centralized IT database to support IA risk assessments, the certification and accreditation process, and a comprehensive NRO IT portfolio management process.

• Establish an NRO information resources management governance framework. The governance framework enables corporate decision-making for IA and other information resource investments.

(U) Customers/Products

• The DNRO and NRO senior management, to whom, as required by law and regulation, the CIO provides advice.

• All NRO components that select, acquire, manage, and/or operate information systems and IT.

• External agencies with stakeholder interests or equities in NRO information resource activities.

(U) The primary product for this project is an efficient and cost-effective NRO IT planning, acquisition, and management framework that results in the delivery of reliable, assured, and secure information services to support the missions and personnel of the NRO. Additionally the project is responsible for the following:

- NRO Information Assurance Policies.

- NRO Information Resources Management/Capital Planning and Investment Control Policies.

- NRO IS/IT Strategic Action Plan.

- Integrated IT enterprise architecture.

- OMB Circular A-11, Exhibit 53 (in coordination with Business Plans and Operations (BPO)).

- OMB Circular A-11, Exhibit 300 (in coordination with NRO program managers and BPO).

- Federal Information Security Management Act (FISMA) report.

- Centralized IT database to support IA risk assessments, the certification and accreditation process, and other information resources management needs.

- Accreditation decisions.

- NRO IA Strategy.

(U) Budget Highlights/Key Changes

Chief Information Officer Project
Budget Highlights by Appropriation Account
FY 2004 – FY 2006
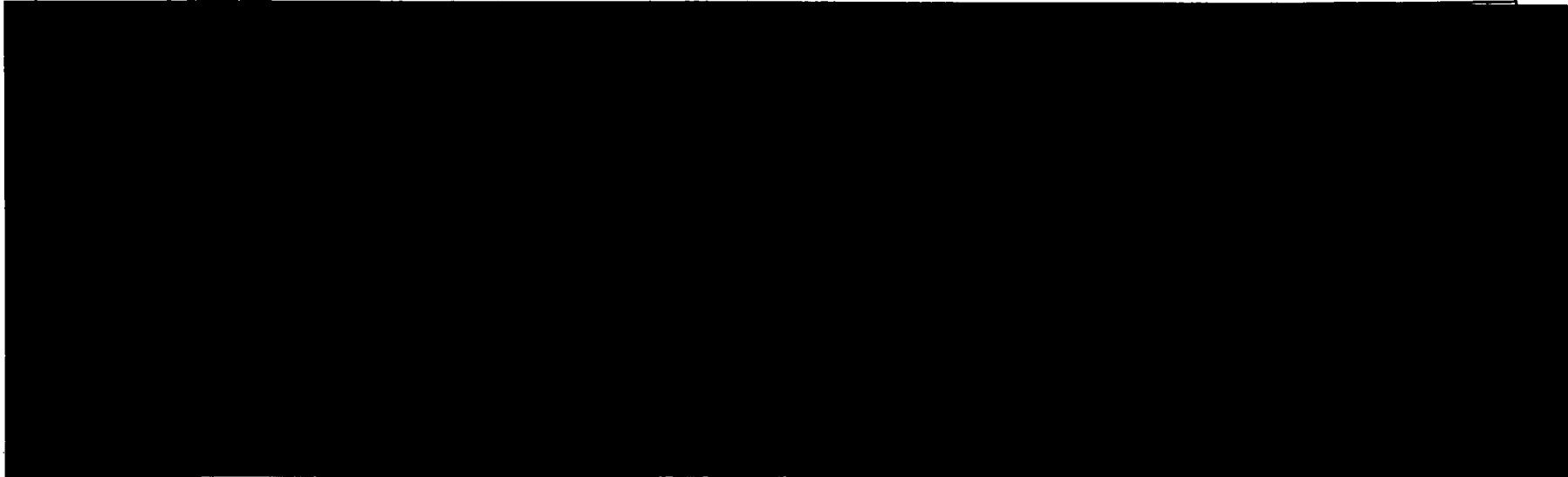
(U) OPERATIONAL SUPPORT

(U) The Operational Support Expenditure Center (EC) provides resources for innovative technologies and technical expertise to support intelligence users, including those in the military, policy, law enforcement, and homeland security communities.

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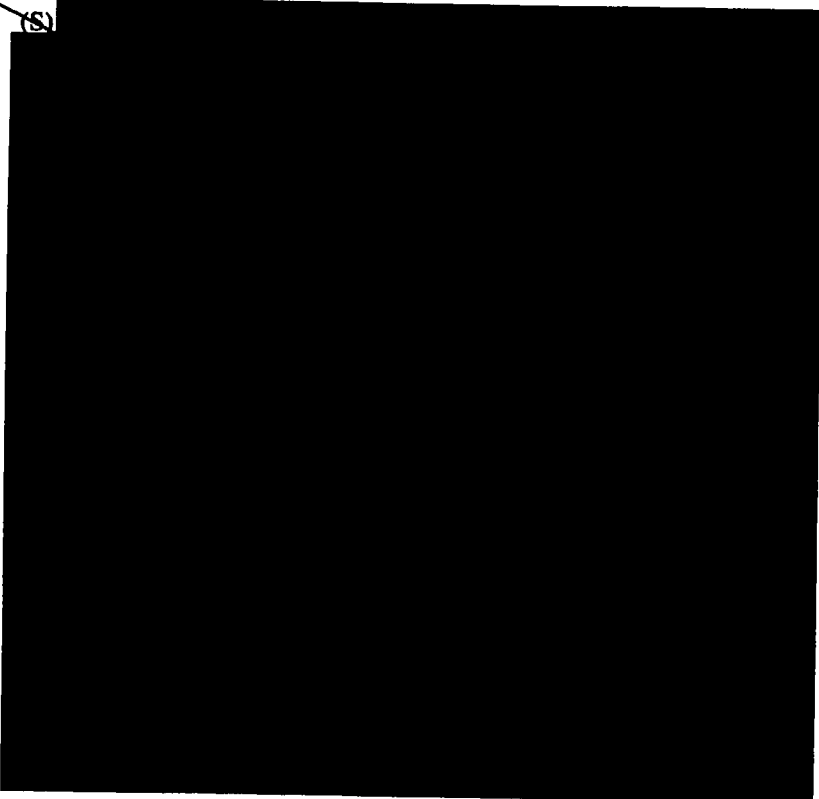
(U//FOUO) Major Contractors

• Booz Allen and Hamilton, National Security Team, McLean, VA: operations, field services, and technical support.

• General Dynamics, Oakton, VA: operations and technical support.

• L-3 Communications Analytics, Vienna, VA: operations and technical support.

• Lockheed Martin Space Systems—Astronautics Operations, Denver, CO: hardware/software integration.

• Lockheed Martin Technical Operations, Oakton, VA: operations and technical support.

• Northrop Grumman Information Technology–TASC, Chantilly, VA: engineering management and technical support.

• Scitor, National Operations, Chantilly, VA: data analysis, independent validation and verification support, and technical support.

• Titan, San Diego, CA: engineering and technical services.

(U) Management Oversight

(U) Unless otherwise indicated within individual projects, management oversight for this entire EC is:

• Director of Central Intelligence.

• Secretary of Defense.

• Office of Management and Budget.

(U) Budget Request

(S)

(U) OPERATIONAL SUPPORT
(U) NATIONAL AND MILITARY OPERATIONS SUPPORT

(U) Description

(S)

(U//FOUO) The National and Military Operations Support (NMOS) project makes available data collected from overhead systems, cutting-edge technologies, and products, through mission partners, to intelligence consumers—policymakers, military, law enforcement officials, and homeland security officials. Users are able to fully exploit NRO systems against the highest priority intelligence problems as identified in National Security Presidential Directive 26 and against military targets, particularly for warfighter operational planning and crisis situations. NMOS also serves as a catalyst for new sources and data exploitation methods and aligns the needs and capabilities of national and military information users with the builders and operators of overhead systems.

(U//FOUO) In partnership with NGA, NSA, and the DIA Directorate for MASINT and Technical Collection, the NMOS project provides national and military users with multi-intelligence solutions to priority intelligence problems. The NMOS project engages NGA, NSA, and DIA to provide key military and national users with appropriate direct operational support, as well as educational and training programs focused on the effective use of overhead data across the intelligence disciplines.

(S)

(S) Key Short & Long Term Objectives
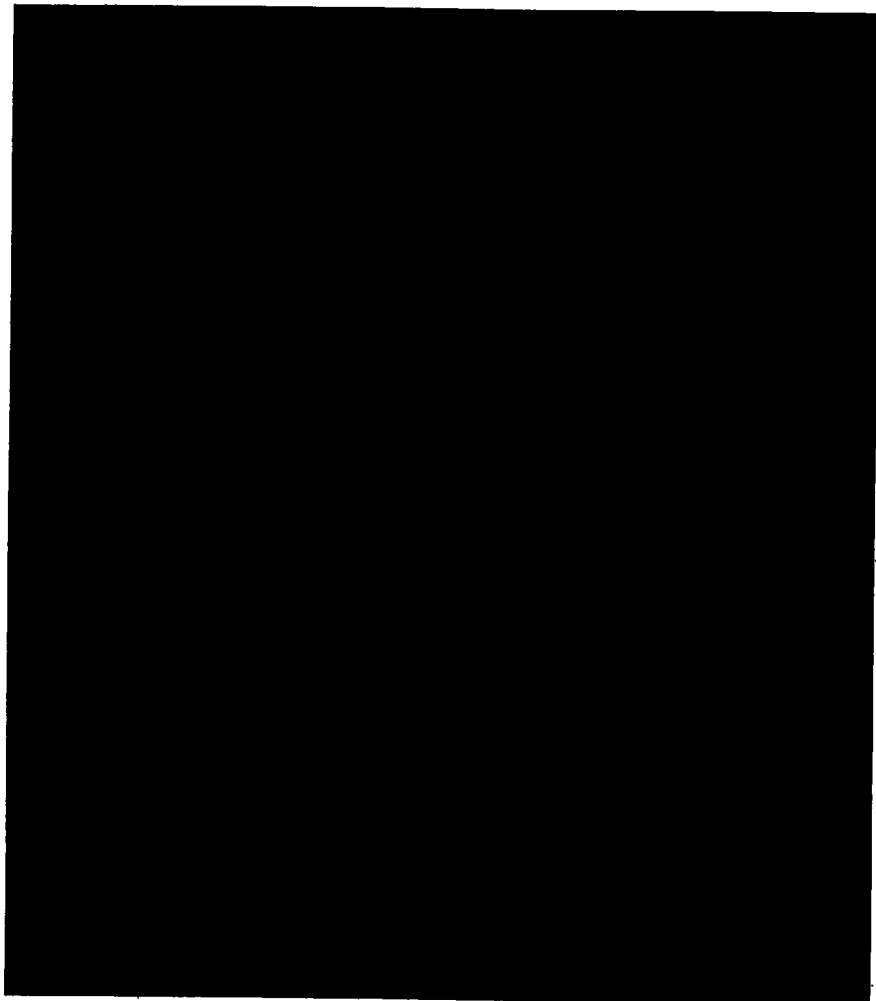
(U//FOUO) Customers/Products

• Direct Support. All Combatant Commands; the four military services; the US Coast Guard; major component commands and their subordinate units; various joint task forces and warfighting centers including the Joint Warfighting Center; the Joint Warfare Analysis Center; and national agencies working on CT, counterproliferation, and counternarcotics issues receive direct support.

• Problem-Specific Consultation and Solutions. Proactively identify unique use of overhead assets to impact the highest priority intelligence problems. Efforts involve working with nearly two dozen national users and interagency groups including the CIA, DOS, FBI, DHS, the National Security Council, and the Homeland Security Council.

• Reporting. The 24-hour NROC provides status of national systems and data to NRO senior management, military, and national customers, including the White House Situation Room.

• IC Liaison. Ensure incorporation of DoD and IC needs in new collection system and studies planning, satisfaction of difficult and conflicting data requirements, and application of overhead intelligence data to hard targets.

(U) Major Contractors

- **(U) Business Operations and Staff Support**

  — American Management Systems, Inc., Fairfax, VA: accounting software support.

  — CSC-Welkin, Chantilly, VA: management integration and business policy support.

  — Electronic Data Systems, Herndon, VA: financial reporting, program records, and information management.

  — Integrity Applications, Chantilly, VA: independent technical assessments and NRO Cost Analysis Toolkit.

  — Integrated Data Systems, Chantilly, VA: finance and contracting tools.

  — Bearing Point, Arlington, VA: financial business process improvement and business policy support.

  — Northrop Grumman Information Technology—TASC, Chantilly, VA: financial business process and information management improvement, risk analysis, and cost estimating and analysis support.

