

**BY ORDER OF THE COMMANDER
45TH SPACE WING**

45TH SPACE WING INSTRUCTION 99-101

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Test and Evaluation

**45TH SPACE WING MISSION PROGRAM
DOCUMENTS**

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This instruction implements AFI 10-1211, Space Launch Operations; AFI 99-103, Capabilities-Based Test and Evaluation; AFD 10-12, Space; AFD 99-1, Test and Evaluation Process; and AFSPCI 10-1208, Spacelift Operations. It documents the policies, procedures, and instructions for preparing, submitting, and processing documents in the Universal Documentation System (UDS), and related organizational roles. The instruction applies to 45th Space Wing (45 SW), Range contractors (as a compliance document), Space and Missile Systems Center (SMC) and its contractors supporting Range and Range customer requirements (as a compliance document), and to Range customers through current Memorandums of Understanding, Interservice Support Agreements, or CSOSA Annex Agreements between the customers and the 45 SW. Users of this instruction should familiarize themselves with the contents to ensure they meet the established suspense requirements for submitting and processing documents. Specifics for each of the documents are included in the individual chapters. Other 45 SW Instructions, as well as internal agreements, address support for unit bed down/deployment, tenant organizations, and management of Range resources. The potential for overlapping processes, functional responsibilities, and categorization/status of an organization seeking 45 SW support (wing customer) necessitates early coordination between 45 SW/XP, 45 SW/FM, 45 LCG, 45 MSG, and 45 OG to determine the basis, process, and overall OPR for support to that organization. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Form 847s from the field through Major Command (MAJCOM) publications/forms managers. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363,

Management of Records, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/>.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include updates to wing organizations and their roles and responsibilities; updates to the Universal Documentation System (UDS) lead times and timeline information; the consolidation of all UDS lead time tables and timeline information into one attachment.

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1. GENERAL.

1.1. **Purpose.** The documentation system and procedures described in this instruction are prescribed for use at the 45 SW and comply with all UDS standards specified by the applicable version of the Range Commander’s Council (RCC) UDS Document. The structure for format and text is compatible with documentation in use at all major ranges and test facilities. The UDS provides a common language and format for stating requirements and preparing support responses. The UDS is based on a common structure to enable customers to employ one basic format when presenting requirements to support agencies. However, 45 SW requires certain modifications or adaptations to the UDS, and these are described within this instruction. Air Force Range Standardization and Automation (RSA), including an automated UDS, may also require additional modifications and adaptations. These will be identified to all customers when available and are expected to require more structure and specifically defined subordinate paragraph formats for communication of detailed requirements and solutions. 1 ROPS/DOUF should be contacted by 45 SW internal and external customers prior to their preparation of any requirements/UDS documents, including “electronic media” communication of the document.

1.2. **Responsibilities.**

1.2.1. The 45 SW operates the Eastern Range (ER). As an AF Range and DoD Major Range and Test Facility Base (MRTFB), the mission is to provide launch and tracking facilities, safety of flight, and data to a wide variety of customers. The customers include the Air Force, Navy, Missile Defense Agency (MDA), National Aeronautics and Space Administration (NASA), and various other civil and commercial organizations. Wing organizations and non-Wing organizations such as NASA, other DoD, civil, and commercial enterprises may be required to provide input to UDS and related documents/processes to establish support for an ER customer.

1.2.2. The Plans and Programs office (45 SW/XP) serves as the office of primary responsibility (OPR) and single point of contact for all inquiries regarding 45 SW ER services and new work until it is conditionally accepted as a new 45 SW Range workload, and the Statement of Capability (SC) or SC letter is signed and distributed. After the SC, XP remains a point of contact for the customer's convenience, as required. 45 SW/XP's other responsibilities include:

1.2.2.1. Point of contact for prospective Range customers and provider of a Wing Planning Engineer (WPE) to act as the customers' initial "single point of contact".

1.2.2.2. Accepts new workloads or significant changes to existing workloads IAW 45 SWI 10-601, staffs requirements, and prepares the Range's SC or letter SC to be returned to the customer.

