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## Memoranda of Understanding Included in this File

- 1. Memorandum of Understanding (MOU) For the Joint Development of the Advanced Mirror System Demonstrator (AMSD) (USAF/NRO) (undated)
- 2. Memorandum of Understanding (MOU) between US Atlantic Command (USACOM) and the Operational Support Office, April 1994 (
- 3. Memorandum of Understanding (MOU) between Internet 2 Initiative of University Corporation for Advanced Internet Development and Global Grid/ATD Net Initiative of the National Reconnaissance Office on the Collaboration in Research, Development and Testing of Information Infrastructures, 1998
- 4. Memorandum of Understanding between National Reconnaissance Office and Defense Contract Management Agency, 2001
- 5. Memorandum of Understanding between The National Security Agency/Central Security Service and The National Reconnaissance Office for \_[redacted]\_ Management, 1993
- 6. Memorandum of Understanding between The National Security Agency/Central Security Service and The National Reconnaissance Office for Network Connectivity and Interoperability Supporting Operations and Management Partnerships across Joint SIGINT, MASINT and IMINT Programs and Missions, 1999
- 7. Memorandum of Understanding between the National Security Agency/Central Security Service and The National Reconnaissance Office on the Accreditation of Information Systems, 1997
- 8. Memorandum of Understanding between the Chief, F8 and the Chief, K for National Security Agency Personnel Assigned to the National Reconnaissance Office SIGINT Processing Organization, 1998
- Operational Technology Evaluation Capability (OTEC) Central Imagery Tasking Office (CITO) Memorandum of Understanding (MOU) for the Rapid Dissemination System (RDS), February 2000 (NRO - National Geospatial-Intelligence Agency)
- Memorandum of Understanding among the Assistant Director of Central Intelligence for Collection, the Director. National Security Agency / Chief, Central Security Service, and the Director, National Reconnaissance Office Regarding the Overhead Collection Management Center, 2003
- 11. Memorandum of Understanding Between the National Reconnaissance Office, Operational Support Office, and New Mexico State University on Security Sponsorship of Various Research Laboratories at New Mexico State University, Las Cruses, New Mexico, 2000
- Memorandum of Understanding between U.S. Air Force Declassification Office (AFDO) and National Reconnaissance Office Information Declassification Review Center (NRO/IRDC) on Exclusive Information Equity Regarding the SENTRY/SAMOS Imaging Satellite System, 2000
- Memorandum of Understanding Between The Deputy Director For National Support, National Reconnaissance Office and Chief, National Security Agency Customer Advocate Office for National Customer Outreach Activities, 1999
- 14. Memorandum of Understanding Between National Reconnaissance Office, Office of Space Launch And 30th Space Wing Safety on Integrated Safety Roles & Responsibilities For NRO Sponsored Payloads Launched By EELV From VAFB, 2002



15 April 2009

This is in response to your letter dated 13 June 2003, received in the Information Access and Release Center of the National Reconnaissance Office (NRO) on 17 June 2003. You are appealing our use of Section 502 of the Intelligence Authorization Act of 2003 on your request for records pertaining to ". . . NRO Comity Agreements and Memoranda of Understanding." For reference purposes, your case number is F03-0033.

As the Appellate Authority, and after a complete review, I have determined that the records responsive to your request are segregable. In April 2005, eight records, totaling twenty-seven pages were released to you in part as an initial interim release. As the second interim release to your request, we are forwarding two records, totaling ten pages, which are being granted in full; and twelve records, totaling forty-four pages which are being granted in part. Eight records, comprising seventy-three pages, are denied in full. The denied records, and denied portions of the records being released are withheld pursuant to the following FOIA exemptions:

-(b)(1) as properly classified information under Executive Order 12958, Section 1.4 (b),(c),(d),(e),(g), and (h); and exemption (b)(3), which applies to information specifically exempt by statute, specifically 50 U.S.C. § 403-1, which protects intelligence sources and methods from unauthorized disclosure;

-(b)(2) High, which pertains solely to the internal rules and practices of an agency and allows the withholding of information which, if released, would allow circumvention of an organization rule, policy, or statute, thereby impeding the agency in the conduct of its mission;

- (b)(3) which allows the withholding of information prohibited from disclosure by statute, 10 U.S.C. § 424 which states: "Except as required by the President or as provided in subsection (c), no provision of law shall be construed to require the disclosure of (1) The organization or any function . . (2) . . . number of persons employed by or assigned or detailed to any such organization or the name, official title, occupational series, grade, or salary of any such person . . . (b) Covered Organizations . . . the National Reconnaissance Office";

- (b)(4) which applies to proprietary information obtained from a company which, if released, would result in competitive harm to the company; and

- (b)(6) which applies to records which if released would constitute a clearly unwarranted invasion of the personal privacy of individuals.

Please be advised that additional records contain other agencies' equities. Twenty-two records, totaling 183 pages, have been forwarded to other agencies for their review, redaction, and direct response to you, as required by Executive Order 12958. There are further additional documents still in coordination with other agencies, for their review and return to the NRO for our final release determination. We will continue our efforts to obtain the responses we need to resolve these remaining documents and complete your request.

You are advised that you are entitled to a judicial review of this determination in a United States District Court in accordance with 5 U.S.C. § 552 as amended.

Sincerely,

C- Markalas

Charles Barlow

Enclosures: 14 MOUs (54 pages)



# Memorandum of Understanding (MOU)

# For the Joint Development of the Advanced Mirror System Demonstrator (AMSD)

**Partners**:

NASA Next Generation Space Telescope Project

Air Force Research Laboratory/Phillips Site

National Reconnaissance Office, Advanced Systems and Technology Directorate

Approvals:

Mr. X.V. Diaz Director Goddard Space Flight Center

Richard R. Paul Major General, USAF Commander Air Force Research Laboratory

Mr. Robert Pattishall Director National Reconnaissance Office Advanced Systems and Technology Directorate

This memorandum of understanding is between the National Aeronautics and Space Administration, Goddard Space Flight Center (GSFC); the Air Force Research Laboratory (AFRL) where responsibility is located at the Phillips Site; and the National Reconnaissance Office (NRO) where overall responsibility resides in the Advanced Systems and Technology Directorate (AS&T) and program oversight responsibility resides in the Research and Technology Section of the Imagery Intelligence Systems Acquisitions and Operations Directorate (IMINT/RTS). These organizations, NASA/GSFC, AFRL, and NRO (AS&T and IMINT/RTS), are the Partners.

The next generation of space astronomical observatories, reconnaissance sensors, and directed energy systems will benefit both technically and financially by advancements in the state of the art of ultra-lightweight space optics. Active wavefront control and precision deployable structures complement the optics, and together these technologies herald a new paradigm for the development of large space optical systems. These revolutionary concepts provide the necessary scalability and affordability to enable new mission concepts and more favorable cost curves.

The metric that most appropriately summarizes the state of the art is the mirror system areal density, expressed in units of kilograms per square meter  $(kg/m^2)$  of optical surface. This parameter incorporates all relevant aspects of the deployable, active optic, including figure control actuators, reaction structures, launch locks, and cabling. The current state of the art for greater than meter class space optics is >35 kg/m<sup>2</sup>; the state of the practice is of the order of 50-100 kg/m<sup>2</sup>.

The NASA GSFC team has invested over \$10M in the last two years to verify that the target areal density and subsequent wavefront error goals are achievable. The current NGST Mirror System Demonstrator (NMSD) and Subscale Beryllium Mirror Demonstrator (SBMD) Programs address specific technology scaling issues in glass and beryllium material systems. The key elements of rapid fabricability and cost, along with the less mature materials such as silicon carbide (SiC), need to be investigated thoroughly before full scale development of operational systems are attempted.

AFRL has been actively pursuing similar advanced mirror technologies for tactical imaging and space based laser beam director and relay mirror system applications. AFRL has on-going technology development activities in glass, SiC, and glass-composites, as well as advanced inflatable membrane mirror research.

The subject of this MOU is a two-year partnership to implement a space mirror technology development activity known as the Advanced Mirror System Demonstrator (AMSD) Program. The AMSD partnership strives to achieve at least a factor of two improvement in the state of the art, from 35 kg/m<sup>2</sup> to 15 kg/m<sup>2</sup>. If successful, these advanced mirrors would then be validated by a separately funded space demonstration experiment as early as 2003. The Partners will work together, starting in early FY 1999, to develop AMSD technology. Each organization will provide funding for two years to the Goddard Space Flight Center. The overall two-year funding level is expected to be approximately \$15M. The Air Force funding will be provided by the Space Based Laser System Program Office and the AFRL Space Vehicles and Directed Energy Directorates.

2

Although this MOU specifically defines the two-year AMSD partnership, each of the partners has longer-range objectives that require significantly more aggressive space optics technology than AMSD will yield. It is understood that the AMSD partnership is a potential precursor to a similar cooperative attack on these longer term and much more difficult space optics technology issues.

### **Procurement Plan:**

Procurement of the AMSD effort is envisioned as follows. There will be two AMSD phases, followed by a flight demonstration phase (funded outside the scope of this partnership). Advancement from one phase to the next will be based primarily on success in the preceding phase. However, the down select process will be open to consideration of other unanticipated breakthrough technology options. At each phase, the specific contract vehicle and its incentives will be selected to best achieve the goals and mitigate the risks of that phase. The Request for Offer (RFO) for the first phase was released in March of 1999. The Statement of Work (SOW) will address the technical requirements of all partners.