  — RDR, Chantilly, VA: management and integration.

  — General Dynamics, Fairfax, VA: network engineering, systems administration, and information systems security support.

  — Scitor, Herndon, VA: financial forecasting and budget support, acquisition consulting, and training support.

  — Tecolote Research, Inc., Santa Barbara, CA: cost estimating and management integration.

  — TICOM, Inc., Chantilly, VA: acquisition analysis support.

  — Wyle Labs, Chantilly, VA: cost estimating and analysis.

- **(U) Inspector General**

  — PricewaterhouseCoopers, Arlington, VA: commercial financial audit services.

  — Bearing Point, Springfield, VA: short-term consulting for IG strategic planning.

- **(U) Counterintelligence**

  (U) General Dynamics, Oakton, VA: research, threat surveys, and analysis for CT and force protection efforts; support to critical web-based travel/contact/incident reporting database.

- **(S//BYE) Security**

  — US Investigative Services, Annandale, VA: personnel investigations.

  — General Dynamics, Fairfax, VA: facility security, security training and education, personnel security, security policy support, information systems security, electronic security support, and financial and budget support.

  — Boeing Service Company, Dallas, TX: security administrative support and security guard services.

  — Northrop Grumman Information Technology—TASC, Chantilly, VA: vulnerability assessment.

- **(U) National Security Space Office**

  — ManTech Aegis Research Corp., McLean, VA: security support.

  — Northrop Grumman Information Technology—TASC, Chantilly, VA: strategic planning, engineering, and financial management support.

- **(U) Transportation Management**

(U) There are no contractors associated with this project.

- *(U//FOUO) Support Services*

    — Booz Allen Hamilton, McLean, VA: strategic planning.

    — CACI Technology Services, Falls Church, VA: video design and production and redactor services.

    — Boeing Service Company, Richardson, TX: IT services.

    — General Dynamics, Oakton, VA: administrative support.

    — Lockheed Martin Company, Reston, VA: system integration.

    — SRS, Newport Beach, CA: environmental and safety support.

    — ManTech Aegis Research Corp., Falls Church, VA: redaction system integration services.

— L-3 Communications, Vienna, VA: policy research and support.

— Aerospace, Los Angeles, CA: Federally Funded Research and Development Center (FFRDC), cost estimating process development, cost and technical data collection, program baseline documentation support, and policy research and support.

(U) Management Oversight

(U) Unless otherwise indicated within individual projects, management oversight for this entire EC is:

- Director of Central Intelligence.
- Secretary of Defense.
- Office of Management and Budget.

(U) MISSION SUPPORT
(U) BUSINESS OPERATIONS AND STAFF SUPPORT

(U) Description

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(U) The Business Operations and Staff Support (BOSS) project funds NRO HQ staff functions and operational activities required to support the NRO-at-large. Activities include: the Acquisition Center of Excellence (ACE), the Director, NRO (DNRO) front office staff, the Office of Equal Employment Opportunity (OEEO), the Office of General Counsel (OGC), and the Business Plans and Operations (BPO) office.

(U) Key Short & Long Term Objectives

(U) Acquisition Center of Excellence

- Provide support for at least 115 source selections in FY 2006. This includes in-depth hands-on acquisition consulting, mentoring, cutting edge electronic source selection tools, electronic archiving of evaluation material, contract award, and protest support.

- Continue to train the NRO acquisition workforce (Contracting Officers, Contracting Officer Technical Representatives (COTR), Financial Officers, and Program Security Officers), as required by the NRO Acquisition Training Instruction.████████████████

- Improve the NRO acquisition process through the identification and communication of best practices and in-depth source selection support. Techniques include benchmarking world-class practices and distributing lessons learned.

- Continue to educate the NRO workforce on acquisition best practices, lessons learned, and processes by instructing over 3,000 students in 170 courses.

(U) Office of Equal Employment Opportunity

- Ensure compliance with Equal Employment Opportunity (EEO) laws, executive orders (EO), parent organization directives, and military regulations.

- Maintain current diversity plans and programs for the organization.

- Provide reasonable accommodations for qualified persons with disabilities.

(U) Office of General Council

- Provide corporate legal counsel, guidance, and review of NRO policies and plans.

- Advise NRO of new laws and manage financial disclosure reporting.

- Provide competitive and sole-source acquisition law support.

(U) Business Plans and Operations

- Continue improvements to the financial management system to attain an unqualified audit opinion.

- Restructure the internal control review program to ensure that the budget is executed according to generally accepted accounting principles (GAAP).

- Continue to meet OMB's 21-day quarterly financial statement reporting deadline and its 45-day annual financial statement reporting deadline.

- Provide a common integrated suite of financial management tools and applications across all NRO organizations and sites.

- Ensure compliance with federal procurement laws and executive orders. Continue to ensure compliance with policies, procedures, and practices to standardize and improve NRO contracts and the business relationships with our industry partners.

- Continue to provide support for developing and implementing business policies to ensure compliance with applicable statutes, regulations, and accepted business practices. This includes contract policy, finance policy, advisory and assistance services policy, and the NRO Management Control Plan.

- Operate and maintain the Electronic Procurement Exchange (Epx) Business Suite; develop and deploy the remaining Epx modules to provide an enterprise acquisition system that will enhance workforce productivity, ensure compliance with Federal Acquisition Regulations, and support the President's Management Agenda.

- Operate, maintain, and refine the automated financial reporting of NRO contract-accountable property to ensure compliance with the Chief Financial Officers Act and the recommendations documented in the NRO Financial Statement Audit.

- Provide independent cost analysis support to more than 50 major programs and new initiatives during FY 2006. Independent cost analysis serves as direct input into all NRO Acquisition Board reviews, the Integrated Technical Investment Process (ITIP), source selection decisions, program office trade studies, the Integrated NRO Architecture initiative (INA), the Intelligence Program and Budget Submission (IPBS), and the CBJB.

- Through a formal MOA, continue to exchange and develop cost estimating methods and program data with the Air Force space cost estimating community to ensure best practices are used to generate independent cost estimates for Air Force and NRO programs.

- In conjunction with the Deputy Director, Systems Engineering, continue to improve Independent Technical Assessments in support of major program cost estimates.

- Continue to improve the capabilities of the NRO Cost Analysis Toolkit (NCAT) through incorporation of additional NRO and Air Force space program data and enhancements to estimating models.

- Provide program managers with real-time actionable information from NRO business systems.

- Provide ongoing program and budget analysis, monitor budget execution, and oversee budget formulation for the IPBS and CBJB submissions.

- Interface with the DDCI/CM, OMB, DoD, and Congressional staff to explain and justify the NRO's budget requirements.

- Provide liaison between the NRO's directorates and offices and Congressional staff on all NRO matters.

(U) Customers/Products

- Source selection support, NRO acquisition training and education, and acquisition innovation/best practices. (ACE)

- Staff support to the DNRO and DDNRO.

- Federal EEO laws and regulations compliance. (OEEO)

- Corporate legal counsel, guidance, and review of NRO policies and plans. (OGC)

- Corporate financial, budgetary, programmatic, and legislative management and support. (BPO)

- Contract management and business policy development. (BPO)

- Independent Cost Estimates (ICE) for the DNRO, IC oversight, and NRO acquisition and operations directorates. (BPO)

- Life-Cycle-Cost Estimates for source selections. (BPO)

(U) MISSION SUPPORT
(U) INSPECTOR GENERAL

(U) Description

(S)

(U) The Office of Inspector General (OIG) is an independent office that reports directly to the DNRO. OIG is responsible for oversight of all NRO activities through the performance of independent audits, inspections, and investigations. This oversight is designed to promote economy, effectiveness, efficiency, and accountability within the NRO and to assist in preventing and detecting fraud, waste, and abuse in NRO programs and operations. As such, the OIG has the responsibility for advising the DNRO and DDNRO of problems or deficiencies in NRO programs and operations and any impacts to the OIG's ability to carry out its mission.
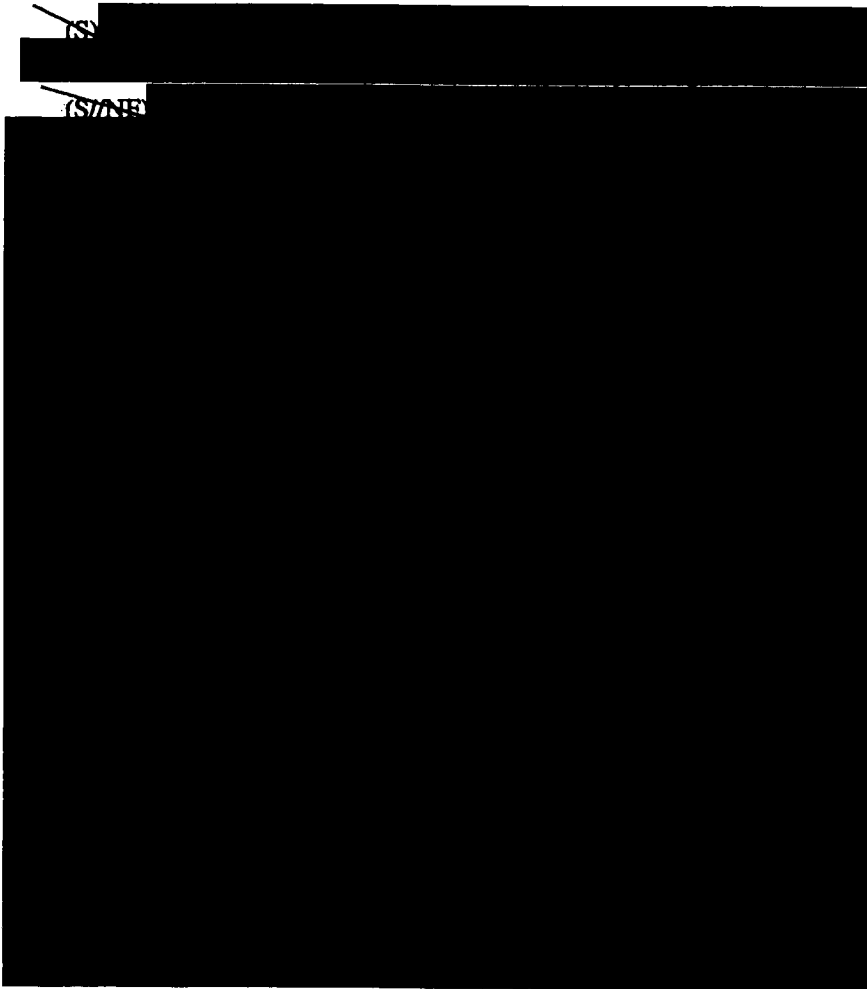
### (S) Key Short & Long Term Objectives

(U) Customers/Products

* Independent assessments and reporting of NRO activities.

* NRO fraud, waste, and mismanagement detection and prevention activities, including briefings and training programs.

* Annual and semiannual reports to the DNRO and the Congress highlighting OIG activities.

(U) MISSION SUPPORT
(U) COUNTERINTELLIGENCE

(U) Description

(S) Key Short & Long Term Objectives
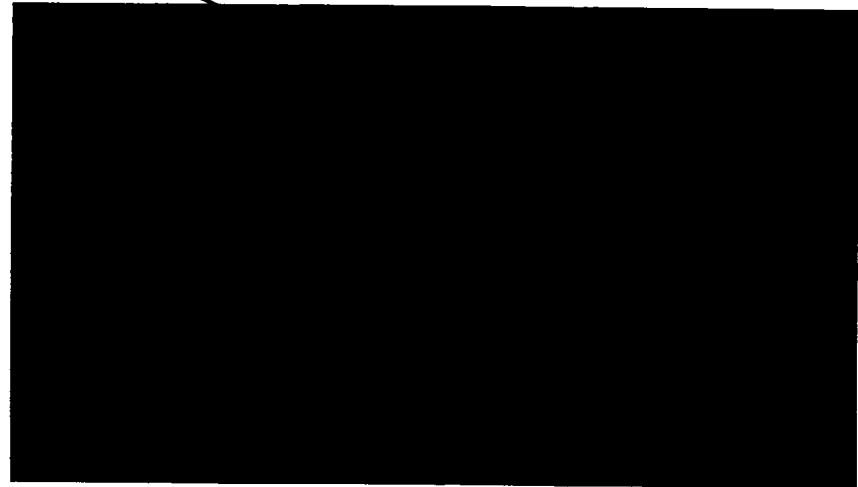
(U) Customers/Products

• Foreign intelligence and terrorist threat briefings and analytic products disseminated worldwide.

• Analyses and inquiries to detect and deter espionage and terrorism.

• Regional terrorism, foreign intelligence, and pre-travel threat assessments.

• CI threat assessments supporting program managers' acquisition decisions, program activities, and initiatives.