1.2.2.3. Provides the customer with all necessary information to use the Range including available resources, documentation, base support policies, initial cost estimates, and a step-by-step process of working with the wing.

1.2.2.4. Analyzes future customer requirements and coordinates and formulates plans for support by 45 SW resources. Maintains familiarity with potential customers' programs, aids potential customers in obtaining information on ER capabilities to facilitate potential customers' program planning and the wing's long-range planning, and educates the customer on wing processes.

1.2.2.5. Acts as the wing focal point for new Government customers, determining if additional support documentation, such as a new Support Agreement, Memorandum of Agreement, Memorandum of Understanding or Joint Operating Procedure, is required to support the new program.

1.2.2.6. Acts as the wing focal point for new commercial customers, executing Initial Support Agreements (ISAs) and Wing annexes to the Commercial Space Operations Support Agreement (CSOSA). Also, acts as the focal point for evaluating customer satisfaction through personal contact, written surveys, and other means as appropriate.

1.2.3. The 45 SW Safety Office (45 SW/SE) establishes, directs, and manages the overall safety program for flying, nuclear, explosive, missile, ground, industrial, and system safety. They prepare Range safety inputs to SCs, Program Support Plans (PSPs) and Operations Directives (ODs) within the time lines provided in this instruction in response to customer requirements. They compute destruct criteria and prepare appropriate displays for the safe conduct of missile and space vehicles. They provide estimates and estimate revisions for all safety support as required by this instruction.

1.2.4. The 45th Launch Group (45 LCG) provides the on-scene Launch Vehicle (LV) and Space Vehicle (SV) technical and operations expertise to support processing and launch for AF “heritage” and EELV launch systems. This includes direct support to the System Program Director (SPD) and Mission Director (MD) for all Air Force, DoD, and National Security Space Satellite and LV programs as required for launch systems operations and payload integration.

1.2.4.1. The 45th Launch Support Squadron (45 LCSS) provides technical surveillance and risk assessment of spacecraft processing, critical infrastructure, and emerging launch vehicles in support of spacecraft system wings to fulfill combatant commander and national requirements. Provides management, oversight, surveillance and sustainment of spacecraft processing facilities, munitions and fuel storage areas, and common use launch infrastructure (e.g., common launch control centers, processing centers, etc.).

1.2.4.1.1. The 45 LCSS Mission Support Flight (45 LCSS/LSM) provides a Launch Site Integration Manager (LSIM) who upon completion of statement of capabilities by 45 SW/XP, acts as the primary interface between the emerging launch vehicle customer and the 45 SW for all booster and spacecraft activity requirements. The LSIM conducts 45 SW integration and leadership responsibilities consistent with approved arrangements (Commercial Space Operations Support Agreement (CSOSA), Space Operations Support Agreement (SOSA), etc).

1.2.4.1.2. The 45 LCSS Spacecraft Flight (45 LCSS/LSG) provides a wing Field Program Manager (FPM) who will provide on-site representation, acquisition management, engineering, contractual oversight, mission assurance and direct support for SV System Program Offices and other payload customers per Letter of Assignment (LOA) or Letter of Delegation (LOD). The FPM supports SV design/production/planning per LOA/LOD to include, but not exclusive to, the following activities: launch site infrastructure requirements and plans, system safety documentation development, universal documentation system development and launch base plans and procedure development. FPMs delegated financial management responsibility on behalf of the SV/LV customers will work closely with the 1 ROPS Program Analysts (PAs).

1.2.4.2. The 5th Space Launch Squadron (5 SLS) is the launch agency for Atlas V and Delta IV launch operations conducted on the ER in support of AF, other DoD, and non-DoD U.S. government programs. The 5 SLS provides mission assurance to the Mission Director through management of LV processing from receipt at Cape Canaveral Air Force Station (CCAFS) through launch. Their role mitigates risks to booster processing, integrated operations pre-launch, launch, and post-launch by providing the government insight or oversight of launch services contractor activities throughout launch vehicle processing. They are responsible for oversight, surveillance, and mission assurance for all EELV launch facilities, booster processing facilities, and other specific or associated facilities.