## Roles & Responsibilities:

### NASA/GSFC

- Contracting agent for the AMSD competitive procurement
- COTR on any contracts assigned to NASA GSFC with technical concurrence of the Partners
- Contribute the NASA GSFC funding share to the partnership for each of years FY '99, 00
- The GSFC, at the request of the Executive Board, will provide support for financial management of the AMSD activity

Membership on the Multi-Agency Technical Oversight Committee

• Membership and Chair on the Executive Board

## <u>AFRL</u>

- COTR on any contracts assigned to AFRL with technical concurrence of the Partners
- Contribute the Air Force funding share to the partnership for each of years FY '99, 00

Membership and Chair on the Multi-Agency Technical Advisory Committee

Membership on the Executive Board

## NRO

- · Contribute the NRO funding share to the partnership for each of years FY '99, 00
- · Membership on the Multi-Agency Technical Advisory Committee
- Membership on the Executive Board

### Partnership Organization:

**Executive Board:** Each Partner organization will have equal membership on the AMSD Executive Board; the members of which will participate in contract selection and programmatic oversight of the AMSD Program. To insure that all partner's interests are addressed, Executive Board decisions must have unanimous support. NASA GSFC will chair the Executive Board.

**Technical Advisory Committee:** Technical Advisory Committee will provide technical insight /oversight of AMSD. Each Partner will appoint one formal member and one alternate from their technical staffs. The AFRL member will chair the Technical Advisory Committee.

<u>Contract Oversight and Technical Review</u>: The resultant contracts will be awarded and reside at NASA/GSFC. The Executive Board will identify Contracting Officer's Technical Representatives (COTR) from AFRL and NASA/GSFC and delegation of authority will by provided by the NASA/GSFC Contracting Officer. The COTR will be responsible for day-to-day technical management and oversight.

### 21 April 1994

## MEMORANDUM OF UNDERSTANDING BETWEEN U.S. ATLANTIC COMMAND (USACOM) AND THE OPERATIONAL SUPPORT OFFICE

1. Purpose. To establish a formal support relationship between the Operational Support Office (OSO) and the United States Atlantic Command (USACOM). The intent of this MOU is to provide enhancement of the application of National Systems products and services in satisfaction of USACOM requirements.

2. <u>Scope</u>. The scope of this document is limited to direct National Systems planning, field support, and logistics considerations. Matters of security and policy will be governed by appropriate law, and joint policy doctrine. The stipulations agreed to herein will be effective until terminated by either party, and will be reviewed annually by representatives of both parties.

3. <u>Background</u>. The OSO provides expertise in National Systems to include training, education, exercise support, technology demonstrations and operational and intelligence support to military organizations.

4. <u>Command Relationship</u>. The relationship between OSO and USACOM will be that of OSO, supporting command, to USACOM, supported command.

5. <u>Operational Support Responsibilities</u>. Support will be provided by the permanent assignment of an OSO Liaison Officer and an OSO Theater Representative to perform mission and functions as specified in enclosure (1). Additional support, as required, can be addressed on a case-by-case basis.

6. <u>Resource Prioritization.</u> OSO resources will be provided based on the following priorities established by USACOM J2, with resources being subject to recall for operations or contingencies of a higher priority:

- 1. Contingency Support
- 2. Pre-planned Operations and Field Support
- 3. Joint & Combined Exercise Support
- 4. Component Exercise Support
- 5. Software & Hardware Logistics Support
- 6. Additional Tasking or Requirements

7. <u>Contingency Support</u>. OSO provides limited direct support to worldwide contingency operations which may require diversion of OSO assets from USACOM theater of operations. The contingency support, and duration thereof, must be approved by the Joint Staff (J36), and will be specified by orders issued to the personnel assigned for each support mission or operation.

8. <u>Support Request Method</u>. Routine requests for additional OSO support will be submitted by message. Time critical support requests may be submitted by telephone, followed by confirmation message.

9. <u>Support Responsibilities</u>. The responsibilities for OSO personnel and equipment will be as follows:

A. <u>Transportation</u>. Under normal conditions, movement of personnel and equipment to and from commercial airfield or port of embarkation nearest the supported command will be the responsibility of OSO. For support at remote or restricted locations, (i.e., commercial transportation not readily available), movement of personnel and equipment shall be the responsibility of the supported command. When feasible, OSO personnel will travel by military directed transportation systems. Additional travel accomplished at the request of the supported command.

B. <u>Berthing & Messing Facilities</u>. OSO personnel may use government berthing and messing facilities when they are available, unless such use would be detrimental to the mission.

C. <u>Equipment & Communications</u>. OSO will normally provide required hardware. Secure office space, furniture, office supplies, internal ADP/communications support, power, communications, physical security, and coordination of Special Compartmented Intelligence communications will be the responsibility of the supported command. D. <u>Clearances & Accesses</u>. Security clearances for OSO personnel will be certified to the supported command with authorization to recertify. Locally required accesses, if any, will be the responsibility of the supported command. The supported command will recertify clearances and provide courier authorization as required to properly perform the support mission.

E. <u>Support Costs Responsibility</u>. OSO will pay the support costs associated with long term contract assignments. OSO will provide funding to support official travel taken as a result of, or in support of provisions of this memorandum. Any required military transportation, government berthing and/or messing facilities will be provided or arranged by USACOM. Travel executed in support of unique OSO requirements will be funded separately by the OSO.

Date: 27

T. R. Wilson RADM USN Director Of Intelligence US Atlantic Command

Date: nnatter

COL USA Director Operational Support Office

Enclosures:

- (1) Theater/Command Representative Missions and Functions
- (2) Operational Support Office Points of Contact

## THEATER/COMMAND REPRESENTATIVE

## **MISSION:**

-Act as OSO representative to USACOM and other commanders or agencies within Atlantic Command, as appropriate. -Coordinate OSO activities in support of USACOM.

## FUNCTIONS:

-Represent OSO to USACOM:

- --Coordinate OSO support services and activities.
- --Provide USACOM with detailed understanding of the missions, capabilities, limitations, products, and tasking procedures for OSO supported National Systems.
- --Assist in developing and refining the flow of National Systems data to and within the USACOM's C4I architecture.
- --Provide working level understanding of the capabilities and limitations of each OSO sponsored system.
- --Assist in understanding the missions, products, services, and dissemination architecture of related systems and other national agencies.
- --Identify requirements for analytic support related to National Systems data.
- -Assist USACOM in identifying and arranging for National Systems training services.
- --Support ad hoc training requirements, as required.
- --Arrange and/or conduct hardware/software trouble shooting and repair support for OSO sponsored systems.
- --Coordinate OSO sponsored initiatives and test objectives in USACOM exercises and demonstrations.

## -Represent USACOM requirements to OSO:

- --Coordinate refinement of requirements for OSO sponsored National Systems support:
  - ---Work with USACOM to articulate requirements and priorities for exercise and contingency support.
  - ---Identify data flow, processing, storage and information display requirements.
  - ---Assist in definition of future National Systems needs.

- --Monitor system performance to ensure quality of provided products and services. --Identify product and service improvements desired by
- USACOM.
- --Advise USACOM J2 with regard to additional commands or agencies in USACOM which would benefit from OSO support.

Attachment (1)

# USACOM/Operational Support Office Points of Contact and Message Addinesses

## USACOM

CAPT C.T. Mauro, USN Chief, Collection Management Office DSN: 564-8385 (CMO) USACOM

Commercial: (804) 444-8385

Christopher B. Jackson, GS14/ USGS Technical Director, USACOM CMO

Commercial: (804) 444-8385/7 DSN: 561-8385 Message: CINCUSACOM NORFOLK VA//CMO// SCI: CINCUSACOM//CMO// FAX: Secure - (804)444-6858

## 060

COL D. M. Vannatter, USA Director, Operational Support Office

Commercial: (202) 279-2201 DSN: 294-2201 Message: OSO WASHINGTON DC SCI: OSO//OPS// FAX: Secure - (202)279-2343 Unclas - (202)279-2134

LtCol Robert O. Work. USMC Director of Operations

LCDR Mark Segal, USN Director, Customer Support Commercial: (202) 279-2299

Commercial: (202) 279-2209

DSN: 294-2299

DSN: 294-2209

Don Bergeson Assistant Command Representative DSN: 294-2275

Commercial: (202) 279-2275

Commercial: (804) 444-8385 Mike Stockmeier USACOM Command Representative DSN: 564-8385

Attachment (2)

#### MEMORANDUM OF UNDERSTANDING BETWEEN

#### INTERNET 2 INITIATIVE OF

#### UNIVERSITY CORPORATION FOR ADVANCED INTERNET DEVELOPMENT

AND

## GLOBAL GRID/ATD NET INITIATIVE OF THE NATIONAL RECONNAISSANCE OFFICE

ON

## THE COLLABORATION IN RESEARCH, DEVELOPMENT AND TESTING OF INFORMATION INFRASTRUCTURES

THE MEMORANDOM OF UNDERSTANDING MAY BE EXTENDED TO OTHER PARTIES ON BOTH SIDES.

1. This agreement is entered into to pursue common technology interest for interoperable, scaleable commercially derived Infrastructures.

2. This agreement shall be effected for the purpose of: "collaboration in research, development and testing of Information Technologies which are of common interest."

3. This agreement shall support the collaboration and initiation of selected data sharing (protected by appropriate mechanisms as needed), and research activities between individual and/or all parties. Specific actions and responsibilities covering these research activities will be detailed in separate Statements of Work referencing this agreement and executed via appropriate government, industry, or university mechanisms.

4. Financial obligations: This agreement will not by used by itself for the purpose of recording financial obligations. If mutually agreed to research is identified as a result of this agreement, a separate Statement of Work will be prepared as described in paragraph three above.