• CI analytical reviews in support of organizational IT acquisitions.

• Personal protection surveys for designated NRO officials.

(U) MISSION SUPPORT
(U) SECURITY

(U) Description

(S) [REDACTED]

(U//FOUO) The Security project provides common security support services to the entire NRO government and industry population. These services include developing and distributing security policy guidance; planning long-range security initiatives; investigating, performing polygraphs, adjudicating, and granting NRO accesses; providing physical security of all facilities and personnel; inspecting and accrediting secure facilities and information systems; and providing security training and awareness products to NRO employees, industry, and external government agencies supporting the NRO. The Office of Security supports approximately [REDACTED] government and industry personnel in over [REDACTED] NRO-sponsored facilities and almost [REDACTED] information system networks.

(S) Key Short & Long Term Objectives

[REDACTED]

(U//FOUO) Customers/Products

* Comprehensive, customer-focused personnel security program to support the NRO mission (including background investigations, forensics investigations, and administration of polygraph tests).

* Expanded personnel security database (Super 2) with connectivity to major NRO contractors.

* Standard security requirements for facility and technical security.

* Security policy, procedures, tools, and guidance for information security.

* Engineering, technical, facility, and automated information security advice and support (including IS and SCIF assessments, certifications, and accreditations).

* (U//FOUO) Regular vulnerability assessments of all NRO ground stations, communications networks, and commercial telephone switches [REDACTED]

* Security training and awareness products and services to educate the NRO workforce on how to achieve a secure working environment.

* Security policy for the NRO workforce (government and industry) and operational security support for special programs in the NRO.

(U) MISSION SUPPORT
(U) NATIONAL SECURITY SPACE OFFICE

(U) Description

(S)

(U) The NSSO project funds an independent joint DoD and IC organization, originally chartered as the National Security Space Architect (NSSA) by MOU between the Secretary of Defense (SecDef) and the DCI. The NSSA reported to the Under Secretary of the Air Force and the Director, NRO (USecAF/DNRO). In April 2004, the USecAF/DNRO expanded the organization's roles and responsibilities by combining the NSSA, the NSSI Office, and the Transformational Communications Office into the NSSO. The expanded roles and responsibilities include: development of national security space strategies and plans; enterprise engineering; conduct of an annual assessment of the national security space (NSS) program; functional area integration; and assistance with trade assessments between space and non-space solutions.

(U) Specifically, the NSSO:

• Develops strategic plans and mid- and far-term architectures across the national security space enterprise in a collaborative manner with representatives of all affected organizations, spanning the missions and functions of the military, intelligence, civil, and commercial space sectors.

• Conducts enterprise engineering activities to develop near- and mid-term mission/functional area architectures, functional area system-of-systems engineering, and functional allocation in a collaborative manner with representatives of all affected organizations.

• Assesses the consistency of the defense and intelligence space programs with NSS policy, plans, guidance, and architectural decisions.

• Conducts functional area integration efforts to advocate the functional area architecture; maintains the functional area baseline; identifies necessary interoperability standards and protocols; monitors acquisition activities; and collaborates with stakeholders.

• Assesses trades between space and non-space solutions to meet DoD, IC, and other user requirements, as well as appropriate integration of space with land, sea, and air components in support of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)); the DDCI/CM; the Under Secretary of Defense for Intelligence (USD(I)); the Secretaries of the Military Departments; and the Assistant Secretary of Defense for Networks and Information Integration (ASD (NII)).

(U) There is no other organization in the DoD, the IC, or the civil sector that performs these functions.

(U) Both the IC and the DoD provide manpower and funding for the NSSO. The NRO is designated as the lead agency for the IC. The IC portion of the NSSO budget is contained in the National Reconnaissance Program (NRP) for administrative purposes, and will fund approximately 25 percent of the total NSSO funding requirement.

(U) Key Short & Long Term Objectives

• Develop and update, as appropriate, the National Security Space Plan.

• Develop additional national security space strategies for specific mission/functional areas.

• Conduct the annual assessment of the National Security Space program.

• Develop and maintain the Integrated National Security Space Operating Concept (INSSOC).

• Develop a national security space architecture for one or more of the following topic areas: Objective Blue Force Tracking; Integrated Force Application; and Space Control and Information Operations, as resources permit.

— Objective Blue Force Tracking would focus on the appropriate mix of space and non-space resources to locate, identify, and track US and allied force elements.

— Integrated Force Application would focus on creating the foundation for possible future space force application capabilities.

— Space Control and Information Operations would focus on establishing the common framework between these two emerging mission areas to achieve denial, deception, disruption, degradation, and/or destruction of similar target sets while minimizing duplication of effort and resources.

• Conduct enterprise engineering activities to develop the near- and mid-term architectures and functional allocation necessary to guide implementation of approved plans and strategies.

• Lead the continued development of an integrated technology roadmap to support NSS capabilities.

• Establish appropriate functional integration offices, resourced by the stakeholders, to: maintain functional area architecture baselines; identify interoperability standards and protocols in a collaborative manner with stakeholder participation;, and monitor acquisition activities to encourage synchronization among the wide range of tasks necessary to ensure achievement of architectural goals.

• Conduct other studies, analyses, assessments, evaluations, and architectural development efforts as directed by the USecAF/DNRO and the DDCI/CM, in consultation with senior IC and DoD decisionmakers, as resources permit.

(U) Customers/Products

• National Security Space Plan for use by the SecDef, the DCI, the USecAF/DNRO, the DDCI/CM, the Joint Staff, Combatant Commands, and program managers of the National Intelligence Program (NIP).

• Annual assessment of the National Security Space Program for SecDef; DCI; USecAF/DNRO; USD(AT&L); DDCI/CM; USD(I); ASD(NII); the Joint Chiefs of Staff; Commander, US Strategic Command; the Secretaries of the Military Departments; and the program managers of the National Intelligence Program.

• Integrated architectures for future national security space capabilities for use by the SecDef, the DCI, the USecAF/DNRO, and the DDCI/CM.

• Advice to senior IC and DoD decisionmakers on space policy issues, trades between space and non-space solutions, and acquisition and investment strategies.

• Studies as directed by the USecAF/DNRO , and other senior IC and DoD decisionmakers.
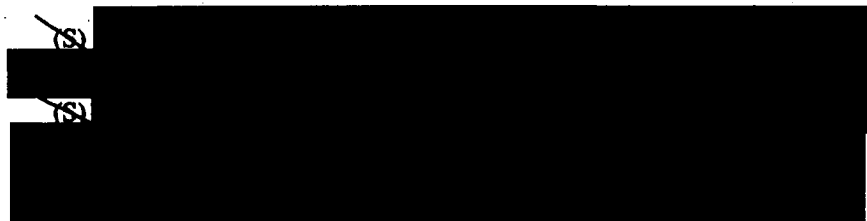
(U) FACILITIES

(U) The Facilities Expenditure Center (EC) includes resources for operation and maintenance (O&M) and essential lease costs of NRO HQ facilities.

(U) The major objectives of the Facilities EC are to:

• Provide space and facility-related services required to meet NRO mission requirements.

• Comply with federal, state, and local workplace environmental and safety statutes.

• Manage O&M activities of NRO HQ facilities efficiently and cost effectively.

• Maintain a data center to support the facilities management enterprise system.

• Improve the efficiency and cost effectiveness of NRO HQ facilities management.

• Ensure adherence of preventive maintenance on facility systems to prolong system life.

• Update life-cycle projections of facility equipment and systems to ensure adequate recapitalization planning.

• Provide facilities infrastructure support and consulting to NRO facilities worldwide.

(U) Budget Request

(S)

(S)

(U) Major Contractors

• *(U) Westfields*

(U) Boeing Service Company, Richardson, TX: O&M services.

• *(U) Leased Facilities*

(U) Boeing Service Company, Richardson, TX: leased management and O&M services.

(U) Management Oversight

(U) Unless otherwise indicated within individual projects, management oversight for this entire EC is:

• Director of Central Intelligence.

• Secretary of Defense.

• Office of Management and Budget.

(U) FACILITIES
(U) WESTFIELDS

(U) Description

(S)

(U) The Westfields project provides resources to support O&M of NRO HQ facilities. Specifically, the project provides resources to:

- Operate and maintain NRO HQ facilities.

- Support HQ renovations, modifications, utilities, maintenance of facilities and grounds, retrofit work, upgrades of facility operations systems and equipment, facility engineering, facility security systems, logistics/warehousing operations, property management, compliance with safety and environmental regulations, and acquisition of supplies and equipment to support O&M and NRO mission activities.

(U) Key Short & Long Term Objectives

- Provide office space and facility-related systems, equipment, and services required to meet NRO mission requirements.

- Comply with federal, state, and local workplace environmental and safety statutes.

- Manage the O&M activities of NRO HQ facilities efficiently and cost effectively.

- Maintain a data center to support the facilities management enterprise system.

- Continue to improve the efficiency and cost effectiveness of the HQ facilities management and O&M.

- Ensure adherence of preventive maintenance on facility systems to prolong system life.

- Continue to update life-cycle projections of facility equipment and systems to ensure adequate upgrade or recapitalization planning.

(U) Customers/Products

(U) All personnel assigned to NRO HQ facilities are customers of this project.

(U) PERSONNEL
(U) HUMAN RESOURCE MANAGEMENT

(U) Description

(S) ███████████████████████████

(U) The Human Resource Management project provides resources to fund NRO human resources (HR) support and initiatives to improve recruitment, retention, development, recognition, and management of the NRO's diverse acquisition workforce.

(U) Key Short & Long Term Objectives

- Provide HR support to all NRO employees and managers.

- Implement human capital initiatives to maintain a world-class NRO work force.

(U) Customers/Products

(U) All NRO employees and managers are customers of this project.

(U) PERSONNEL

(S//BYE)

[REDACTED]

(U) Description

(S) [REDACTED]

(U) In FY 2006 the NRO is requesting [REDACTED] additional positions O&M, AF and [REDACTED] supporting activities across the NRO. This increase is driven by the increasing size of the NRO's responsibilities [REDACTED] with increased emphasis on new, transformational programs while maintaining and enhancing our legacy capabilities. However, personnel strength has remained relatively flat. The lack of staffing increases has stretched the NRO development activities and could potentially impact the effectiveness of those programs. The additional staff will improve internal oversight of NRO activities and provide increased visibility into our programs.

(S//BYE) [REDACTED]

(S//BYE) [REDACTED]

(U) Key Short & Long Term Objectives

(U) The major objective of the Personnel projects is to provide the necessary funding for positions and personnel support costs to accomplish the NRO mission.

(U) Customers/Products

(U) All NRO employees and managers are customers of these projects.

(U) NATIONAL RECONNAISSANCE PROGRAM (NRP) FY 2006 – FY 2011 PERFORMANCE PLAN FOR ACHIEVING THE DCI *Imperatives*

(U) Overview

(U) The NRO develops and operates unique and innovative space reconnaissance systems and conducts intelligence related activities essential for US national security. The 2003 NRO Strategic Plan instantiates this mission statement and establishes clear objectives for ensuring its accomplishment, today and in the future. To achieve those objectives, the NRO leadership team has defined and is implementing a comprehensive programmatic roadmap—The NRO Architecture Vision and Investment Strategy (AVIS) or "Way Ahead" architecture. As in FY 2005, the annual analysis underlying this architecture serves as the common basis for both the FY 2006 budget submission and this FY 2006 Performance Plan for Achieving the DCI *Imperatives*. The Performance Plan ensures implementation of the NRO Strategy by defining measures of progress, establishing annual performance targets on those measures, and defining programs and initiatives for attaining them.

(U) The NRO is principally an intelligence collection and systems acquisition organization, chartered to acquire and operate space-based remote sensing capability and capacity. As tasked-based systems, NRO satellites are inherently flexible to support all the DCI imperatives. As such, NRO performance measurements are derived from the overarching target- and mission-specific IC objectives.

(U) Specifically, the output of overhead collection systems provided and operated by the NRO ultimately yields imagery and signals intelligence, measurement and signature characterization, special communications support, and aspects of information dissemination that contribute to the IC performance goals. This FY 2006 - FY 2011

Performance Plan for Achieving the DCI *Imperatives* relates NRO measures, targets, and actions to the overarching IC strategic objectives and performance goals.