1.2.5. The 45th Mission Support Group (45 MSG) is responsible for base and organizational support to wing, ER customers, and tenant units. Functional areas include

civil engineering, security, contracting, human resource services, and Morale Welfare Recreation (MWR) services. Additionally, they are responsible for CCAFS through Detachment 1 (Det 1, MSG).

1.2.5.1. The 45th Security Forces Squadron (45 SFS) establishes, directs, and manages the overall security program for Space Launch Systems and Patrick Air Force Base (PAFB), including CCAFS annexes. They prepare Range security input to SCs, PSPs, and ODs within time lines provided in this instruction in response to customer requirements. They identify security requirements and provide necessary controls in support of secure launch operations.

1.2.5.2. The 45th Civil Engineering Squadron (45 CES) provides, operates and maintains facilities, utilities, housing, environmental, fire protection, base operability, and Explosive Ordnance Disposal (EOD) support for the 45 SW and other assigned units in support of DoD and commercial space launch or other assigned programs.

1.2.5.3. The 45th Logistics Readiness Flight (45 LRF/LGRT) manages transportation and traffic services for efficient movement of personnel and material to include support to DoD space launches, and coordinates airlift and sealift to the downrange stations and other worldwide destinations. They operate an air terminal in support of the Air Mobility Command (AMC) peacetime exercises or contingency operations, provide planning and organization for air transportation activities, and process passengers and cargo for movement by military air. The 45 LRF provides traffic management services for personnel, personal property, and commercial surface freight movement to include freight operations at Port Canaveral and manages and operates preservation and packaging activities.

1.2.5.4. The 45th Contracting Squadron (45 CONS) provides contracting services to meet all 45 SW and tenant requirements. They award and administer contracts for supplies, services, construction, research, and development. They also provide contract administration for contracts awarded by other DoD and NASA offices for space launch systems and payload programs.

1.2.5.5. The Det 1 Launch Integration Office (LIO) at CCAFS ensures the integration of 45 SW launch support requirements.

1.2.5.6. The Det 1 Program Management Office (PMO) at CCAFS manages operational control and oversight of Institutional Base Support Restructure (IBSR) Program service contracts (infrastructure O&M services, fire protection/emergency management and emergency medical services, grounds maintenance/pest control services, vehicle operations/vehicle & equipment maintenance services, refuse disposal, and NASA service contracts).

1.2.6. The 45th Operations Group (45 OG) is responsible for the direction of real-time Range operations, support planning, and scheduling, to include the operation and maintenance of all ER instrumentation: command control, communications, telemetry, radar, metric optics, other sensors, timing countdown, critical data collection and processing systems, and meteorology in support of all Range operations/tests (primarily missile and space vehicle launches). Also manages the Range contract that provides significant technical and management core support for the 45 OG responsibility.

1.2.6.1. The 1st Range Operations Squadron (1 ROPS) is responsible for planning, operational control, and allocation of resources in support of Range operations. They are the 45 SW support OPR, after SC turnover, to provide the assigned programs with planning, documentation support, resources, funding management, Range operations control and execution, and data accuracy. 1 ROPS plans and directs instrumentation platform deployments and is responsible for 45 SW airspace and sea space as a range resource. All other 45 SW organizations coordinate with and may obtain assistance from 1 ROPS in order to conduct support planning and execution for the customers.

1.2.6.1.1. The 1 ROPS Program Management Flight (1 ROPS/DOUF) provides the wing's Program Support Managers (PSMs) as the customer's primary point of contact for Range support following XP publication of the SC. The PSMs are responsible for the application of and adherence to the UDS system by both the customer and Range organizations within the confines of the applicable RCC UDS Document and this instruction. A Program Analyst (PA) is also provided as the customer's primary financial liaison to the wing. All financial matters are handled through the Program Analyst from the wing planning phase to close out of customer account. They also provide cost estimates and revisions for all Range support, as required by this instruction. FPMs delegated financial management responsibility on behalf of the SV/LV customers will work closely with the PAs.