5. Modification and Termination:

a. This agreement may be modified at any time by written document signed by the officials authorized.

b. Neither this agreement, nor any interest arising, will be assigned by either party without the express written consent of the officials authorized to bind the parties.

## SUBJECT: THE COLLABORATION IN RESEARCH, DEVELOPMENT AND TESTING OF INFORMATION INFRASTRUCTURES

c. This agreement becomes official or the date of the last signature for a term of three (3) years and may be extended.

d. Either (or any) party may terminate its participation by written notice 30 days prior to the desired date of termination. The terminating party will not incur any liability to any other party for terminating this agreement.

e. The parties will use reasonable efforts to participate in the efforts related in this agreement.

-18/98 DATE:

Other Global Grid/ATD Net Candidates NSA NIMA NRL DIA DISA DARPA, etc.

Douglas VanHou

University Corporation Advanced Internet Development

**a**> DATE:

Other University/Industry Candidates as developed

#### MEMORANDUM OF UNDERSTANDING Butwoon NATIONAL RECOMMANSANCE OFFICE And DEFENSE CONTRACT MANAGEMENT AGENCY

#### 1. Purpose

The agreement sets the foundation for Defense Contract Management Agency (DCMA) Special Programs support to the National Reconnelesance Office (NRO).

#### 2. Authority

Federal Acquisition Regulation (FAR), Part 42, Contract Administration, Subpart 42.2, Contract Administration Services, Defense FAR Supplement (DFARS) 242.2 Contract Administration Services, FAR Subpart 42.3 Contract Administration Office Functions, DFARS Subpart 42.3 Contract Administration Office Functions, and DLAS 5000.4 (DCMA One Book).

#### 1. 30000

This agreement defines the relationship between NRO and DCMA Special Programs for Early Contract Administration Services and subsequent contract administration support.

- a) DCMA will provide tailored Contract Administration Services consistent with FAR 42.502, DFARS 242.302, DLAD 6000.4 and applicable IRO guidance. Requested Contract Administration Services may include all or pert of government property administration, contract administration, cost/price analysis, quality assurance, angineering/technical sestemace, software surveillance and Early CAS/tource selection. These services and the manner in which they will be provided, will be defined at the program level and failured to meet the requirements of the section program level and failured to meet the requirements of the section program of the contracting Office.
- b) If required by special circumstances, detailed written agreements of support aphylics will be executed on a program/contract basis.
- c) All entering DCMA support currently ongoing in support of the NRO remains in full force and shall not be effected by this agreement. However, in those cases not clearly covered by a current willian agreement or delegation, DCMA personnel will provide a description of services to the program officer for written concurrence or modification in order to assure that their type and level of support is consistent with NRO program diffice requirements.

d) DCMA will provide a contract administrator, GS 1102-12 series, at the NRO Chandly, Virginia facility to provide Early CAS consistent with DCMA One Book Chapter 1.1, Early Contract Administration. These services will include support for source selection, pricing/negotiation and recommendations concerning contract terms and provisions.

#### 4. <u>Nevialene and Termination</u>

This agreement may be revised at any time upon mutual consent of NRO and DCMA. Either party may terminate this agreement by providing 120 days notice.

#### 6. Effective Date

This agreement is effective upon the telest date of signature below and shall remain in effect until cancelled. This agreement should be reviewed by both parties annually and emended, if necessary, as agreed to by both perties.

	Quant
APPROVED	APPROVED Mulle A Malriel
	HONALD H. DABROWSKI
	folenel, USAF
	Director Special Programs
	DCINA
	4

DATE: 22 Mig. 01

DATE: 6 april 2001





HENORANDUN OF UNDERSTANDING RETWEEN THE NATIONAL SECURITY AGENCY/CENTRAL SECURITY SERVICE AND THE NATIONAL RECONNAISSANCE OFFICE

HARAGENEET

## I. Purpose

-

(IP-Mar) This Memorandum of Understanding (NOU) between the National Security Agency/Central Security Service (NSA/CSS) and the National Recommaissance Office (NSO) delineates agreements for operational and management responsibilities at the located at

II. Background

(TP-Mas) The MSA/C68 an	d the MRO have agreed to locate	the st
	Collocation of the	and,
potentially, elements of	and the future High Altitu	de System Architecture
(HASA) in a		rovides the opportunity for
maximum operational synergy and	minimum redundant activities.	

#### III. Agreements

A. (TOTAL) Organizational Roles and Responsibilities.

1. The MRO shall be responsible for satellite command and control, vehicle health and safety, and associated support (e.g. contractor operations, maintenance, and angineering support).

2. The MSA/CSS shall be responsible for SIGINT (Signals Intelligence) processing, analysis, reporting, and associated support (e.g. contractor operations, maintenance, and engineering support).

3. The U.S. Air Force Intelligence Command (AFIC) shall be responsible for the processing, analysis, and reporting.

4. The MRO shall be responsible for facility infrastructure support including facility engineering and maintenance and physical security devices and services.

5. The MRD, MSA, and AFIC shall be responsible for funding necessary to ensoure their respective roles and responsibilities identified in this MOU. Each shall be responsible for contracting support services necessary to execute their roles and responsibilities or as otherwise agreed under separate MOUS.

6. Collection operations shall be executed in accordance with National Security Council Intelligence Directive No. 6.

B. (ISACK) Station Management.

1. The Director NBO (DNRO) shall appoint, with concurrence by the Director NEA/Chief CES (DIRNEA/CHCES), the MGE Commander. The MGE Commander shall also serve as the Commander of Space Operations reporting to the NRO.

2. The DIRNEA/CHCES shall appoint, with concurrence by the DNRO, a military Service Cryptologic Element (SCE) officer as the MGS Deputy Commander. The MGS Deputy Commander shall also serve as the Commander of SIGINT Operations and Commander of the joint SIGINT field activity, reporting to the MSA/CSS.

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C. (TS-S) Station Organization.

1. All Station missions and functions will be organized within a single integrated organizational structure to take advantage of achievable operational synergy and to minimize redundancy. Staffing of activities and assignments of NBO and NEA/CES and AFIC personnel to positions of responsibility will be commensurate with the roles and responsibilities identified in this NOU and with the charters of the person organizations. Choice of personnel for jointly performed functions will be made on the basis of "best qualified".

SECRET

2. Mission Planning, Station Engineering, and Support functions shall be jointly staffed by the MHO, MEA/CES, and AFIC personnel. Where feasible, management responsibilities shall be alternated.

3. To the maximum practical degree, activities shall be associated with organisational elements to avoid shared funding across budget sources.

D. (TOWN) Security.

1. The Station shall generally be operated at a single classification level. Exclusion areas shall be established as necessary to protect compartmented activities.

2. A single set of Information Security (INFOSEC), physical security, and Operational Security (OPSEC) regulations and certification procedures, jointly agreed by the NNO and MSA/CSS, shall apply at the Station.

#### IV. Responsibilities

(IFWK) The DIRMSA/CHCSS and the DMMO shall execute additional plans, agreements and/or actions necessary to implement the provisions of this MOU.

#### V. Effective Date and Duration

(TF-SM). This NOU shall remain valid until modified or rescinded by mutual agreement. The terms of this NOU shall be implemented at the second state of the second sta

J.H. NoCOMMELL Vice Admiral, U.S. Navy Director, NEA/Chief, CBS

Date: 3 MAR 93

MARTIN C. FAG Director, M



#### NEMORANDUM OF UNDERSTANDING BETWEEN THE NATIONAL SECURITY AGENCY/CENTRAL SECURITY SERVICE AND THE NATIONAL RECONNAISSANCE OFFICE FOR NETWORK CONNECTIVITY AND INTEROPERABILITY SUPPORTING OPERATIONS AND MANAGEMENT PARTNERSHIPS ACROSS JOINT SIGINT, MASINT AND IMINT PROGRAMS AND MISSIONS

I. (U) PURPOSE AND SCOPE:

A. (U) This Memorandum of Understanding (MOU) between the National Security Agency/Central Security Service (NSA/CSS) and the National Recommaissance Office (NRO) documents and formalizes a shared commitment to substantially improve opportunities to conduct joint, multi-sensor, cross-discipline, cross-site operations through partnered information systems technology (IT) insertion initiatives and expanded network connectivity.

B. (U) Specifically, this MOU establishes a framework encouraging partnered systems engineering, prototyping, acquisition, deployment and systems support initiatives aimed at enabling interoperable network infrastructure, web-centric shared data and digital publishing enterprises, groupware, databases, common display processors and analytic tools.

C. (U) This MOU is intended to express the strongest senior management commitment on the part of the undersigned Chief Information Officers (CIO) to encourage the broadest possible interpretation of existing security, organizational, engineering, operations, and IT governance policies between the two agencies. The central objective of this more flexible policy framework is to promote seamless network connectivity and IT systems interoperability in support of compelling cross-discipline operations objectives in support of our mutual military and policy-making customers.

D. (U) The scope of this MOU extends to all mission and management elements resident at NSA/CSS Fort Meade and associated NSA-managed SIGINT Field Sites, as well as the NRO Headquarters and associated NRO Mission Ground Station and field operations elements involved in National Systems SIGINT, MASINT and IMINT mission management, tasking, processing, exploitation, reporting and dissemination.

E. (U) This MOU does not obviate existing DCI Directives and related NSA/CSS and NRO security policy directives governing systems security and accreditation, security compartment access, access for non-US mission partners and "need to know" principles. It does, however, expressly encourage IT and network engineering and security elements within the two agencies to look for specific initiatives where they can achieve increased collaboration so that operational effectiveness may be enhanced. The focus is on the possible, not the prohibited. This MOU should be interpreted broadly in order to move forward with targeted IT infrastructure initiatives enabling more seamless, rapid, high-fidelity, cross-mission operations.