(U) National Intelligence Program (NIP) Strategic Objectives

(U//FOUO) The FY 2006 Performance Plan continues the approach established in FY 2005 for addressing NIP strategic goals and measures, and complies with IC Performance Planning and Programming Guidance, the NRO Strategic Plan, the NRO FY 2005 Performance Plan, and the AVIS architecture for FY 2006 - FY 2020. As in previous years, the NRO surveyed national and military user communities to determine their top-level view of present and future intelligence requirements. The NRO translated those requirements into a broad range of measurable space-based remote sensing capabilities, such as re-visit, geolocation accuracy, spectral bands, etc., needed to satisfy user requirements. The NRO further allocates these capabilities by applicable NIP Strategic Objectives—terrorism, warning, homeland security, WMD, and denial and deception (D&D). A 100 percent scale is used in each of the IC strategic goal areas to represent achieving all satellite remote sensing capabilities attributable to that area. The percent of capability shown in the performance measures for FY 2004 represents the current status of the on-orbit system. Annual progress on these measures requires that planned increases in remote sensing capability are acquired, launched, and rendered operational. Amplifying details on the AVIS architecture and its performance measures is provided under Management Approach and Challenges.

(U) WIN THE WAR ON TERRORISM

(U//FOUO) NIP Strategic Objective

*Provide intelligence and activities that enable the US to defeat or preempt terrorist acts against US interests.*

*(U) Overall Strategy for achieving this NIP Strategic Objective*

(S//SI//NF)

[REDACTED]

(U) The overarching NRO approach for achieving this and other IC NIP strategic objectives reliant on space-based remote sensing is to deliver current on-orbit capability to users, replenish the constellation to preserve and enhance foundational capabilities, and simultaneously leverage advanced technology to develop future transformational capabilities. The NRO will use the funds requested in its budget submission to provide space-based remote sensing capability that fully supports the NIP Long-Term Performance Goals. This includes myriad activities across the NRO that will result in achieving targeted improvements in remote sensing performance. Details of specific programmatic initiatives are provided in the NRP Congressional Budget Justification Book (CBJB), with significant efforts described below. Delivering on our promised technologies and transforming to more robust capabilities will enable the intelligence required for strong defense of US interests.

(U) Initiatives and Performance Measures Supporting this NIP Strategic Objective

(S//TK)

[REDACTED]

(S)

[REDACTED]

(S//TK)

[REDACTED]

(S//TK)

[REDACTED]
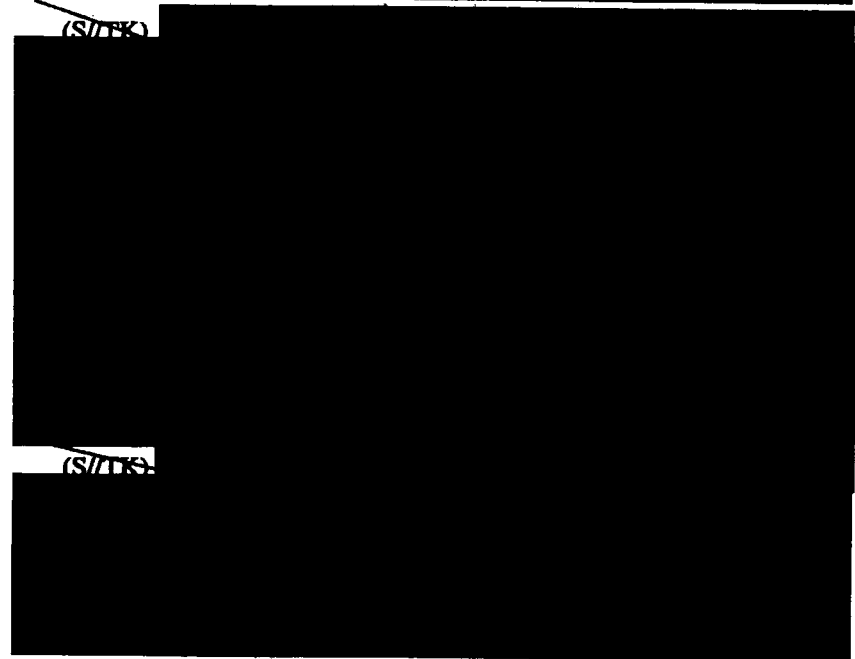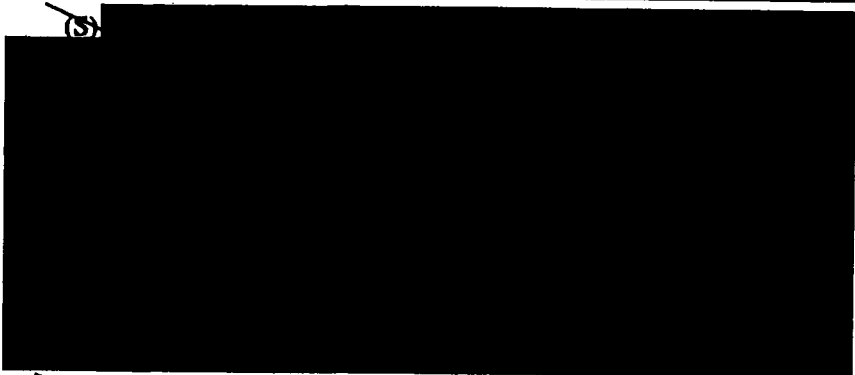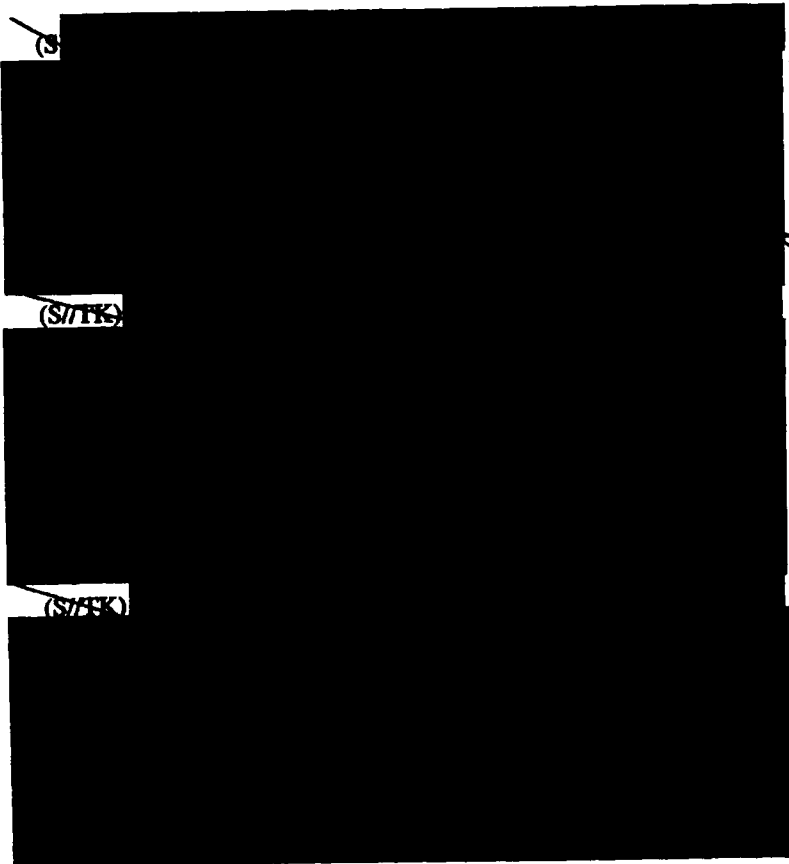
(U) NIP Long-Term Performance Goal
(U) Provide relevant, actionable, and predictive counterterrorism intelligence to our customers in accordance with national intelligence priorities.

(U) NRP Performance Goal
(U) Maintain high levels of operational availability.

	Results	Target Values	
(U) Performance Measure	2004	2005	2006
(U) Operational Availability, space	███	███	███
(U) Budget Linkage: Key ECs related to this performance measure are IMINT Operations and SIGINT Operations.			

(U) NIP Long-Term Performance Goal
(U) Expand human and technical penetration of terrorist organizations, cells, and support networks.

(U) NRP Performance Goal
(U) Achieve the currently programmed 2020 architecture capability supporting counterterrorism.

	Results	Target Values	
(U) Performance Measure	2004	2005	2006
(U) percentage of currently programmed 2020 satellite architecture's counterterrorism capabilities that are currently operational.	███	███	███
(U) Budget Linkage: All NRP expenditure centers are relevant to achieving these performance goals.			

(U) WARN OF IMPENDING GLOBAL THREATS

(U//FOUO) NIP Strategic Objective

Provide accurate and timely global indications and warning that prevent surprise impacts on US interests and personnel worldwide.

(U) Overall Strategy for achieving this NIP Strategic Objective
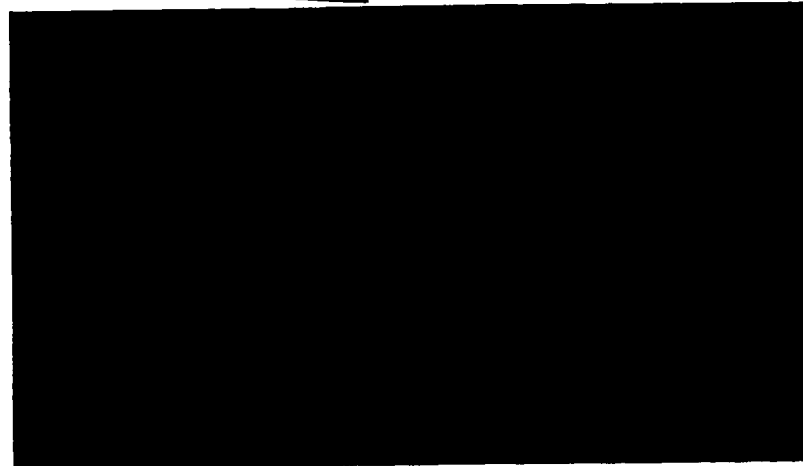
(S//SI//NF) ████████████████████████

(U) The NRO contribution to this objective is to provide the most capable and robust space-based ISR capability possible. Details of the NRO strategy for improving remote sensing are provided under the first IC performance goal discussed in this plan. Delivery of the technologies described below will enhance our ability to provide the accurate and timely data needed to support this objective.

(U) Initiatives and Performance Measures Supporting this NIP Strategic Objective

(U) Initiatives included under the first NIP Strategic Objective, plus:

(S//TK) ████████████████████████

(S//TK) ████████████████████████

(U) NIP Long-Term Performance Goal
(U) Effectively communicate warning to relevant policy makers and operational components in time to initiate mitigating action.

(U) NIP Performance Goal			
(U) Achieve the currently programmed 2020 architecture capability supporting US deployed forces and US allies.			
	Results	Target Values	
(U) Performance Measure	2004	2005	2006
(U) percentage of the currently programmed 2020 satellite architecture capabilities necessary to warn of threats to US deployed forces and allies that are currently operational.	████	████	████

(U) Budget Linkage: All NRP expenditure centers are relevant to achieving this performance goal except: Facilities, Imagery Intelligence (IMINT) Ground Development and Maintenance, and Mission Support.

(S//TK) ████████████████████████

(U) PROTECT AMERICA

(U//FOUO) NIP Strategic Objective

Develop and share intelligence for the prevention of physical and virtual attacks on the US homeland.

(U) Overall Strategy for Achieving this NIP Strategic Objective

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

(U) The NRO contribution to achieving this objective is to provide the most capable and robust space-based ISR capability possible. Details of the NRO strategy for improving remote sensing are provided under the first NIP strategic objective discussed in this plan. In support this first NIP strategic objective, the NRO focuses on efforts to provide the data required to enable intelligence agencies, including NGA and NSA.

(U) Initiatives and Performance Measures Supporting this NIP Strategic Objective

(U) Initiatives included under the first NIP Strategic Objective, plus:

(S//TK) [REDACTED]

(S//TK) [REDACTED]

(U) NIP Long-Term Performance Goal
(U) Provide relevant, actionable, and predictive intelligence to Homeland Security and federal law enforcement elements in accordance with national intelligence priorities.

(U) NRP Performance Goal
(U) Achieve the currently programmed 2020 architecture capabilities, which will provide information on threats to the US homeland.

(U) Performance Measure	Results	Target Values	
	2004	2005	2006
(U) percentage of the programmed 2020 architecture capabilities related to providing information on threats to the US homeland that are currently operational.	[REDACTED]	[REDACTED]	[REDACTED]

(U) Budget Linkage: All NRP expenditure centers are relevant to achieving this performance goal except: Facilities, IMINT Ground Development and Maintenance, and Mission Support.

(U) SUCCEED AGAINST ENDURING STRATEGIC CHALLENGES

(U//FOUO) NIP Strategic Objective

Eliminate critical intelligence gaps on hard targets, WMD development and delivery systems.

(U) Overall Strategy for Achieving this NIP Strategic Objective

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

(U) The NRO approach for achieving this objective is to provide the most capable and robust space-based ISR capability possible. Details of the NRO strategy are provided under the first IC performance goal

discussed in this plan. The enhanced capabilities described below will support information needs against hard targets and mitigate intelligence gaps.