1.2.6.1.2. The 1 ROPS Scheduling Flight (1 ROPS/DOUS) is the primary point of contact and single scheduling authority for all launch operations, launch associated tests and internal Range activities requiring ER and 45 SW support resources excluding base support and 45 SW Safety Office functions. Their objective is to ensure that all launches, operations and associated tests are fully supported on the dates and times requested by the range customer, or as close to the requested date and time as possible. DOUS will consider mission priorities, range capabilities, economy of operations, funding availability and established safety and security criteria when processing and prioritizing authorized schedule requests.

1.2.6.2. The 45th Weather Squadron (45 WS) is responsible for natural aerospace environmental support and service, as needed, including monitoring plans and programs to determine meteorological requirements and recommending actions, as necessary, to satisfy these requirements. The 45 WS provides pre-mission staff support and launch weather forecasts for all ER operations. They provide Closed Circuit Television (CCTV) weather briefings for all operations. They act as OPR for natural aerospace environmental support. They provide cost estimates and revisions for all weather support as required by this instruction.

1.2.6.3. The 45th Operations Support Squadron (45 OSS) provides comprehensive spacelift operations support to fulfill national requirements. Support functions include assisting in flight hardware processing and launch operations, overseeing the establishment of wing operations training programs and policy, and managing all airfield and air traffic services for three geographically separated airfields. They also provide cost estimates and revisions for all spacelift operations they support.

1.2.6.4. The 45th Range Management Squadron (45 RMS) manages the daily operation and maintenance of ER instrumentation. These resources support all spacelift and ballistic missile launches from CCAFS, Kennedy Space Center (KSC), and many operations and tests conducted by other Ranges. They provide wing program management for the Range contract and chair the Requirements Validation Board (RVB), which approves support requirements-range capability enhancements requiring modification/new ER Systems (ERS). They are the interface for the wing to SMC. Their role is to best ensure necessary resource availability that permits the timelines specified/authorized by this instruction. Also responsible for operational test and evaluation (OT&E) for all ERS.

1.2.6.5. The 45th Space Communications Squadron (45 SCS) operates and maintains communications-computer systems, airfield operations systems, enterprise network, and Range wideband communications to ensure space launch readiness. Also manages 45 SW communications plans, resources, systems integration and architecture, and spectrum management direction and support. The functions support DoD, civil, and commercial customers, serving as the single communications integrator for PAFB, CCAFS, and the ER.

2. SECURITY.

2.1. **Purpose.** These security instructions are provided for personnel who prepare and control 45 SW Operations Documents IAW DoD 5200.1-R, Information Security Program, AFI 31-401, Information Security Program Management, and the applicable RCC UDS Document. The originating agency of the UDS document is responsible for identifying the information to be protected, including application of the proper security classification designators and any other special security markings.

2.2. Classification Markings.

2.2.1. Each classified document will show on its face the overall classification, source of classification, date or event for declassification, office of origin, and date of origination. The overall classification of a document will be conspicuously marked permanently at the top and bottom on the outside of the front cover, the first page of the interior pages, and on the outside of the back cover. All other pages, except those that are blank, will be marked at the top and bottom according to content to include "unclassified" when no classified information is contained on such a page. These instructions are IAW DoD 5200.1-R, Information Security Program and AFI 31-401, Information Security Program Management.

2.2.2. When the classified sections of large documents are few in number, it may be expedient to provide unclassified basic documents with the classified portions provided in a separate classified document extract or annex. Classified extracts will have limited distribution and should be cross-referenced in the basic unclassified document.

2.2.3. **Proprietary Information.** Range customers requesting ER support and organizations providing off-range support to the ER should identify proprietary information in documents provided to the 45 SW.

2.3. **Operations Security (OPSEC).** When applicable, authors of documents will consider AFI 10-701, Operations Security (OPSEC) and, if required, will include an OPSEC annex or incorporate specific OPSEC procedures within the document.