#### II. (U) BACKGROUND:

A. (U) The central objectives and themes in the recently published <u>DCI Strategic Intent</u> strongly suggest the need for more aggressive partnerships between agencies in the Intelligence Community (IC). This MOU substantially clears the way for such partnerships among the technical, policy, security, management and operations communities within NSA/CSS and NRO.

B. (U) Operations requirements recently presented from operational and management elements under the joint programmatic and management structures of NSA/CSS and NRO dictate the need for clearer policy-level guidance and a mutually agreed-to philosophy between the NSA/CSS and NRO CIOs regarding access to network resources, tools and data within both agencies.

C. (U) The growth of collaborative multimedia-capable operations spanning the SIGINT community, made possible by a globally pervasive and increasingly robust NSA/CSS-managed wide-area network (NSANET), has created substantially improved opportunities to improve and enhance the speed, fidelity and relevance of intelligence mission management and production operations around the world. The operational successes achieved have inspired broader opportunities to collaborate across the SIGINT, MASINT and IMINT technical disciplines - providing legacy policy and organizational barriers can be addressed so that engineering, security and operations organizations can move forward without delay on virtual mission support initiatives.

III. (U) AGREEMENTS, PROCESSES AND RESPONSIBILITIES:

A. (U) While it is the expressed intent of this MOU to encourage and facilitate the establishment of joint initiatives without needless bureaucracy or self-imposed policy or organizational barriers to interoperability, we recognize the need to permit each agency to negotiate its participation in such efforts. This MOU is not a vehicle for either agency to be pressured to assume costs or organizational commitments not consistent with jointly agreed to interoperability objectives. Each initiative proposal under the general framework of this MOU will be authorized by the signing or other appropriate conveyance of approval between the two CIOs.

B. (U) Successful initiative proposals will, at a minimum, delineate:

1. (U) Initiative leadership and participation.

2. (U) Initiative goals and expected operational benefits.

3. (U) The overall technical approach to be pursued.

4. (U) A cost profile with explanation of funding commitments to be incurred by both agencies. Fair share cost agreements and common sense approaches to shared burdens are strongly encouraged.

5. (U) A project schedule including explanation of commitments and review/approval milestones within both agencies.

C. (U) This MOU is not intended to obviate or disrupt existing IT systems engineering, acquisition, support or security accreditation processes jointly engaged in between NSA/CSS and NRO. Under this framework, engineering and security organizations from both agencies are strongly encouraged to execute those processes with efficiency and resolve at the lowest possible level. At any point in the execution of joint IT and network initiatives between NSA/CSS and NRO, either agency CIO can be brought in to the process to deliberate uniquely occurring policy questions or issues of fair share resource commitments to ensure a successful outcome.

D. (U) Joint systems implementations will be reviewed and accredited per previous NSA/CSS-NRO MOU on Accreditation of Information Systems (dated 30 Sep 1997 (NSA) and 8 Oct 1997 (NRO)). Technical Security organizations within NSA/CSS and NRO will ensure the broadest and most flexible interpretation of both of these MOUs to allow for common sense, lowest level agreements on system accreditation, protection-indepth approaches and shared responsibilities for managing the security environment of a joint IT infrastructure component. Trust and partnership between NSA/CSS and NRO will be the central themes of such initiatives.

#### IV. (U) REVIEW/TERMINATION:

(U) This MOU will enter into force on the date of the final signature and will remain in force for a period of 4 years, unless modified or rescinded in writing by mutual agreement of the signatories or terminated by written notice of either party received by the other. This MOU will be reviewed every 2 years while in force.

Approved:

3

Chief Information Officer National Reconnaissance Office 26 November 1999 Raymond Holter Chief Information Officer National Security Agency 26 November 1999

#### References:

a. DCI Strategic Intent

b. NSA/CSS - NRO MOU on The Accreditation of Information Systems

## MEMORANDUM OF UNDERSTANDING BETWEEN THE NATIONAL SECURITY AGENCY/CENTRAL SECURITY SERVICE AND THE NATIONAL RECONNAISSANCE OFFICE ON THE ACCREDITATION OF INFORMATION SYSTEMS

#### Purpose:

This Muthemorandum of Understanding (MOU) between the National Security Agency/Central Security Service/Information System Security Policy (NSA/CSS/ISSP) and the National Reconnaissance Office, Security Office (NRO) documents and formalizes the understanding between the two agencies in accrediting their Information Systems (ISs) and networks which process Sensitive Compartmented Intelligence information, including VRK and BYE information.

#### Background:

a. Both agencies use Reference b. as the standard for IS security accreditation and have cooperative working arrangements.

b. For the purpose of implementation, NSA adheres to NSA Manual 130-1 for all government users and NRO uses AISSIM-200. Both NSA and NRO use AISSIM-200 as the implementation requirements manual for their contractors.

#### Responsibilities:

NRO/Office of Security/Facilities and Information Security Division (NRO/OS/F&ISD) is responsible for ensuring all ISs and networks owned and operated by NRO have been properly accredited. NSA/CSS/ISSP is responsible for ensuring that all ISs and networks owned and operated by NSA have been properly accredited.

LUI BARRANNA STATE

## SUBJECT: MOU BETWEEN NSA AND NRO ON JOINT ACCREDITATION ON INFORMATION SYSTEMS

#### Agreement:

NRO/OS/F&ISD and NSA/CSS/ISSP will be responsible for conducting joint accreditations of all ISs and networks deployed and installed by NRO within NSA facilities and ISs and networks deployed and installed by NSA/CSS within NRO facilities. The accreditor for the host facility will be responsible for -coordinating all visits, ensuring that all appropriate documentation is provided, and issuing a final accreditation report. Upon completion of the accreditation process, NRO/OS/F&ISD and NSA/CSS/ISSP will issue a joint accreditation agreement to their respective organizations.

If agreement on accreditation approval cannot be reached between each organizations' Designated Accrediting Authority (the Chief Information Officer), the issues will be forwarded to Director, National Security Agency and the Director, National Reconnaissance Office for resolution. If an accreditation approval still cannot be reached, the matter will be presented to the Director of Central Intelligence for final accreditation determination.

NRO and NSA/CSS will cooperate with and support each other's accreditation efforts in these instances. Either NRO/OS/F&ISD or NSA/CSS/ISSP may request the other accreditor act on their behalf.

2

## SUBJECT: MOU BETWEEN NSA AND NRO ON JOINT ACCREDITATION ON INFORMATION SYSTEMS

#### Termination/Review:

This MOU shall become effective as of the date of the latest signature and shall be reviewed by both parties, biennially. Any revisions or modifications to the MCU will be by consent of both parties, in writing, and published as amendments to the base MOU. This MOU may be terminated upon the written notice by either party to the other and shall be effective on a date mutually agreed to by the parties.



DATE: 8 October 1997

Chief Information Officer National Reconnaissance Office

Orial

Ronald Kemper Chief Information Officer National Security Agency

DATE: 30 Distuden 1997

3

## SUBJECT: MOU BETWEEN NSA AND NRO ON JOINT ACCREDITATION ON INFORMATION SYSTEMS

References:

a. DoD Directive 5200.28, Security Requirements for Automated Information Systems (AISs), dated March 21, 1988.

b. Director of Central Intelligence Directive 1/16, Security Policy for Uniform Protection of Intelligence Processed in Automated Systems and Networks, effective 19 July 1988.

c. Automated Information Systems Security Implementation Manual (AISSIM-200), dated 18 February 1994.

d. NSA/CSS Manual 130-1, NSA/CSS Operational Computer Security Manual, dated 17 October 1990.

## MEMORANDUM OF UNDERSTANDING BETWEEN THE CHIEF, F8 AND THE CHIEF, K FOR

NATIONAL SECURITY AGENCY PERSONNEL ASSIGNED TO THE NATIONAL RECONNAISSANCE OFFICE SIGINT PROCESSING ORGANIZATION

## I. <u>BACKGROUND</u>:

(S) On 29 March 1995, the Director, National Security Agency (NSA), and the Director, National Reconnaissance Office (NRO), signed the NSA/NRO Joint Management Plan for Acquisition of the Integrated Overhead SIGINT Architecture (IOSA). As a result, the NRO SIGINT Processing Organization (PSPO) was established at NRO Headquarters and jointly staffed by NRO and NSA/K5 personnel. The NSA personnel integrated into other components of the NRO were assigned to a new NSA Field Organization, F8. A Memorandum of Understanding (MOU) dated 8 June 1995 delineates the agreements for the management responsibilities of the Chief, F8 and Chief, X for the NSA/K5 personnel assigned to the PSPO. This document replaces that MOU and establishes management responsibilities of the Chief, F8 for NSA/K5 personnel assigned to the PSPO at the NRO facility in Chantilly, Virginia.

#### II. <u>POLICY</u>:

(S) The NSA/K5 personnel assigned to the PSPO at the NRO headquarters facility in Chantilly, Virginia, will be assigned to F8 and will functionally report through the NRO chain of command to the Chief, PSPO/K5. All F8 personnel are\provided administrative, professional development, and career progression support by the Chief, F8. National Security Agency K5/PSPO personnel not assigned to the NRO headquarters facility in Chantilly, Virginia, will be provided administrative, professional development, and career progression support by the Chief, K.