(U) Initiatives and Performance Measures Supporting this NIP Strategic Objective

(U) Initiatives included under the first NIP Strategic Objective, plus:

(S//TK)

(S//TK)

(S//TK)

(U) NIP Long-Term Performance Goal (U)			
(U) NRP Performance Goal (S//TK)			
		Results	Target Values
(U) Performance Measures (S//TK)		2004	2005	2006

(U) Budget Linkage: All NRP expenditure centers are relevant to achieving this performance goal except: Facilities, IMINT Ground Development and Maintenance, and Mission Support.

(U) PROTECT OUR INTELLIGENCE CAPABILITIES

(U//FOUO) NIP Strategic Objective

Operate and protect the collaborative US intelligence enterprise such that it is neither thwarted by adversary efforts nor interrupted by catastrophic events.
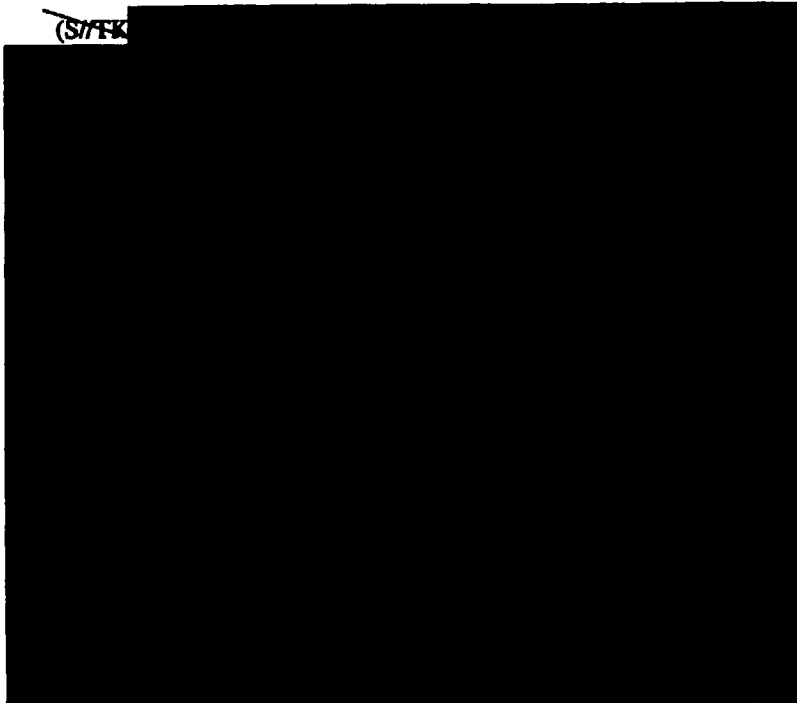
(U) Overall Strategy for Achieving this NIP Strategic Objective

(S//SI//NF)

(U) Initiatives and Performance Measures Supporting this NIP Strategic Objective
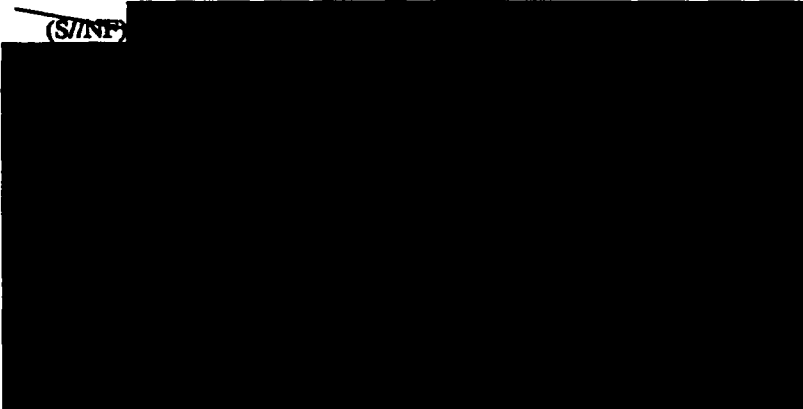
(S)

(S//TK)

(U) NIP Long-Term Performance Goal
(U) Improve the ability to detect and defeat D&D through rigorous collection and analytic processes, and implementing new techniques against different technological phenomena.
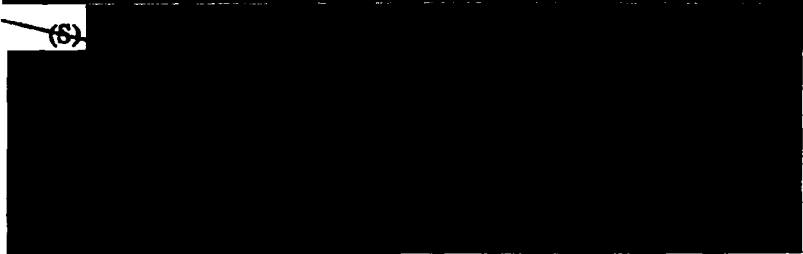
(U) NRP Performance Goal
(S//TK)

		Results	Target Values	
(U) Performance Measure		2004	2005	2006
(S//TK)				

(U) Budget Linkage: All NRP expenditure centers are relevant to achieving this performance goal except: Communications (Enabling & Enterprise), IMINT Engineering, Integration & Management, IMINT Ground Development and Maintenance ████████ and Operational Support.
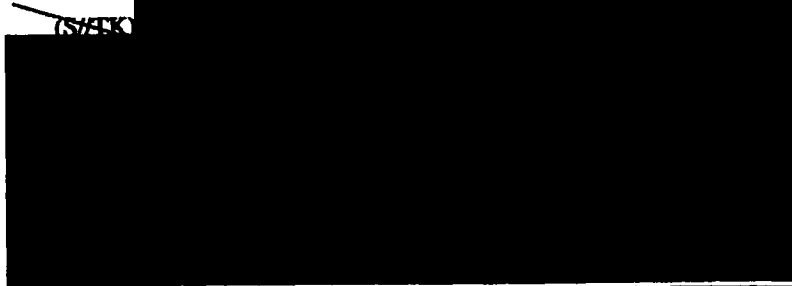
(S//TK)

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(S//TK)

(S)

(S//TK)

(U) NIP Long-Term Performance Goal (U) Develop and implement plans to provide continuity of services to customers if normal operating procedures or environments are disrupted.			
(U) NRP Performance Goal (S//TK) ███████████████			
	Results	Target Values	
(U) Performance Measures	2004	2005	2006
(S//TK) ███████████	███	███	███
(U) Budget Linkage: All NRP ECs are relevant to achieving this performance goal. Key ECs are Corporate Systems Engineering and Ops, and Mission Support.			
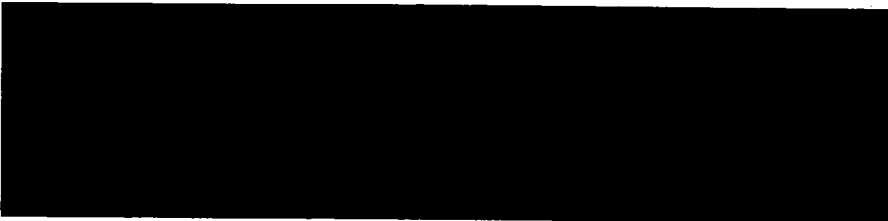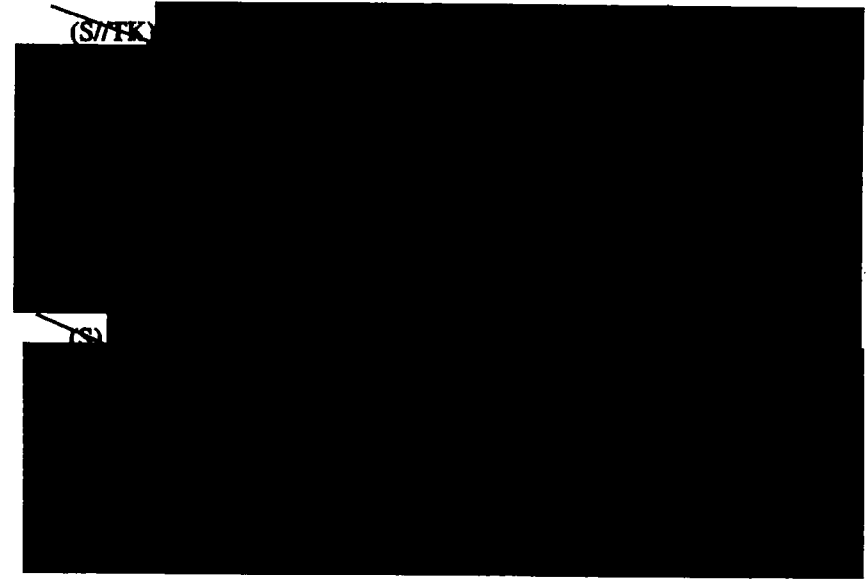
(U) LEVERAGE TECHNOLOGY TO TRANSFORM INTELLIGENCE

(U//FOUO) NIP Strategic Objective

Discover, develop, and insert superior technology and associated collaborative operational concepts to achieve a decisive intelligence advantage.

(U) Overall Strategy for Achieving this NIP Strategic Objective

(S) ███████████████████

(S//TK) ███████████

(U) Initiatives and Performance Measures Supporting this NIP Strategic Objective

(S//TK) ███████████████████

(S) ███████

(S//TK) ███████████████████

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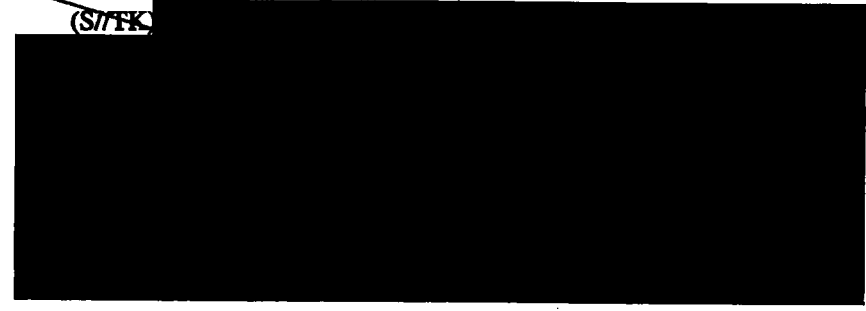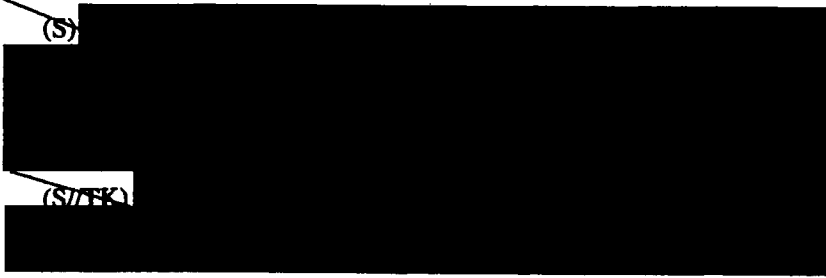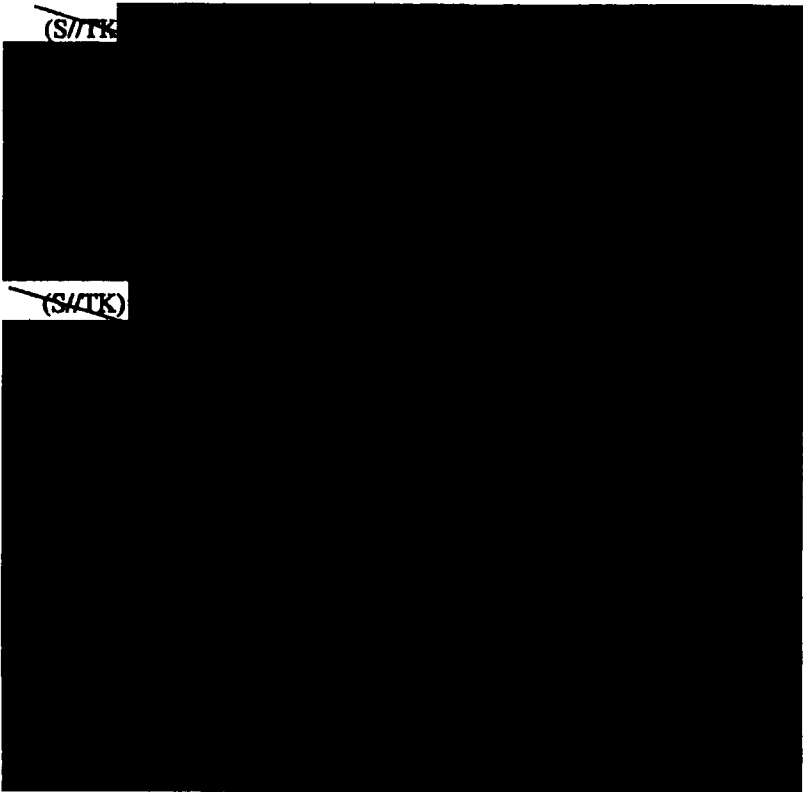
(U) NIP Long-Term Performance Goal
(U) Develop and field sensing technologies within a coordinated and integrated architecture that achieves transparency of all target sets.
(U) NRP Performance Goal
(U) Annually increase the investment in advanced and applied R&D, baselined to FY 2004.