3. DOCUMENTATION SYSTEM.

3.1. **Purpose.** The 45 SW official documentation system to request and deliver Range support is the UDS approved and adopted by the RCC. All UDS documentation should be submitted IAW lead times shown in Attachment 2, Tables A2.1 thru A2.5. Modifications to lead times for all UDS are open to negotiation and mutual agreement between 45 SW and the Range customer. Details of the system are shown in the RCC UDS Document as well as supplemental guidance provided by 45 SW/XP and 1 ROPS. The UDS is based on a common numbering system which serves as the framework for all documents within the UDS. The document system addresses all support (including leased/licensed real property, facilities, base support, Range instrumentation, airspace, aerospace, and construction engineering) that a Range customer requires for their mission/operations execution.

3.1.1. The advent of support to “purely commercial” Range customers IAW the Commercial Space Launch Act (CSLA), and the resultant changes to base support available to these customers, does not alter the need for UDS to consolidate documentation of all support requirements and solutions. The PI, PRD, and OR must identify the customer’s requirements even if the base support policy precludes the 45 SW (or other US Government organizations) as a source of the service/commodity.

3.1.2. The identification in UDS of a customer’s overall support requirements best ensures delivery of authorized 45 SW support, avoidance of conflicts/delays in Range operations, and identification of derivative Range requirements, including public safety, that can exist irrespective of the source of the support. All organizations and commercial entities providing support are subject to these requirements (badging, materiel authorization/access to PAFB/CCAFS/KSC, environmental and safety compliance, resource preservation/protection, i.e., “dig permits”, among others). At the time of UDS document submission to the Range, the customer will, at minimum, enter the notation “commercial source” in the appropriate UDS section to indicate resolution of a requirement. When known, the service/commodity provider must be identified by company name and address (which, if so indicated, will be treated by the 45 SW as “proprietary information”). This information is necessary in order for the customer’s document to be accepted by the 45 SW ER and for Range documents to be issued. Reference Attachment 2 for the lead time associated with this information.

3.1.3. The SC, PSP, and OD must document the solution and source of all customer support requirements, regardless of source, for the same reasons that the minimum information is identified in the customer’s UDS documents. Additional information from the Range customer may be required as appropriate to identify criticality/impact of the support. Coordination of “commercially available” service providers, their compliance with KSC/45 SW requirements, and their coordination with KSC/45 SW is the responsibility of the Range customer.

3.2. **Document Organization.** The UDS provides for three levels of customer and support agency documentation (reference Attachment 2, Table A2.1). They are as follows:

3.2.1. The level 1 documents are used to initiate program support planning between customers and support agencies.

3.2.2. The level 2 documents are for additional or more detailed program information, especially for the more complex programs.

3.2.3. The level 3 documents are used to plan separate operations within a program.

3.3. **Flexibility.** The UDS can be used in situations involving a single customer and a single support agency or for operations involving multiple customers with multiple support agencies. For multiple customers and multiple support agencies, the recommended approach is to use a lead range agency to coordinate all the customer and support agency documents. Depending on the size and complexity of the program, one or two levels may be combined. For example, the PRD/OR or PSP/OD may be combined if this is a more expedient approach. For all UDS documents, only those applicable pages and sections of Range UDS formats from the UDS Document need to be used in these combined documents. For programs/customers requiring minimal overall or narrow functional support, the UDS documents can be further tailored for simplicity and efficiency and will not affect purpose and suitability.

4. PROGRAM INTRODUCTION AND STATEMENT OF CAPABILITY.

4.1. **Program Introduction (PI).** The PI is the UDS initial statement of program support requirements and is the official document prepared by the customer to introduce a new Range workload. The PI phase leads to 45 SW conditional approvals of new programs. Customers should submit the PI IAW lead times shown in Attachment 2, Table A2.2. Customers prepare the PI using procedures in the applicable RCC UDS Document and 45 SW UDS documentation guidance. This document is prepared by the customer to inform the Range of the customer's initial understanding of support requirements including test and evaluation of specific systems, sub-systems, and equipment. For programs requiring limited support, a simple letter PI may serve as the initial statement of support requirements. In some cases, for payloads or minor support requirement change, a PRD may be appropriate, and a PI may not be required. Additionally, new non-Range workloads will not typically require a PI, but instead require a request letter. Any customer request that requires a significant or unique re-evaluation of Range resources will be processed by 45 SW/XP IAW 45 SWI 10-601, Acceptance of New Workloads. Prior to submitting the PI, the customer shall establish a 45 SW Job Order Number (JON) account and deposit initial funding in an amount specified by 45 SW/XP.