CL BY: CL REASON: 1.5(c) DECL ON: X1 INT FRIM: NRC SCO 4.0 14 Oct 95





SUBJECT: Memorandum of Understanding Between the Chief, F8 and the Chief, K for National Security Agency Personnel Assigned to the National Reconnaissance Office SIGINT Processing Organization

## III. AGREEMENTS:

A. (3) The Chief, F8 in his/her capacity as Deputy Director of the NRO SIGINT Directorate, will provide oversight and direction to the PSPO for the acquisition and maintenance of SIGINT mission ground processing and will confer with the Chief, K5/PSPO with regard to personnel assignments to the PSPO positions at F8. The Chief, F8 will provide input on the performance appraisal of the Chief, PSPO/K5 to his/her rating official, Chief, K.

B. (S) Chief, K, in coordination with Chief, F8, will designate which K5 activities and personnel are not congruent with the PSPO. These will include K5 Policy Staff, Administrative Staff, K-wide technology activities, and certain research and development (R&D) efforts. Chief, K, through Chief, K5, will retain total responsibility for those activities and personnel so designated.

C. (S) The Chief, K will have general oversight and influence over the execution of processing R&D activities executed by PSPO. The Chief, K, in conjunction with the NRO SIGINT Director, will review the acquisition of overhead processing systems at periodic reviews held at least two times a year.

#### IV EFFECTIVE DATE AND DURATION:

(U) This MOU shall remain valid until modified by mutual agreement or by higher authority. The terms of the MOU shall be effective upon signature by Chief, K and Chief, F8. The Chief, F8 and the Chief, K shall execute additional plans, agreements and/or actions necessary to implement the provisions of the MOU.

SECRET

 Chief,	F8	•	



Chief, SIGINT Engineering

4/27/98 DATE:\_\_\_ 2

DATE: 5/1/95

# Operational Technology Evaluation Capability (OTEC)

SECHET # DAG // Y1

Central Imagery Tasking Office (CITO)

Memorandum of Understanding (MOU)

for the

Rapid Dissemination System (RDS)

> Customer Code (Z02)

February 2000

<signature on file>

Chief, OTEC NRO/IMINT/SOS <signature on file>

Chief, Imagery Products Branch NIMA/CITO

CL By: CL Reason: 1.5(c) DECL On: X1 DRV From: NRO SCG 4.0, 14 OCT 1995 ------

Handle via BYEMAN Control Channels Only

#### SECHEMPONE

#### 1 Purpose

This Memorandum of Understanding (MOU) documents the agreement between the NRO/IMINT/SOS Operational Technology Evaluation Capability (OTEC) and the NIMA/CITO Imagery Products Branch (IPB) regarding the use of RDS Customer Code Z02 to support the imagery data needs of the Product Quality (PQ), and Research and Development (R&D) communities.

## 2 Background

IPB provided OTEC with the use of RDS Customer Code Z02 to support the joint NIMA-NRO PRIMEX Phase 1 demonstration in 1999. The use of Customer Code Z02 was suspended at the conclusion of the demonstration.

OTEC has a continuing need for an imagery feed to support the PQ and R&D communities, which have come to rely on OTEC as a source of IMINT data for their projects.

#### 3 Scope

This MOU identifies the specific agreement between IPB and OTEC regarding the use of RDS Customer Code Z02.

#### 4 Roles and Responsibilities

**IPB agrees to allow OTEC** to use the RDS Customer Code Z02 to support the data needs of projects supported by the **OTEC lab infrastructure**, indefinitely, or until an operational need for the Customer Code arises.

OTEC agrees to use the RDS customer code to support pixel-processing projects in the PQ and R&D communities. If an operational need arises, OTEC agrees to relinquish the use of Customer Code Z02 when requested to do so by IPB.

#### 5 Operational Concept

Customers of OTEC will use RDS Customer Code Z02 when building production and distribution (P&D) nominations in the Requirements Management System (RMS). Imagery for Customer Code Z02 will come through RDS to the OTEC Image Data Server (IDS) in the OTEC lab.

#### 6 Reviews

This MOU may be formally reviewed whenever either of the signatories perceives the need to revise the understandings herein. Such a review may potentially result in a change to the current practice.

#### 7 Glossary / Acronym List

стто	Central Imagery and Tasking Office
IDS	Image Data Server
IPB	Imagery Products Branch
MOU	Memorandum of Understanding
NIMA	National Imagery and Mapping Agency
NRO	National Reconnaissance Office
OTEC	<b>Operational Technology Evaluation Capability</b>
P&D Nom	Production and Distribution Nomination
PQ	Product Quality
R&D	Research and Development
RMS	Requirements Management System

CONTRACTOR IN MALAN

# SECRET // COMINTARALENT KEYHOLE // X1

## (U//FOCO) MEMORANDUM OF UNDERSTANDING

## AMONG

## THE ASSISTANT DIRECTOR OF CENTRAL INTELLIGENCE FOR COLLECTION,

## THE DIRECTOR, NATIONAL SECURITY AGENCY/CHIEF, CENTRAL SECURITY SERVICE,

## AND

## THE DIRECTOR, NATIONAL RECONNAISSANCE OFFICE

### REGARDING

## THE OVERHEAD COLLECTION MANAGEMENT CENTER

I. (U//FONO) PURPOSE: This Memorandum of Understanding (MOU) among the Assistant Director of Central Intelligence for Collection (ADCI/C), the Director, National Security Agency/Chief, Central Security Service (NSA/CSS), and the Director, National Reconnaissance Office (NRO) delineates the roles and responsibilities for the operation of the Overhead Collection Management Center (OCMC).

## II. (U) REFERENCES:

- A. (U//FOUO) Memorandum of Agreement (MOA) between NSA/NRO for System Requirements and Signals Intelligence (SIGINT) Satellite Operations, dated 20 Feb 96
- B. (U//FONO) Initial Operating Capability (IOC) Integrated Overhead SIGINT Architecture (IOSA) Mission Management (IMM) Concept of Operations (CONOP), dated 4 Aug 00
- C. (U//FOLO) Director of Central Intelligence Directive (DCID) 3/1, Authorities and Responsibilities of the Assistant Director of Central Intelligence For Collection and the National Intelligence Collection Board, dated 7 Aug 00
- D. (U//FONO) Final Operating Capability (FOC) IMM CONOP, dated 21 Dec 00
- E. (U//FONO) United States Signals Intelligence Directive (USSID) 110, Collection Management Procedures, dated 20 Jun 01
- F. (U/IFOUO) USSID 110, Annex K (Overhead), dated 8 Apr 02
- G. (U//FOUO) IOSA System Requirements Document (ISRD), dated 7 Jan 03

III. (U) SCOPE:



# SECRET//COMINTY TALENT KEYHOLE//X1

## IV. (U//FOLIO) RESPONSIBILITIES

- A. (U//FOUC) The Assistant Director of Central Intelligence for Collection will:
  - 1. (U//FOSQ) Ensure that the collaborative processes are in place to achieve the proper prioritization of Overhead collection.
  - 2. (U//FOIO) Ensure that tasking promulgated by the OCMC is in accordance with DCI guidance as provided by the SIGCOM.
- B. (U//FOSQ) The Director, National Security Agency/Chief, Central Security Service
- will
- 1. (U//FOGO) Be responsible for the overall management of the OCMC.
- 2. (U//FORO) Directly or through a designee, nominate the Chief of the OCMC for concurrence by the Director, NRO or designee.
- 3 (U//FONO) Provide necessary facilities, technical and administrative support to the OCMC (to include desk and floor space in the National Security Operations Center (NSOC)).
- 4. (U//POLQ) Provide personnel qualified to perform OCMC duties in accordance with (IAW) guidance provided by the Chief, OCMC.
- 5 (U//FOGO) Provide Consolidated Cryptologic Program (CCP) funding to support OCMC capabilities.
- 6 (U//POLIO) Convey system-level requirements to the NRO to support development of OCMC collection management support tools.
- 7. (U//FOW) Maintain SIGINT Operational Control (OPCON) and mission tasking of the SIGINT satellite portion of the United States SIGINT System (USSS), as delegated by the Secretary of Defense (SECDEF).



- C. (U//FODE) The Director, National Reconnaissance Office, will:
  - 1. (U//FONO) Directly or through a designee, nominate the Deputy Chief of the OCMC for concurrence by the Director, NSA or designee.
  - 2. (U//FOLO) Provide qualified personnel to perform OCMC duties IAW guidance provided by the Chief, OCMC.

SECRET // COMINIT/ TALENT KEYHOLE // X1

## SECRET//COMININGALENT KEYHOLE//X1

- 3. (U//FONO) Provide engineering, technical and administrative support to the OCMC.
- 4. (C) Provide National Reconnaissance Program (NRP) funding to support OCMC capabilities.
- 5. (U//FOC) Acquire, deliver and maintain OCMC collection management support tools that are compatible with Cryptologic Mission Management developed mission/collection management support tools.
- D. (U//FODE) The National SIGINT Committee will:

6.



E. (U//FODE) The Overhead Collection Management Center will:



## SECRET//COMININGALENT KEYHOLE//X1



NRO standards. V. (U) All activities pursuant to this MOU are subject to the availability of appropriated funds. No provision shall be interpreted to require obligations or provision of funds in violation of the

No provision shall be interpreted to require obligations or provision of funds in violation of the Anti-Deficiency Act (31 USC 1341).