(S//TK)

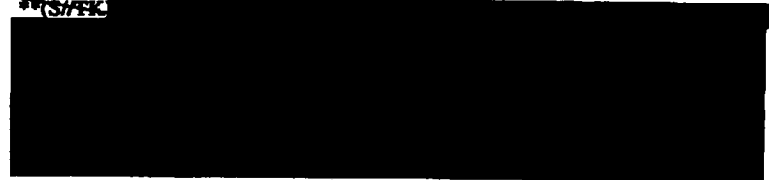|	Results	Target Values	
(U) Performance Measures	2004	2005	2006
(U)	Baseline	▮▮▮▮	▮▮▮▮

(U) Budget Linkage: Relevant NRP expenditure centers include Advanced Technology and Applied Technology.

*(U) Advanced and applied R&D is defined as the budget in the Advanced Technology Applied Technology Expenditure Centers.

**(S//TK)

(U) **Director's Innovation Initiative (DII) program:** The NRO DII program provides a risk-tolerant environment to invest across US industry, academia, and other US government agencies and labs in cutting edge technologies and high payoff concepts. The DII is the NRO's primary program to identify key concepts and ideas that will shape the future of NRO capabilities ensuring the integration and application of commercial technologies. The DII projects focus on

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making orders of magnitude improvements in efficiency and effectiveness while expanding the frontiers of detection, exploitation, and processing.

(U) **Innovative Solutions Initiative (ISI) program:** The NRO ISI complements the DII program by pursuing similar objectives in a classified environment. This allows a more specific and explicit focus on NRO needs and constraints than is possible in the unclassified DII environment.

(U) Management Approach and Challenges

(U) A key factor in the successful achievement of the NRO performance targets, as well as the overall NRO strategy, is our ability to integrate and align our long-term strategy with near-term programmatic decisions and activities. The challenge of balancing often competing interests is mitigated by having a clear road map or "Way Ahead" that provides for disciplined adherence to the priorities articulated by the National Security Presidential Decision (NSPD)-26, the DCI, the Mission Requirements Board (MRB), and the Quadrennial Defense Review. These sources identify current and future national needs, and thereby facilitate the strategy for architecture decisions.

(U) The NRO Architecture Vision and Investment Strategy

(U//FOUO) Immediately following publication of the 2003 NRO Strategic Plan, the DNRO challenged his staff to construct a long-term NRO Architecture Vision and Investment Strategy (AVIS) to achieve the strategic goals and objectives. AVIS represents the architectural vision and programs the NRO will pursue between now and 2020 that are responsive to future needs and dynamic world events.

(U//FOUO) The two key objectives of the AVIS architecture are to:

• Develop the architectural vision and investment strategy for the next-generation of collection systems necessary to keep pace with the ever-increasing set of hard target problems.

• Ensure the right mix of technologies and capabilities within available resources.

(U//FOUO) The NRO used a methodical process, firmly grounded with decision analysis tools, to get from strategic guidance and intelligence drivers to the investment of dollars in real programs. AVIS preserves plans for on-going programs while prioritizing Next Generation "operational" (collector) and "enabling" (COMM, infrastructure, protection, and so forth) programs.

(U//FOUO) The NRO developed its future architecture vision and strategy based upon strategic drivers. These drivers included DCI and SecDef direction, IC Performance Planning and Programming Guidance, the NRO Strategic Plan, the NRO FY 2005 Performance Plan, and information needs derived from the national and military communities.

(U//FOUO) To understand the information needs that drive the future NRO architecture, we used our Deputy Director for Military Support and Deputy Director for National Support staffs to survey the national and military communities for their top-level view of the future intelligence needs. The FY 2005 cycle used 14 intelligence drivers; the FY 2006 - FY 2011 process used the newly approved NSPD-26 structure as the basis for this survey.

(U//FOUO) After several years of this kind of community interaction, we have developed a set of 42 core information needs that cover the spectrum of intelligence drivers. The community is finding this set increasingly helpful as a common lexicon across stovepipes, and it allows us to readily link to a variety of topical reference systems like the DCI's Mission Based Budgeting framework. The IC weighted both the intelligence drivers and the core information needs.

(U//FOUO) With a top level view of information needs in hand, we then asked the NRO IMINT and SIGINT Directorates, in conjunction with their mission partners, to develop the critical capabilities necessary to address this broad spectrum of needs. This approach effectively links the engineering capabilities and the future intelligence drivers from our customers. We are excited about this capability-based analysis approach but have more to do to refine these capabilities.

(U//FOUO) Note that taking the weights from the surveys and flowing them down to the measurable critical capability level has established the relative importance of the critical capabilities. This means the importance of improving our capability, in any area, is tied directly to the priorities of our national and military users.

(S//TK) ████████████████████████████

(U//FOUO) This linkage also means that we can communicate consistently with systems engineers in the NRO at the capability level, and with our users in the community at the intelligence need level. This is a powerful approach to future architecture planning.

(U//FOUO) We next developed value scales for each of the critical capabilities in cooperation with our mission partners. These scales represent the value placed on different levels of performance for each capability. The top of these scales was set without regard to current capability and represent truly transformational capability (stretch goals). Uninterrupted target access, for example, has a top-of-scale that requires 24-hour, uninterrupted target access. This capability is more important for some information needs than it is for others, an aspect that was captured by our mission partners.

(U//FOUO) An ideal NRO architecture would score at the top of each critical capability scale and thus receive a total score of 100. This means the NRO would have the capability to do everything it is expected to do, but it does not mean that the NRO would singularly solve all intelligence problems.

(U//FOUO) With the intelligence drivers, core information needs, and critical capabilities all linked and prioritized by our users, we developed domain architecture alternatives to potentially address the information needs. These alternatives were evaluated against the critical capabilities and scored as combinations to capture synergies among programs. This evaluation data was reviewed by NRO seniors and refined based on DCI and SecDef planning, performance and programmatic guidance to develop the recommended AVIS architecture. Resultant programs were then time-phased to fit within in the anticipated NRP top line.

(U) How Performance Plan Metrics are Linked to AVIS

(U//FOUO) While it is a complex and difficult task to plan future architectures based on limited knowledge of future demands, the NRO proactively plans our capabilities based on enduring threats. As such, six of the eight DCI Long Term Performance Goals were directly linked to a strategic driver used in development of the AVIS architecture. The ease and transparency of this linkage affirmed that we had a robust set of drivers. A positive aspect of this approach is that NRO performance over time can come directly from the AVIS data for specific programs.

(U//FOUO) Custom metrics were developed for two of the performance goals, Improving Security Measures and Applying Technology. While they were not tied directly to the intelligence drivers, these goals are reflected in the NRO strategic plan.

(U//FOUO) Once the linkage between performance goals and strategic drivers was established, we aggregated the scores for each program and credited the capability over time in accordance with the launch schedule. Note: NRP funding profile constrains when a capability becomes available.

(U//FOUO) The performance metric that we are using for each measurement area is "percent of AVIS capability realized." This metric represents the progress made to achieve the AVIS capability and is a function of the critical capabilities, information needs, and community priorities; program achievement against the critical capabilities; launch schedules; and NRP funding. Progress is shown only when critical remote sensing capabilities or a subset thereof within a strategic area are acquired, launched, and operational.

(U) Support to the President's Management Agenda (PMA) Initiatives

(U//FOUO) The NRO's Enabling Objectives directly support the PMA. Three of these objectives: "Create and Maintain a Diverse World-Class Work Force", "Enable Enterprise Excellence with a High Performing Organization and Infrastructure", and "Develop a State-of-the-Art System Engineering Competency", support the PMA initiative of "Strategic Management of Human Capital." The objective of "Support an Industrial Technology Base for Space Intelligence" directly supports the "Competitive Sourcing" initiative. The NRO enabling objectives of "Manage Financial Resources to Maximize Program Success" and "Master Program Management as an NRO Core Competency" provide a link to the PMA initiative "Improved Financial Performance". The PMA initiative "Expanded Electronic Government" is supported by the objective "Provide World-Class Enterprise Information Services". Finally, the initiative of "Budget and Performance Integration" is reflected in the linkage that has been identified between NRP ECs and the IC performance goals. Examination of the linkages shows that each performance goal is supported by multiple ECs. Budget and performance integration for IMINT is further addressed in the Program Assessment Rating Tool summary.

(U) PROGRAM ASSESSMENT RATING TOOL (PART) SUMMARY

(U) Program: NRO Space-Based Imagery Intelligence Program

(U) Agency: Department of Defense

(U) Bureau: National Reconnaissance Office

(U) Program Type: Capital Assets and Service Acquisition

(U) PART Score Summary:

Purpose	80%
Planning	78%
Management	100%
Results/Accountability	35%
Overall	61%

	Results Achieved		Measures Adequate
✔		✔	
	Results Not Demonstrated		New Measures Needed

(U) Key Performance Measures*	Year	Target	Actual**
(U) Long Term			
(S)			
(S)			
(C)			
(S)			

(U) Annual				
(S)				
(S)				
(S)				

Partial list.
** Actual figures shown here reflect an average across either currently operating systems (for operational measures) or post-Key Decision Point (KDP) B acquisition programs (for acquisition measures).

(S//TK) Program Funding Level (in millions of dollars)

Program Summary:

(FOUO) The NRO space-based IMINT Program employs satellite assets to collect and process high value imagery to satisfy national and DoD intelligence requirements. To accomplish this, the NRO IMINT program develops and operates state-of-the-art, high-value space-based imaging systems, delivers innovative new sources and methods, and works with the NGA to deliver vital intelligence to IC and military customers. The program assessed in the PART evaluation encompasses the activities of the NRO IMINT Directorate and its joint responsibilities and interfaces with NGA, the Air Force Space Based Radar (SBR) program, oversight/policy organizations, and other program partners. It does not include functional management responsibilities for the total US Government IMINT enterprise, which are assigned to NGA.

(U) The PART Assessment found:

1. (U) The purpose of the NRO IMINT program is clear; it addresses a current and relevant need; it is not duplicative of other public or private sector efforts; and its outputs reach the intended beneficiaries. However, evolving technologies and requirements threaten to blur the historic distinction between imagery intelligence collection and DoD operational support missions. While the purpose and scope of the NRO IMINT program has been clear in the past, new IC and DoD space and airborne initiatives make this less certain in the future and increase the potential for duplicative capabilities.

2. (U) The program is hampered by a lack of consensus among key stakeholders on a future integrated, prioritized, resource-constrained vision and a capstone set of capability needs for the end-to-end space-based imagery enterprise. This leads to ambiguity in goals and priorities.

3. (U) The NRO IMINT program has established short- and long-term goals to measure and assess acquisition and operational programs. These include development-related cost, schedule, and performance specifications as well as on-orbit performance and system availability metrics. IMINT initiatives are vetted with, and reflect the needs identified by, the user community. However, the IMINT program would benefit from enterprise-wide measures for architectural-level performance.

4. (U) The program demonstrates strong financial management practices and regularly collects performance data. However, IMINT resource needs are not presented in a complete and transparent manner in the CBJB, in part due to the constraints inherent in the IC's standardized format.

5. (U) The NRO has a structured and integrated set of internal acquisition management processes, including regular independent evaluations, that encompass all phases of the acqusition process from pre-acquisition through on-orbit operations. It also has a disciplined investment planning process that links IMINT and NRO resource planning activities with user requirements.

6. (U) The NRO takes meaningful steps to address planning and management deficiencies identified by internal and external reviews. In response to external recommendations, NRO has: strengthened its system engineering capabilities; improved cost estimating processes; established joint management processes with NGA; realigned the FIA program management structure and its associated cost/schedule baseline; and initiated a new effort designed to address many of the acquistion "reform" flaws instituted in the mid-1990's.

7. (S//TK)

8. (U) In general, IMINT acquisition programs meet established performance requirements but are less successful in achieving cost and schedule goals. In part, this is due to the overly optimistic estimates used in the past and industry-wide problems with component quality control. However, once on orbit, most IMINT satellites perform well, and consistently exceed their specified design lives.

9. (S)

(U) Program Response

(U) As a result of the above, the NRO IMINT Program will:

- Support IC and DoD efforts to develop an integrated vision and a clearly defined set of capstone capability needs for the end-to-end space-based imagery architiecture.