4.2. **Statement of Capability (SC).** The SC is the UDS response to the PI and is the 45 SW's conditional acceptance of a new Range workload subject to working through future requirement approvals. Prior to acceptance, all requests for support of new Range workloads will be staffed by XP, reviewed by applicable 45 SW offices, and evaluated by the affected wing organizations for their ability to support before signature by the 45 SW Commander. 45 SW/XP should submit the SC IAW lead times shown in Attachment 2, Table A2.4. The SC may also provide the User with a Rough Order of Magnitude (ROM) cost estimate, identify additional documentation which must be provided, and lay out conditions that further wing support is contingent upon. In cases where requirements are not well defined, cost estimates may be delayed until the second and third levels of the UDS. For programs that submitted a letter PI, a letter SC will document the acceptance rather than the usual UDS SC. Requirements that cannot be satisfied with available resources will be identified and

recommendations made on resolving the deficiency. The 45 SW also has the option of responding to the PI with a letter stating the wing cannot support the request.

5. PROGRAM REQUIREMENTS DOCUMENT AND PROGRAM SUPPORT PLAN.

5.1. **Program Requirements Document (PRD).** The PRD is the customer's request to the Range describing in detail the customer's requirements for support of the program. It will list operation or test parameters, reports, data reduction, analyses, and evaluation requirements. The document should be prepared using the applicable UDS formats as outlined in the applicable RCC UDS Document and submitted IAW times shown in Attachment 2, Table A2.2. The 1 ROPS will forward the PRD to the Range contractor following 45 SW/CPTS confirmation of program funding. Information, even though not complete, should be submitted as early as possible, especially when support of certain items requires long lead times. As new or revised requirements develop, the original pages are revised and submitted as a PRD Revision (PRDR). The implementation of new Range capabilities is accomplished through the Requirements Statement Process (for information, go to <https://imis.rc.patrick.af.mil/imisl/Vrhome/> or contact 1 ROPS/DOUF).

5.1.1. A PRD is not mandatory for programs that do not require Range development or for programs of short duration or minimal support. However, submission of a PRD will help to ensure that existing equipment will be available during the time period required by the customer. A PRD is highly desirable when off-range support is required. The Range will initiate a critical analysis of the PRD to identify requirements which cannot be met and respond with a "Response To Requirements Tasking" or a PSP IAW lead times in Attachment 2, Table A2.4.

5.1.2. PRD drafts will be prepared and coordinated through 1 ROPS for new programs when considered advantageous to the Range customer. The draft document provides the opportunity for early coordination and clarification of requirements and an assessment of support questions that may arise concerning support from organizations external to the wing. A PRD Extract (PRDE) is used when requirements placed on the ER necessitate support from other organizations external to the wing, commonly other ranges or sensor operators. These derivative requirements occur when it is not appropriate to levy the original PRD on these other agencies. The derivative requirements are prepared using PRD formats IAW the standard UDS outline. The PRD Extract will be prepared by 1 ROPS/DOUF. When the response is received, the ER will ensure the input is incorporated into the consolidated PSP along with appropriate cost estimates provided by the supporting Range. The 45 SW responds to PRD Extracts from other Ranges or organizations as well.