VL

VII. (U//FOCO) POINTS OF CONTACT: The ADCI/C point of contact for this MOU is the SIGINT Issue Manager, Office of ADCI/C, The NSA point of contact is the Chief, Signals Intelligence Directorate Office of Policy, The NSA point of contact of contact is the Director, NRO Office of Policy

VIII. (U//FOCO) EFFECTIVE DATE: This MOU is effective upon the date of the final signature of the approving authorities.

IX. (U//FOUC) TERMINATION/REVIEW: This MOU shall remain valid until modified or rescinded by mutual agreement in writing, and shall be reviewed every two years. Any party may terminate this MOU upon written notice to the other two parties.

SECRET//COMINT/TALENE KEYHOLE//X1

## SECRET//COMINS/FALENT KEYHOLE//X1

MICHAEL V. HAYDEN PETER B. TEETS Assistant Director Lieutenant General, USAF Director, National of Central Intelligence Director, National Security Agency/ Reconnaissance Chief, Central Security Service for Collection Office DATE: 9/29/03 DATE: 8 Oct 03 DATE: 6 Oct '03

SECRET//COMINITAN ENT KEYHOLE//X1

#### MEMORANDUM OF UNDERSTANDING BETWEEN

## THE NATIONAL RECONNAISSANCE OFFICE, OPERATIONAL SUPPORT OFFICE

AND

## NEW MEXICO STATE UNIVERSITY

ON

SECURITY SPONSORSHIP OF VARIOUS RESEARCH LABORATORIES AT NEW MEXICO STATE UNIVERSITY, LAS CRUSES, NEW MEXICO

### PURPOSE

This Memorandum of Understanding (MOU) between the National Reconnaissance Office (NRO), Operational Support Office (OSO) and the New Mexico State University (NMSU) Physical Science Laboratory (PSL) addresses sponsorship of the to-be-established sensitive compartmented information facility (SCIF) in the Computer Network Research Laboratory, Intelligence Research Laboratory, and the Decision Systems Research Laboratory (CNRL/IRL/DSRL) located within Anderson Hall on the campus of NMSU, Las Cruses, New Mexico.

#### BACKGROUND

One area emphasized by the Intelligence Community (IC) and the Department of Defense (DoD), as defined by Presidential Decision Directive (PDD) 35 and Joint Vision (JV) 2010 and 2020 (JV 2010/2020), focuses on the strategic planning process for research and development (R&D) and the fielding of new information technology systems. Achieving this goal requires a paradigm shift from a collection-based focus to knowledgecentric architectures that encourage and enable collaboration and sharing of information among peer organizations.

The CNRL/IRL/DSRL was conceived to develop and collect technologies necessary to provide the following:

- 1. R&D in support of offensive and defensive information technology and networking (ITN) services and products.
- 2 Mathematical and computational foundations for understanding ITN infrastructures.
- 3 ITN services and products to national intelligence customers.

UNCLASSIFIED//FOR OFFICIAL-USE ONLY
SUBJECT Security sponsorship of various research laboratories on the campus of NMSU, Las Cruses, New Mexico

The CNRL/IRL/DSRL are focused on supporting the decision process to allow maximum information sharing, consideration of options, and understanding of the end results of the courses of action taken.

### SCOPE

Demonstration and application of the technologies and processes at the CNRL/IRL/DSRL will be accomplished through partnering with other government organizations and commercial industries. Government organizations partnering with NMSU may include the National Security Agency/Central Security Service (NSA/CSS), the Service Cryptologic Elements (SCEs), the Central Intelligence Agency (CIA), various DoD offices, and other government agencies. The critical infrastructure protection application that concerns both the IC and the DoD requires partnering with major corporate leaders such as telecommunications companies, which control large infrastructure components.

#### RESPONSIBILITIES

The OSO will sponsor SCIF accreditation of the NMSU CNRL/IRL/DSRL area through the NRO Office of Security. The NRO Office of Security will accredit the PSL SCIF, ensuring it meets DCID 1/21 standards for sensitive compartmented information and special access programs/special handling processing. The NRO Security will also accredit all automated information systems (AIS) to meet DCID 6/3 standards and provide services to PSL for delivery of classified materials to NRO headquarters or other intelligence partners. In addition, the OSO will sponsor the secure communications requirements for the PSL SCIF. The CNRL/IRL/DSRL area/room currently is not SCIF certified. Any and all costs associated with the above, as well as maintaining continued accreditation of the CNRL/IRL/DSRL, will be the responsibility of the NMSU PSL.

The NRO Security will assume security cognizance of the above SCIF described in the preceding paragraph and certify its use for DoD, Top Secret, SCI, SAP, TCO, BCO, and unclassified co-utilization, pending approval of the NMSU PSL-developed AIS security plan detailing the security procedures, equipment, software, and other items necessary to ensure secure/ accreditable operations. In addition, co-utilization agreements with partners for use of advanced communication technologies will be developed by NMSU PSL and approved by the OSO through UNCLASSIFIED//FOR OF TOWN SEE ONLY

SUBJECT: Security sponsorship of various research laboratories on the campus of NMSU, Las Cruses, New Mexico

NRO Security. This capability will be provided to all partnering groups to allow secure collaboration.

The OSO Security will conduct an annual assessment of the NMSU security program in coordination with NRO Security and other NRO Program Offices. This aspessment is directed at ensuring a cross-flow of security-related tools/information and maintaining consistent application of DCI, NRO, and IC protection requirements.

Since the PSL seeks to utilize these technologies for critical infrastructure protection, the PSL will develop, in writing, formal relationships with key industry partners to support the intent of PDD 35 and JV 2010/2020.

Industry partners' access to the SCNF will be subject to the approval of the OSO. As NMSU PRA dependent takes solutions to critical infrastructure protection, FDE NE. and JV 2010/2020, tours of the facility will be conducted at appropriate security levels and with the approval of the facility (NMSU) Special Security Officer.

All NRO security requirements relative to facility protection, information systems security, and personnel security will be complied with fully. Any expense necessary to bring this facility into compliance will be the responsibility of NMSU PSL.

#### TERMS AND REVISIONS

1

This document will be considered in force when signed by all parties. Signatories to this MOU or their successors may request the renegotiation of all or part of this agreement. Changes to this agreement, in writing, must be approved by both parties holding the offices of the signatories at the time of the change. This document will be reviewed annually.

2056	
Director,	Director, Operational Support
Physical Science Laboratory	Office
New Mexico State University	National Reconnaissance Office
Date: / Powersed 2000	Date: 17 NOV 2000
UNCLASSIFIED//F	FOR OFFICIAL USE ONLY

### MEMORANDUM OF UNDERSTANDING BETWEEN U.S. AIR FORCE DECLASSIFICATION OFFICE (AFDO) AND

### NATIONAL RECONNAISSANCE OFFICE INFORMATION DECLASSIFICATION REVIEW CENTER (NRO/IDRC)

ON

### EXCLUSIVE INFORMATION EQUITY REGARDING THE SENTRY/SAMOS IMAGING SATELLITE SYSTEM

It is agreed that information in NRO and USAF records pertaining to the SENTRY/SAMOS imaging satellite program is exclusively the equity of the NRO/IDRC. Exclusive equity means that SENTRY/SAMOS-related information in any documents possessed by, or referred to, the NRO will be reviewed for automatic declassification pursuant to Executive Order 1095F without need for referral to the AFDO for additional equity review. It also means that AFDO records containing SENTRY SAMOS information will be transferred to the NRO IDRC for primary declassification review before being released to the public.

This MOU will be considered in force once signed by both parties. Signatories to this MOU or their successors may request renegotiation of all or part of this agreement. Both parties holding the offices of the signatories at the time of a change must approve changes to this agreement.



Declassification Review Center National Reconnaissance Office

Date: Que 22 2000



Declassification Office

Date: 24 Avi 2000

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### MEMORANDUM OF UNDERSTANDING BETWEEN THE DEPUTY DIRECTOR FOR NATIONAL SUPPORT, NATIONAL RECONNAISSANCE OFFICE AND CHIEF, NATIONAL SECURITY AGENCY CUSTOMER ADVOCATE OFFICE FOR NATIONAL CUSTOMER OUTREACH ACTIVITIES

-1.0

(U) This Memorandum of Understanding (MOU) between the Deputy Director, National Support (DDNS), National Reconnaissance Office (NRO) and the Chief, National Security Agency (NSA) Customer Advocate Office (PO3), establishes cooperative and mutually supportive guidelines for NRO/NSA interaction and customer support functions as Mission Partners.

for the United States SIGINT System (USSS) and the Office of the DDNS exercises advocacy for overhead collection systems' capabilities for support to National Customers.

The It is understood that the NSA and the NRO depend on productive Mission Partner relationships to accomplish their respective missions and that separate meetings with customers can result in false expectations, confusion or an incomplete representation of information. Therefore, specific guidelines related to customer outreach activities and the relationship between the DDNS and the PO3 will be conducted as follows:

a. (U) Each office will keep the other informed of SIGINT activities related to National Customer outreach efforts in their respective areas.

b. (U) Each office will invite the other to participate in NSA, NRO and community meetings related to National Customer support. When appropriate, local NSA Cryptologic Representatives to National SIGINT customers will be included.

c. (U) If either office is unable to attend National Customer support meetings, the other will provide feedback on relevant issues.

d. (U) Each office will coordinate requirements for SIGINT related National Customer support with the other.

CL EY: CL REASON: 1.5 DECL ON: XL DRV FROM: NRO SCG 4.0 14 October 1995

SUBJECT: National Customer Outreach Activities

e. (U) The DDNS and Chief PO3 will conduct quarterly exchange meetings to update each other on current and projected customer outreach activities.

SECOND ST

(U) This document will be considered in force once signed by both parties. Signatories to this MOU or their successors may request the renegotiation of all or part of this agreement. Changes to this agreement must be approved by both parties holding the offices of the signatories at the time of the change.