- Continue to improve upon NRO/NGA collaboration, to include conducting joint NRO/NGA performance trade offs for future imagery systems.

- Use more realistic cost and schedule estimates when proposing and budgeting for new programs, and then manage to those estimates.

- Continue multiple, ongoing initiatives to correct strategic planning and management problems.

- Ensure pre-acquisition programs have specific and assessable goals and deliverables.

- Develop an acquisition efficiency metric.

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(U) RESOURCE EXHIBITS

(U) GLOSSARY

(U) ACE—Acquisition Center of Excellence. A service of the Office of Contracts dedicated to providing source selection, management integration and earned value management training and support.

(U) AFELM—Air Force Element.

(U) AFSCN—Air Force Satellite Control Network. A worldwide network that provides command, control and telemetry for satellite operations.

(U) AFSATCOM—Air Force Satellite Communications.

(U) AI&T—assembly, integration and test.

(S//TK)

(U) AISR—airborne intelligence, surveillance and reconnaissance.

(S)

(U) AMC—Air Mobility Command (USAF).

(S//TK)

(U) AoA—analysis of alternatives.

(U) AOCO—Airborne Overhead Cooperative Operations. System that uses near real-time air and space SIGINT tipping, collection and processing to geolocate and cross cue targets to imagery.

(U) AOIO—Airborne Overhead Interoperability Office.

(U) ARC—ACE Acquisition Resource Center.

(U) AS&T—Advanced Systems and Technology, NRO directorate.

(U) ASD(NII)—Assistant Secretary of Defense for Networks and Information Integration.

(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//BYE)

(U) AUTODIN—Automated Digital Network.

(U) AVIS—Architectural Vision and Investment Strategy

(U) BAAR—baseline agreement and acquisition report.

(S//TK)

(U) BART—Budget Analysis and Reporting Tool.

(U) BB—block builds. Incremental segments of the FIA MIND software during development.

(U) BEM—bandwidth efficient modulation. The use of complex signal waveforms or modulation to increase the data rate within a given frequency channel.

(U) BIPS—billion instructions per second.

(U) BOSS—Business Operations and Staff Support.

(S//TK)

(S)

(U) BPO—Business Plans and Operations office.

(U) BRAT—Beyond Line of Sight Reporting and Tracking. Refers to a Grennadier-BRAT ASPO-COBRA transmitter which sends the COBRA signal to perform Blue Force Tracking.

(U) C&A—certifications and accreditations.

(U) C&C—command and control.

(U) C&T—command and telemetry.

(U) C4ISR—command, control, communications, computers, intelligence, surveillance, and reconnaissance.

(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.

(U) CAIG—Cost Analysis Improvement Group.

(U) CAT—Consolidated Airlift Team.

(U)

(U)

(U) CCAFS—Cape Canaveral Air Force Station.

(U) CCD—charged coupled device. A semiconductor device used as an optical sensor that stores charge and transfers it to an amplifier and detector.

(U) CCP—Consolidated Cryptologic Program. National Intelligence Program component supporting NSA activities.

(U) CCU—circuit switched segment customer premise equipment upgrade. Designed to integrate, install, test, document and migrate services to a COTS-based asynchronous transfer mode network installed at specific NRO locations.

(U) CDMA—code division multiple access.

(S//TK)

(U) CDR—critical design review.

(U) CEMO—Community ELINT Management Office.

(U) CGS—consolidated ground command and control and processing segment.

(U) CIP—critical information protection.

(U) CMA—collection management authority.

(U) CMM—Cryptologic Mission Management. The NSA process to manage the cryptologic assets of the United States Cryptologic System.

(S)

(S//TK)

(U//FOUO) COGS-X—COMINT Overhead Geolocation System. A processor used to produce geolocations on COMINT signals of interest in support of IOSA.

(U) COMM—NRO Communications Directorate.

(U) COMSEC—communications security. Hardware and firmware devices and accompanying software used to encrypt/decrypt data.

(U) CONOPS—concept of operations.

(S//TK/BYE)

(U) COOP—continuity of operations plan.

(U) COTR—Contracting Officer's Technical Representative.

(U) CPIC—capital planning and investment control.

(U) CS/CS—cross-site/cross-system. A term used in conjunction with the capability to manage multiple systems over various locations.

(U) CSAR—combat search and rescue. Task performed by rescue forces to effect the recovery of distressed personnel during war or military operations other than war.

(U) CSE—Corporate System Engineering.

(U) CSE&O—Corporate System Engineering and Operations.

(U) CSPAR—Central Strategic Processing Analysis and Reporting.

(U) D&D—denial and deception. Tactics used by adversaries to deny or deceive intelligence collection.

(U) DA—Directorate of Administration.

(U) DAA—Designated Accreditation Authority for IT systems.

(U) DAMPS—Digital Advanced Mobile Phone System. Technology for digital transmission of radio signals between a mobile telephone and a radio base station.

(U) DARPA—Defense Advanced Research Projects Agency.

(U) DCAA—Defense Contract Audit Agency.

(U) DCID—Director of Central Intelligence Directive.

(U) DCID 6/3—This directive establishes the security policy and procedures for storing, processing, and communicating classified intelligence information in information systems, including Sensitive Compartmented Information and Special Access Programs for intelligence under the purview of the DCI.

(U) DCIS—Defense Criminal Investigative Service.

(U) DDCI/CM—Deputy Director of Central Intelligence for Community Management.

(U) DDSE—Deputy Director of System Engineering.

(U) DHS—Data Handling System. The next generation architecture that will enable transport of data to intelligence product users. DHS will enable the NRO to separate message from data communications and to take advantage of modern, standards-based information and communication technologies.

(U) DIA/DT—Defense Intelligence Agency, Directorate for MASINT and Technical Collection.

(U) DII—Director's Innovation Initiative. An AS&T program that transitions almost 50 percent of the 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) DISA—Defense Information Systems Agency.

(U) DLA—Defense Logistics Agency.

(U) DLT—Data Link Terminal.

(U) ████████████████████████████████

(U) DMS—Defense Messaging System. A DoD and IC standards-based organizational messaging architecture scheduled to replace the Site Communications Processor system.

(U) DNRO—Director, National Reconnaissance Office.

(U) DSRP—Defense Space Reconnaissance Program.

(U) DSSS—direct sequence spread spectrum.

(U) EAP—Employee Assistance Program.

(U) EBS—Electronic Procurement Exchange Business Suite. The integrated set of applications created by and deployed throughout the NRO to automate and standardize the contracting process.

(U) EC—expenditure center.

████████████████████████████████

(U) EDiD—enterprise defense in depth.

(U) EE&C—engineering, evaluation and checkout.

(U) EELV—Evolved Expendable Launch Vehicle. The name for the family of launch vehicle scheduled to replace the Titan and Atlas (II and III) launch vehicles.

(U) EEO—equal employment opportunity.

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

(U) EHF—extremely high frequency. Electro-magnetic spectrum in the range of approximately 20-50 Gigahertz.

(S) ████████████████████████████████

(U) EKMS—Electronic Key Management System. Interoperable collection of systems developed to automate planning, ordering, generating, distributing, storing, filing, using, and destroying of electronic key and management of other types of COMSEC material.

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

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

(U) EMOC—Enterprise Management Operation Center. A 24-hour operational facility that monitors, defends, and controls the information enterprise for the NRO.

(U) EO—electro-optical or Executive Order.

(U) EME—enterprise management engineering.

(U) Epx—Electronic Procurement Exchange Business Suite. The integrated set of applications created by and deployed throughout the NRO to automate and standardize the contracting process.

(U) ES³—environmental, safety and systems safety.

(U) ████████████████████ A matrix of antenna elements, the focus beam of which can be adjusted electronically in space, phase, and/or time.

(U) ESM—enterprise security manager.

(U) EUI—IOSA Enhanced User Interface.

(U) EVM—earned value management.

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

(U) 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.

(S//BYE) [REDACTED]

(U) FEEP—field emission electric propulsion. Highly scalable and efficient propulsion technology based on micromachined components using liquid metal ions as a propellant.

(U) FFRDC—Federally Funded Research and Development Center. A non-profit corporation, sponsored by the government, for the purpose of performing, analyzing, integrating, supporting, or managing engineering, research, or development activities.

(U) FIA—Future Imagery Architecture. A space-based imagery collection and data delivery program and successor to the Enhanced Imaging System.

(U) FISINT—Foreign Instrumentation Signals Intelligence.

(U) FISMA—Federal Information Security Management Act.

(U) FMFIA—Federal Managers Financial Integrity Act.

(U) FOC—full operational capability.

(S//TK) [REDACTED]

(U) FOT—full operational tasking or final operational transition.

(U) FPA—focal plane array. The array of detectors onto which collected light is focused in an optical sensor system.

(U) FPGA—field programmable gate array. A reconfigurable integrated circuit that allows rapid prototyping and avoids the cost of developing multiple application-specific integrated circuits.

(U) FYDP—Future Years Defense Program.

(U) GAAP—generally accepted accounting principles.

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

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

(U) GEO—geosynchronous Earth orbit. An equatorial 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.

(S//BYE) [REDACTED]

(U) GMA—Ground Merged Architecture. IOSA and legacy GEO/HEO satellite integrated mission management, signal distribution and support services.

(S//TK) [REDACTED]

(U) GOTS—government off-the-shelf hardware or software.

(U) GPS—Global positioning System.

(U) GPS M-Code—Global positioning System Military-Code. Next generation GPS signal structure with enhanced security and anti-jamming features.

(U) GSD—ground sampling distance.

(U) GSM—Global System for Mobile Communications or *Groupe Speciale Mobile*. A commercial digital telephone network standard developed in the early 1990's in Europe and now implemented worldwide.

(U) GWAN—Government Wide Area Network. NRO's computer network for classified processing.

(U) GWOT—Global War on Terrorism.

(S//TK) [REDACTED]

(U) HBT—Heterojunction Bipolar Transistor. A bipolar junction transistor in which the flow of electric current is due to both electrons and holes.

(S//TK) [REDACTED]

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

(S) [REDACTED]

(U) HF—high frequency. Electromagnetic spectrum ranging from 3 MHz to 30 MHz.

(U) HLV—heavy lift vehicles. Largest class of ELV boosters.

(S//TK) [REDACTED]

(S//TK) [REDACTED]

(U) [REDACTED]

(U) HPCS—High Productivity Computer Systems. DARPA initiative to identify high performance computer architectures that will satisfy IC needs.

(U) HR—human resources.

(U) [REDACTED] Topographic data; previously known as digital terrain elevation data (DTED).

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

(S//TK) [REDACTED]

(U) I-ISR—Integrated Intelligence, Surveillance, and Reconnaissance.

(U) I&T—integration and testing.

(U) IA—information assurance.

(U) IAS—Information Access Services, formerly known as Integrated Analysis and Reporting (IAR).

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

(U) ICCA—Intelligence Community Communications Architecture.

(U) ICD—interface control document.

(U) ICE—independent cost estimates.

(S) [REDACTED]

(U) [REDACTED]

(U) [REDACTED]

(S//TK) [REDACTED]

(U) ICS—Integrated COMINT System. Worldwide collection and processing of COMINT emitters.

(U) ICSIS—Intelligence Community System for Information Sharing.

(S//TK) [REDACTED]

(U) IED—improvised explosive device.

(U) IEP—Interactive ELINT Processor - supports the IOSA externals missions to: process overhead and airborne collection; detect signal energy, geolocate, and identify signals based upon external parametrics; and generate SIGINT reports for users.

, (U) IF—intermediate frequency. A signal resulting from the mixing of a detected signal with a reference signal in order to improve signal processing and distribution.

(S//TK)

(U) ILAB—IMINT Laboratory. IMINT organization and laboratory environment for research and development of prototype algorithms and advanced concepts that tests new capabilities with operational data.

(U) IFMS—Integrated Financial Management System.

(U) IFS—Integrated FISINT System. Integrated FIS search, detection, processing, analysis, and reporting capabilities that meet all the IOSA FIS requirements.

(U) IM&S—information management and storage.

(S//TK)

(U) IMM—integrated mission management.

(U) INA—Integrated NRO Architecture.

(S//TK)

(U) INSSOC—Integrated National Security Space Operation Concept.

(U)

(S//TK)

(U) IPA—independent program assessment. An unbiased, structured evaluation of a proposed acquisition activity that provides the DNRO an overview of potential programmatic challenges, operational risks, and progress toward meeting program objectives, to include DNRO, Intelligence Community, and DoD guidance and Congressional direction.

(S//TK)

(U) IOC—initial operational capability.

(S//TK)

(S//TK)

(U) IPBS—Intelligence Program and Budget Submission.