John de Greck Chief, Customer Advocate National Security Agency

Thomas W. Conroy Deputy Director for National Support National Reconnaissance Office

4/20/99 Date:

4/22/99 Date:\_

Spices

# MEMORANDUM of UNDERSTANDING

Between

## NATIONAL RECONNAISSANCE OFFICE OFFICE of SPACE LAUNCH

And

# 30<sup>TH</sup> SPACE WING SAFETY

On

## INTEGRATED SAFETY ROLES & RESPONSIBILITIES FOR NRO SPONSORED PAYLOADS LAUNCHED BY EELV FROM VAFB

21 Oct 2002

## (U) PURPOSE

This Memorandum of Understanding (MOU) formally documents a mutual understanding between the National Reconnaissance Office (NRO), Office of Space Launch (OSL) and the 30th Space Wing Safety Office regarding safety roles and responsibilities for the integration of the EELV booster with NRO payloads at VAFB. Under this MOU, the Imreh Vehicle NRO/OSL will perform certain specific safety support functions for 30 SW Safety before and during NRO satellite EELV launch campaigns at VAFB. Those functions are the subject of this MOU.

> The specifics are outlined in the attachment, and are not intended to modify the safety responsibilities of either the EELV Launch Service Provider, or the spacecraft processing facility operator.

## (U) IMPLEMENTATION

This document will be considered applicable once signed by both parties. Signatories to this MOU or their successors may request the revision of all or part of this MOU.

Points of contact for MOU execution and modifications:

NRO OSL/SE (VAFB)

30<sup>th</sup> Space Wing/SES



Extended Expendable (EELV)

## (U) SECURITY

3.1 Certain stand-alone EELV activities must be performed in the payload encapsulation facility while in close proximity to the payload. Security requirements dictate that operations safety support for those few stand-alone activities be included under the provisions of this MOU, the primary focus of which is integrated, rather than stand-alone, activities.

3.2 All classified, proprietary and competition sensitive information will be handled in accordance with NRO security directives and EELV System Protection Guide (EELV SPG), as applicable.

## (U) GENERAL RESPONSIBILITIES/AGREEMENTS

See Attachment 1 for details of roles and responsibilities.

## APPROVAL PAGE

6

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# MEMORANDUM of UNDERSTANDING

Between

NATIONAL RECONNAISSANCE OFFICE OFFICE of SPACE LAUNCH

# 30<sup>TH</sup> SPACE WING SAFETY

On

# INTEGRATED SAFETY ROLES & RESPONSIBILITIES FOR NRO SPONSORED PAYLOADS LAUNCHED BY EELV FROM VAFB

Director, Office of Space Lanach NRO/OSL	Chief of Safety 30 Space Wing	
Date:	Date:	

# SAFETY INTEGRATION OPERATIONS CONCEPT

## FOR NRO SPONSORED PAYLOADS

## LAUNCHED BY EELV FROM VAFB (U)

3 June 2002

## 1 (U) Introduction

1.

1.1. (U) During space launch operations, not only must the booster and payload themselves be safe, but the integrated combination of the two must also be safe, hence the need for space launch campaign safety integration.

1.2. (U) Safety integration responsibilities associated with the EELV/payload interface include the following tasks:

1.2.1. (U) <u>Integrated Operations Safety</u>. This consists of providing safety supervision for the development and performance of integrated payload/booster operations procedures.

1.2.1 (U) <u>Interface Safety</u>. This consists of ensuring that the interfaces between the payload and booster have been analyzed to ensure that each hazard cause which could cross the payload/booster interface and trigger the release of hazardous energy has been identified and dealt with by appropriate controls.

1.2.3. (U) <u>Cross-fenceline Safety</u>. This consists of ensuring the adequate control of each hazard which could be inadvertently released by a cause of any origin, and whose effects could cross a boundary, thereby endangering others besides the owner of the hazard.

1.3. (U) Integrated operations safety has been anticipated to be the responsibility of the EELV Launch Service Provider under the Safety Control Authority (SCA) which the Launch Service Provider was expected to seek and be delegated. However, it has recently been announced that the Delta IV (D-IV) Launch Service Provider will acquire SCA at VAFB *no earlier* than the second D-IV launch from the West Coast, leaving the responsibility for integrated operations in limbo at least during the initial VAFB EELV campaign, if not longer.

1.4. (U) Interface safety and cross-fence line safety for EELV campaigns are expected to be the responsibility of 30 Space Wing Safety (30 SW/SE).

However, restrictions on classified information associated with NRO launch campaigns will limit the number of 30 SW/SE staff who have access to that material. Furthermore, such restrictions will also curtail the number of personnel who will be permitted to perform integrated operations safety at the scene of payload booster integrated operations.

1.5. (U) On 12 Jul 2000, 30 SW/CC granted NRO VAFB SCA for facilities, programs, and operations under the temporary or permanent operational ? control of the NRO at VAFB. This SCA, which includes responsibility for approval of NRO VAFB sponsored user hardware designs and operational / surtained procedures. NRO VAFB's SCA, as approved on 12 Jul 2000, is intended to apply to payload program facilities, hardware, and operations only.

## 2. (U) Purpose.

Batter word

2.1. (U) The purpose of this operations concept is to define roles and responsibilities for the various organizations performing specified safety integration tasks for NRO VAFB EELV launch campaigns. The operations concept is founded on the following five principles:

2.1.1. (U) Ensuring responsible safety oversight of hazard controls which protect human life and health. Any delay in the EELV Launch Service Provider's obtaining SCA would cause a void in responsible safety oversight for EELV activities. Implementation of this operations concept will fill the portion of that void associated with booster/payload integration activities.

2.1.2. (U) Avoiding any impact to existing contracts. Contractual requirements which may currently be in place for obtaining various safety approvals could be expensive to change. Implementation of this operations concept will not affect the identity of any organization having such approval authority.

2.1.3. (U) Synergistic leveraging of NRO VAFB's existing SCA. NRO VAFB's SCA responsibilities already require the organization's safety staff to develop and maintain professional safety expertise and knowledge of NRO payload design, operations, and hazardous energy sources. Implementation of this operations concept will apply that existing expertise and knowledge to the control of hazard causes which could cross the EELV/payload interface and trigger the release of those sources.

2.1.4. (U) Minimizing the number of staff requiring access to classified information. Security founded on rigorous adjudication of need-to-know severely restricts the number of personnel assigned to perform functions in any given discipline. Implementation of this

operations concept will allow those already-accessed NRO VAFB safety discipline personnel to perform payload/booster integrated safety tasks, as well as the payload stand-alone safety tasks which they already perform.

2.1.5. (U) Eliminating the need for implementation concurrence by organizations other than 30 SW and OSL. Any change to an operational mode which requires a change to existing organizational relationships would require that all parties to those relationships agree to the mode change. Implementation of this operations concept will not affect any relationship other than that between 30 SW and the NRO and, therefore, need not be approved by any organization other than those two.

### 3. (U) Scope.

3.1 (U) This concept of operations applies only to payload/launch services provider integrated safety tasks associated with NRO EELV launch campaigns conducted at VAFB. The specific tasks involved are integrated operations safety, interface safety, and cross fence-line safety, as defined in Para 1.2, above.

3.2. (U) Through the implementation of this concept of operations, NRO VAFB/SE effectively will function as an agent of 30 SW Safety, performing a carefully defined, strictly limited subset of EELV integrated safety tasks. 30 SW Safety will retain the authority for these tasks and will audit their performance by NRO VAFB. Any inadequacy of NRO VAFB's task performance, as judged by 30 SW Safety, will be grounds for withdrawal of approval of this concept of operations.

### 4. (U) Detailed Listing of Responsibilities.

4.1 (U) 30 Space Wing Safety.

4.1.1. (U) Per existing contractual requirements and pursuant to NRO VAFB's compliance certification, provide signature approval of EELV/payload integrated safety assessment.

4.1.2 (U) Per existing contractual requirements and pursuant to NRO VAFB's compliance certification, provide signature approval of the safety assessment of stand-alone EELV operations which take place in the PLF encapsulation facility. This signature approval may be executed in conjunction with that for an overall safety assessment of EELV launch base activities.

4.1.3. (U) Per existing contractual requirements and pursuant to NRO VAFB's compliance certification, provide signature approval of EELV/payload integrated operations procedures.

4.1.4. (U) Per existing contractual requirements and based in part on information furnished by the NRO VAFB integrated scheduling system, manage operation of the hazard warning systems (e.g., hazard warning lights, klaxons, public address systems, etc) used to alert potentially affected parties at adjacent work sites about the impending existence of cross-fenceline hazards.



4.1.5 (U) Audit NRO VAFB's compliance with this safety operations concept. In the event NRO VAFB is found to be noncompliant with the parameters of this concept, revoke any related EELV/payload safety integration agreements between NRO VAFB and 30 SW/SE.

### 4.2 (U) NRO VAFB

4.2.1. (U) Review and evaluate the EELV Launch Service Provider's EELV/payload integrated safety assessment. Certify to 30 SW/SES that the integrated safety assessment demonstrates compliance of the interface with all applicable tailored safety requirements. This certification will be signed by the NRO VAFB Commander and the Chief of NRO VAFB Environmental Services and Safety.

4.2.2. (U) Review and evaluate the EELV Launch Service Provider's safety assessment of stand-alone EELV operations which take place in the PLF encapsulation facility. Certify to 30 SW/SES that this safety assessment demonstrates compliance of the stand-alone activities with all applicable tailored safety requirements. This certification will be signed by the NRO VAFB Commander and the Chief of NRO VAFB Environmental Services and Safety.

4.2.3. (U) Review and evaluate EELV/payload hazardous integrated operations procedures in accordance with the provisions of Office Of Space Launch (OSL) Operating Instruction OSL OI-003, Rev A, "VAFB Safety Review Of NRO Contractor Launch Base Test Procedures and Work Orders.". Certify to 30 SW/SES that these integrated operations procedures comply with all applicable tailored safety requirements. This certification will be signed by the Chief of NRO VAFB Environmental Services and Safety.

4.2.4. (U) Assess (a) EELV stand-alone operations procedures to be conducted in the PLF encapsulation facility, (b) payload standalone operations procedures, and (c) payload/EELV integrated operations procedures for hazards whose effects could cross a

boundary, thereby endangering others besides the owner of the hazard. Exercise oversight of the performance of these procedures in accordance with the provisions of Office Of Space Launch (OSL) Operating Instruction OSL OI-003, Rev A, \* VAFB Safety Review Of NRO Contractor Launch Base Test Procedures and Work Orders.\*

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4.2.5. (U) Ensure an EELV/payload integrated scheduling system is implemented which permits cross-fenceline hazards to be identified and which disseminates information concerning those hazards to all potentially affected parties at adjacent work sites.

4.2.6. (U) Notify 30 SW/SE of impending cross-fenceline hazards as identified by the NRO VAFB integrated scheduling system and ensure NRO payload operations are conducted in accordance with cross-fenceline hazard notification.

### 4.3. (U) EELV Launch Service Provider

4.3.1. (U) Per existing contractual requirements, perform and document an integrated safety assessment of the interface between the payload and the EELV provided flight hardware, GSE, facilities, and operations. Per existing contractual requirements, certify the validity of the Integrated safety assessment and submit the assessment and certification for approval.

4.3.2 (U) Per existing contractual requirements, perform and document a safety assessment of stand-alone EELV operations which take place in the PLF encapsulation facility. This assessment shall address EELV provided flight hardware, GSE, and operations and may be incorporated in an overall safety assessment of EELV launch base activities. Per existing contractual requirements, certify the validity of this safety assessment and submit the assessment and certification for approval.

4.3.3. (U) Per existing contractual requirements, prepare, obtain appropriate approvals for, and execute integrated operations procedures.

4.3.4. (U) Per existing contractual requirements, participate in an ? Integrated scheduling system which melds EELV and payload stand-alone operations with EELV/payload integrated operations to the extent necessary to identify trans-organizational impacts. Classification requirements imposed by NRO VAFB sponsored launch campaigns will require that the NRO VAFB scheduling

system be used for detailed integrated scheduling purposes during NRO VAFB sponsored launch campaigns.

4.3.5. (U) Per existing contractual requirements, conduct operations in accordance with cross-fenceline hazard notification.

Sataty Integration Task		Organizational Responsibilities	
	EELV Launch Service Provider	NRO VAFB	30 SW/8E
Interface Safety	4.3.1. (U) Per existing contractual requirements, perform and document an integrated safety assessment of the interface between the payload and the EELV provided flight hardware, GSE, tabilities, and operations. Per existing contractual requirements, certify the validity of the integrated safety assessment and submit the assessment and certification for approval.	4.2.1. (U) Review and evaluate the EELV Launch Service Provider's EELV/payload integrated safety assessment. Certify to 30 SW/SES that the integrated safety assessment demonstrates compliance of the interface with all applicable tailored safety requirements. This certification will be signed by the NEO VAFB Commander and the Chief of NEO VAFB Environmential Services and Safety.	4.1.1. (U) Per existing contractual requirements and pursuant to NRO VAFB's compliance cartification, provide signature approval of EELV/payload integrated safety assessment.
Integrated Operations Safety	4.8.2 (U) Per existing contractual requirements, perform and document a safety assessment of stand-alone EELV operations which take place in the PLF encapsulation facility. This assessment shall address EELV provided light hardware, GSE, and operations and may be incorporated in an overall statety assessment of EELV laurch base activities. Per existing contractual requirements, certify the validity of this safety assessment and existing the assessment and certification for approval.	4.2.2. (U) Review and evaluate the EELV Launch Service Provider's safety assessment of stand-alone EELV operations which take place in the PLF encapsulation tacility. Cently to 30 SW/SES that this safety assessment demonstrates compliance of the stand- alone activities with all applicable tailored safety requirements. This certification will be signed by the NRO VAFB Commander and the Ghief of NRO VAFB Environmental Services and Safety.	4.1.2 (U) Per existing contractual requirements and pursuant to NRO VAFB's compliance certification, provide signature approval of the safety essensment of stand-alone EELV operations which take place in the PLF encapsulation facility. This signature approval may executed in conjunction with that for an overall safety assessment of EELV launch base activities;

## Table 1: TABULAR LISTING OF CONJUGATE RESPONSIBILITIES **AS DESCRIBED IN SECTION 4**

Salaty Integration Task	Organizational Responsibilities			
IIII MARICULAT I CAR	EELV Launch Service Provider	MRO VARB	30 SW/SE	
Approval?	4.9.3. (U) Per existing contractual requirements, prepare, obtain appropriate approvals for, and execute integrated operations procedures.	4.2.3. (U) Review and evaluate EELV/peyload hazardous integrated operations procedures in accordance with the provisions of Office.Of Space Launch (OSL) Contration Instruction OSL OHOM, DE-A. 4/ALL destroy Review (C) MEDI Contration Launch Dest 1 of The	4.1.3. (U) Per existing contractual requirements and pursuant to NRO VAFB's compliance certification, provide signature approval of EELV/payload integrated operations procedures.	

Safety Integration Task		Organizational Responsibilities			· · ·	un in the second	* 
	EELV Launch Service Provider	NRO VAFB		< ~ * 4 	30 SV	V/8E	P.1.
Cross-ferceline Safety		4.2:4. (U) Assess (a) EELV stand- alone operations procedures to be conducted in the PLF encapsulation facility, (b) psyloed stand-slone			• • • • •	-2	in
		operations procedures, and (c) psylcat/EELV integrated operations procedures for hezards whose effects could cross a boundary; thereby endangening others besides the owner	• • •	· · ·	·	- 	
		of the hazard. Exercise overeight for the performance of these procedures in accelerance with the provisions of Office					
		Of Spece Launch (CSL) Operating Instruction OSL 01-003, Rev A, * VAFB Selety Beview Of NRO Contractor Launch Base Test Procedures and Work Orders.*			s. S. January (1) - 12		, <sup>6</sup>

Safety Internation Task		Organizational Responsibilities	
Integration Task	EELV Launch Service Provider	NRO VAFB	30 SW/SE
task name?	3 - 1 - 1		4.1.5 (U) Audit NRO VAFB's compliance with this safety operations concept. In the event NRO VAFB is
			found to be noncompliant with the parameters of this concept, revoke any related EELV/payload safety integration agreements between NRO VAFB and 30 SW/SE.

## Table 2: REPRESENTATIVE PAYLOAD & EELV STAND-ALONE & INTEGRATED OPERATIONS PROCEDURES FOR WHICH NRO VAFB/SE WILL HAVE SAFETY INTEGRATION RESPONSIBILITY

Organization Parliaming Operation	Operation
SVC. OLESIC (PL888), or Enception Paolity Spension	Verity/ selabilish transfer stand emploited in komer transfer tower.
	Verte / Annual Distance and Annual and Annua
	SEB data flow test.

Organization Performing Operation	Opération
ennennen fra Stannen son son son son son son son son son so	
cord'd?	Preps for SV oxidizer loading.
، ۲۰۰۲.	Perform SV öxidizer loading.
	Secure from SV oxidizer loading & perform full loading preps.
م م م	Perform SV fuel loading.
	Secure from SV fuel loading & clean solar panels.
	SV (light-diseout one & closeout photos.
EELV/Payload Integrated Op or EELV Stand-Alone Op Performed in Encapsulation Facility	Prep payload adapter fitting for mating ops.
	Clean payload adapter fitting.
	Move PLF Into encapsulation facility alricok & clean.
۲	Move PLE sectors and encapeutation facility tagit pay
	PLF electrical & mechanical inspection/ consector pull test
	Transfer phytodologister filling to encapsulation stand in Cell #1.
	SV millio prepst
	Mate SV to attachment fitting.

			, , , , , , , , , , , , , , , , , , ,
Organization Performing Operation		Operation	
an a			
1. 27	Establish SV purge.		
	SV-to-attachment litting interface te		
	PLP installation & mating.		
	PLF to payload adapter fitting conn	actor Installation	
, >	SV interface connection.		
	Checkout payload adapter fitting-Pl	F Interface.	
x	PLF integrated verification test.		
	PLP ordnance installation		
	Move encepsulated SV to transfer a	tand in lower trageter tower.	
1	Prene for transport of encausulated	<b>8</b> 7.	
EELV/Payload	Route encapsulation pallet to outsid	e of transfer tower.*	
Integrated Op or EELV Stand-Alone Op			
Performed Outside. Encapsulation Facility			n an
	Transfer encapsulated SV to encap	suiation pallet.*	
	Beellich SV pune & environdente	A REAL PROPERTY AND	
	Transport encapabilitied SV to pad.		

Organization Patienting Operation	Operation
<u>La de la construcción de la de la construcción de la construcción de la construcción de la construcción de la cons</u>	
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C.O	
	Content Strately & provinces much
	Empland BVArsely Methodian mails.
9 2 2 2 2 3 2 2	
· · · · · · · · · · · · · · · · · · ·	SV confidence test.

\* Performed partially inside and partially outside encapsulation facility.