(U)

(U) IS—information systems.

(S)

(U) ISR—intelligence, surveillance, and reconnaissance.

(U) ISSM—information system security manager. Manager responsible for an organization's information security program.

(U) ISSO—information system security officer. Person responsible to ISSM for ensuring that operational security is maintained for a specific information system; sometimes referred to as a Network Security Officer.

(U) ITA—independent technical assessment. An unbiased program technical evaluation conducted by the Deputy Director, System Engineering in conjunction with the NRO Cost Group's independent cost analysis and the Independent Program Assessment to provide technical insight to the cost estimates of the proposed acquisition activity.

(U) ITEC—Independent Test and Evaluation Center.

(U) ITIP—Integrated Technical Investment Process. NRO program developed to allow senior managers to formulate and align technical and non-technical investment decisions with NRO long-term strategic objectives.

(U) IV&T—integration, verification and test.

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

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(S//TK) ████████████████████████████

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(U) JMO—FIA Joint Management Office. A DCI established and jointly staffed and chartered NRO/NGA organization that oversees the end-to-end FIA program's progress against the end-to-end FIA Acquisition Program Baseline. The JMO director briefs the IMINT Strategy Senior Steering Group on at least a quarterly basis on the end-to-end program's progress against the cost, schedule, and performance baselines in the Acquisition Program Baseline.

(U) JROC—Joint Requirements Oversight Committee.

(U) JTRS—Joint Tactical Radio System.

(S//TK) ████████████████████████████

(S//TK) ████████████████████████████

(U) JWICS—Joint Worldwide Intelligence Communications System. DoD's worldwide SI/TK network.

(U) KDP—key decision point.

(U) KPP—key performance parameter.

(U) ████████████████████████████

(U) LAN—local area network.

(U) LANCE—launch and network control equipment.

(U) LCC ████████████████████████████

(S//TK) ████████████████████████████

(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.

(S//TK) ████████████████████████████

(U) LNO—liaison officer.

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

(U) ████████████████████████████

(S//TK) ████████████████████████████

(S//BYE) [REDACTED]

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

(U) MCCS—Mission Critical Conferencing System. Obsolete voice console services at the launch bases.

(U) MCOM—Mobile Communications. Short duration deployable communications squadron based at Vandenberg AFB used to support NRO and other government launch telemetry collection requirements.

(U) MIL-SPEC—military specification.

(U) MIPS—million instructions per second.

(S//TK) [REDACTED]

(U) MGS—mission ground station.

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

(U) MilPers—military personnel.

(U) MIND—Mission Integration and Development. The FIA ground segment that performs the architecture's mission management, communication relay management and data routing functions.

(U) MIO—Mission Integration Office.

(U) MIST—management integrated support team.

(U) Mission threads—an end-to-end description of a capability (such as ELINT, COMINT).

(U) MLV—medium lift vehicle. Medium-class of ELV boosters.

(U) MM—mission management. The assignment of space resources to tasking.

(U) MMD—mean mission duration

(U) MP—[REDACTED] Mission Planning.

(U) MP, AF or MPAF—Missile Procurement, Air Force.

(U) MRB—Mission Requirements Board.

(S//TK) [REDACTED]

(S//TK) [REDACTED]

(S//TK) [REDACTED]

(U) [REDACTED]

(U) NAB—NRO Acquisition Board.

(U) NCAT—NRO Cost Analysis Toolkit.

(U) NCG—NRO Cost Group.

(U) NEXT—NRO Execution Tool.

(S//BYE) [REDACTED]

(U) NFOV—narrow field of view.

(S) [REDACTED]

(U) NGI—Next Generation Integrated Overhead SIGINT Architecture. Architecture concept development responding to community-vetted requirements for next generation Overhead SIGINT.

(U) NIP—National Intelligence Program.

(U) NIPF—National Intelligence Priorities Framework.

(S//TK) [REDACTED]

(U) NLOB—Enabling Line of Business.

(U) NMIS—Network Management Information System. A collection of geographically distributed local area networks hosting a wide array of commercial off-the-shelf software applications, government off-the-shelf software applications, web technologies, and custom software applications modeling NRO business practices.

(U) NMOS—National and Military Operations Support project.

(U) NOPS—NRO Operations Squadron.

(U) NRL—Naval Research Laboratory.

(U) NROC—National Reconnaissance Operations Center.

(U) NRP—National Reconnaissance Program.

(U) NSANet—NSA's communication network.

(U) NSMA—Naval Systems Management Activities.

(U) NSPD—National Security Presidential Directive.

(U) NSS—National Security Space.

(U) NSSA—National Security Space Architect.

(U) NSSI—National Security Space Interation.

(U) NSSO—National Security Space Office.

(S//TK)

(U) O&M—operation and maintenance.

(U) OC—Office of Contracts.

(U) OC-3—optical carrier with a circuit speed of 155 Mbps.

(U) OC-12—optical carrier with circuit speed of 622 Mbps.

(U) OCI—Office of Counterintelligence.

(U) OCMC—Overhead Collection Management Center. Joint, fully-integrated organization which brokers all SIGINT overhead requirements.

(U) OEEO—Office of Equal Employment Opportunity.

(U) OEF—Operation ENDURING FREEDOM (Afghanistan).

(U) OGC—Office of General Counsel.

(U) OIF—Operation IRAQI FREEDOM.

(U) OIG—Office of Inspector General.

(S)

(S)

(U) OP—Office of Policy.

(U) OP, AF or OPAF—Other Procurement, Air Force.

(U) OPE—operational performance evaluation.

(U) OPELINT—Operational Electronic Intelligence.

(S//TK)

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(U) OSL—Office of Space Launch.

(U) P3I—pre-planned product improvements. A list of potential improvements to current IMINT capabilities.

(S//TK) (U//FOUO)

(S//TK)

(U) PART—Program Assessment Rating Tool. OMB managed annual assessment of the performance of programs across the Federal Government.

(U) PCI—pre-configured interface.

(U) PCS—personal communications system or permanent change of station.

(U) PDD—Presidential Decision Directive.

(U) PDR—preliminary design review.

(U) PDSU—power divider switch unit.

(U) PETREL—An effort to develop additional PROFORMA capabilities to automate signal search, recognition, and identification.

(S//BYE ███████████████████████

(U) PIMS—Program Office Information Management System. A quality control system used within a program office.

(U) PKI—public key infrastructure. Creation and management of public and private keys including certificates (signed by granting authority) and certificate revocation lists, if applicable.

(U) PM&P—parts, materials, and processes. A control program to ensure the integrated and coordinated management of the selection, application, procurement, control and standardization of parts (electrical, optical and mechanical), materials, and processes for space and launch vehicles.

(U) PMA—President's Management Agenda.

S//TK (U) ██████████████████████

(U) PMO—program management office.

(U) POE—Points of Emphasis. A Community generated list of requirements to help guide NRO acquisitions.

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

(U) Pre-D—pre-detection. An intercepted SIGINT target signal before any on-board processing occurs.

(S//TK ███████████████████

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

(U) PTT—precision timed tuning. Common method for synchronizing signal collection for cross-mission, cross-site signal processing.

(U) QRC—quick reaction capability.

(S//TK ███████████████████████

(U) R&D WAN—Research and Development Wide Area Network. R&D WAN is a flexible, high-bandwidth core ATM network infrastructure layer allowing connectivity between key R&D network assets throughout the NRO and select IC sites.

(U) R/S—Relay Satellite.

(S//TK ██████████████████████

(U) RCP—RSOC Concept Partners.

(U) RDT&E, AF—Research, Development, Test, and Evaluation, Air Force.

(U) RECAP—recapitilization. The replacement of hardware and software as it ages and becomes difficult and expensive to maintain.

(U) RF—radio frequency.

(U) RFI—radio frequency interference.

(U) RIVET JOINT—RC-135 SIGINT collection airplane.

(U) RMO—Requirements Management Office.

(U) RSOC—NSA Regional Security Operations Center.

(U) RTP—Research and Technology Protection. A program designed to protect key NRO technologies from loss or compromise.

(S//TK ██████████████████████

(S//TK) [REDACTED]

(U) SAAM—special assignment airlift mission.

(U) SAFO—Senior Air Force Officer.

(U) SAI—SIGINT Application and Integration.

(S) [REDACTED]

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

(U) SATCOM—satellite communications.

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

(U) SCIF—sensitive compartmented information facility.

(U) SCP—Site Communications Processor. Custom software residing on commercial hardware, that provides high-volume communications services between the NRO and the Communications Community of the IC and DoD.

(U) SCTS—Spacecraft Transportation System. An oversize transporter capable of over-the-road and air transport to move payload critical hardware from a payload facility to a launch site.

(U) SCTV—spacecraft thermal vacuum test.

(U) SE—systems engineering.

(U) SE&I—systems engineering and integration.

(U) SEI—specific emitter identification.

(U) SE&FD—Systems Engineering and Future Development.

(U) SETA—system engineering and technical assistance.

(U) SETO—Systems Engineering and Technology Office.

(S//TK) [REDACTED]

(U) SIPRNET—SECRET Internet Protocol Router Network. DoD's worldwide SECRET network.

(U) SM—service management.

(U) SMC—Air Force Space and Missile Center.

(U) SOCOMM—Special Operations Communications Network. Common-user record messaging service managed by NRO and used to transmit bulk ELINT, time-critical digital data, narrative text messages, and administrative messages.

(U) SOI—signal of interest.

(U) SOMMS—SIGINT Overhead Mission Management System. A hardware and software tool that provides OCMC the capability to allocate SIGINT satellites against intelligence targets in accordance with priorities and guidance established by the SIGINT Overhead Reconnaissance Subcommittee.

(S//TK) (U) SP— [REDACTED]

(U) SPAWAR—Space and Naval Warfare Systems Command.

(U) SPIF—Spacecraft Processing and Integration Facility. A US Air Force-owned satellite vehicle and booster processing and integration facility at CCAFS.

(U) SPO—system program office.

(S//TK) [REDACTED]

(U) SRR—system requirements review.

(S//TK) [REDACTED]

(S//TK) [REDACTED]

(U) STP—special test program.

(U) STR—SIGINT Test Range.

(U) SURREY—NSA's source of SIGINT requirements under the Unified Cryptologic Architecture.

(U) T/R—transmit/receive.

(U) TACDAR—Tactical Event Detection and Reporting.

(U) TacSat—Tactical Satellite. DoD effort to provide operationally responsive space payloads.

(U) TAT—travel, awards, and training.

(U) TDDS—TRAP Data Dissemination System. TDDS is an operational ultra-high-frequency satellite communications-simplex broadcast that provides the means to deliver time-critical intelligence and other information from national and theater sensors via satellite and terrestrial communications to US and Allied forces worldwide.

(U) TDM—time division multiplexed.

(S) ████████████████████████████

(U) TECHELINT—Technical Electronic Intelligence.

(U) TENCAP—Tactical Exploitation of National Capabilities.

(U) TI—technical intelligence.

(U) TIP—transition integration plan.

(S) ████████████████████████

(S) ████████████████████████████

(U) TRA—technology readiness assessment.

(U) TRAP—Tactical Related Applications.

(U) TRL—technology readiness level.

(S//TK) ████████████████████████████

(U) TSIF—Technical SIGINT Information Factory.

(U) TSR—Theater Support Representative.

(U) TTL—covert tagging, tracking and locating of high-interest resources.

(S//TK) ████████████████████████████

(U) TWTA—traveling wave tube amplifier. A component used to amplify signals for transmission.

(U) UCA—Unified Cryptologic Architecture. Secure C4ISR architecture for interoperability and interconnectivity of entire cryptologic community.

(U) UCAO—Unified Cryptologic Architecture Office.

(U) UCS—Unified Cryptologic System.

(S//BYE/TK) ████████████████████████████

(U) USAF—United States Air Force.

(U) USAT—ultra small access terminal.

(U) USCS—United States Cryptologic System.

(U) USD/AT&L—Under Secretary of Defense for Acquisition, Technology, and Logistics.

(U) USD(I)—Undersecretary of Defense for Intelligence.

(U) USecAF—Under Secretary of the Air Force.

(U) UWAN—Unclassified Wide-Area Network. NRO's unclassified network.

(U) VAFB—Vandenberg Air Force Base.

(U) VL—Virtual Laboratory. AS&T Futures Laboratory environment that allows collaboration and data exchange between modes on the R&D Wide Area Network.

(U) VoIP—voice over internet protocol.

(U) VSAT—very small access terminal.

(U)VWAD—Very Wideband Analog Downlink.

(U) VWB—very wideband.

(U) WAN—wide area network.

(U) WARP—Web-based Access and Retrieval Portal. An NGA interactive web-based imagery dissemination and exploitation system.

(U) WFOV—wide field of view.