5.2. **Program Support Plan (PSP).** The PSP is the official wing response to the PRD. It is an assessment of the Range capability to meet requirements identified in the PRD. The document should be submitted IAW lead times shown in Attachment 2, Table A2.4. The Range contractor prepares a schedule outlining the preparation of the PSP and sends it to agencies responsible for review. After the review, negative or positive responses for all items are sent directly to the Range contractor. The Range contractor prepares and forwards a "Response to Requirements Tasking" to 1 ROPS which contains a preliminary list of PRD requirements which cannot be met. The 1 ROPS will coordinate submission of Requirement Statements or negotiate a waiver of the requirements until a Range capability has been

developed that can satisfy the requirement. The PSP is then prepared and will be ready for 45 SW review and coordination after receipt of the PRD. Requirements which cannot be met by existing capabilities may be met by SMC engineering solutions identified using the Requirements Statement Process. Cost estimates for developing new Range capabilities to meet requirements identified as NOWILCO in the PSP are developed and provided under the Requirement Statement process and are delivered separately from the PSP.

5.2.1. The following disclaimers should be added to all PSPs generated by the ER in Section 1010-Approval Authority and under Remarks: "The Implementation of this PSP and the cost/schedule estimates are not automatic. The PSP must be approved by the requesting agency and notification given to proceed, taking into consideration the identified lead times." "This PSP does not represent final commitment by the United States Government to support this program. This PSP is based on requirements as defined in the Requesting Agency PRD. Further refinements specified in the OR may result in the identification of requirements which the government may be unable to support. Furthermore, manpower and scheduling priorities may preclude support as outlined in this PSP." If the PSP is for a commercial program, the following sentence should be added to the above statement: "The United States Government reserves its right to priority access IAW with Article III of the Commercial Space Operations Support Agreement (CSOSA), dated 27 October 1998, or the latest revision of the subject agreement."

5.2.2. When it is determined that changes to Range capabilities will impact customer requirements, the Range contractor will notify 1 ROPS by letter. 1 ROPS will coordinate with the customer to determine if a PSP revision is appropriate or the customer desires further resolution.

6. OPERATIONS REQUIREMENTS DOCUMENT AND OPERATIONS DIRECTIVE.

6.1. **Operations Requirements (OR).** The OR identifies the specific Range support requested from the 45 SW/Range to conduct an operation or a test. Missile and spacelift vehicle launches, research and development activities (sensor development testing), internal Range operations, Range engineering tests, and special projects (data collection/studies) must have a PRD/OR, an OR, or an Expedite OR for each operation or series of operations for which 45 SW support is required. The PRD/OR may be used in lieu of the OR only if requirements in the PRD are sufficient in detail. If the PRD is deficient in describing all the Range support needed, a separate detailed OR must be written to cover each operation or series of operations. The OR will be prepared IAW the UDS formats in the applicable RCC UDS Document and submitted IAW lead times shown in Attachment 2, Table A2.3. The OR describes in detail an individual operation and specific requirements for a portion of the overall program. When there is a published PRD, the OR is not intended to reflect new requirements or workload not previously stated in the PRD. The OR may be used instead of a PRD for programs of short duration requiring minimal use of Range resources. A critical analysis to identify new requirements not previously covered in the PRD will be made, and any item in this category will be returned to the customer for appropriate action.

6.1.1. Draft OR. Customers with new programs or complex operations/tests which may require additional information before the OD is prepared should present a draft OR in advance of the normal OR time line. 1 ROPS will be able to review the requirements and

set up a conference between the customer and 45 SW organizations to resolve the problem areas/issues. If a draft OR conference is not needed, 1 ROPS will advise the customer to proceed in preparing the OR.

6.1.2. Operations Requirements Extracts (ORE). The official means for any Range to levy requirements for operational support on another Range or support agency is with an ORE. The ORE contains requirements extracted by the Range from the customer's OR with supplementary requirements added and forwarded to one or more Ranges or other organizations to request their support. 1 ROPS advises the Range contractor to review the OR and the PRD Extract and prepare the ORE as well as the OD. The ORE is prepared using the prescribed UDS formats and produced within the time lines of Attachment 2, Table A2.4. An ORE will have the same number as the customer's OR and will always have an OD input in response. The ORE is required to be forwarded to 1 ROPS for approval and is then returned to the Range contractor for publication and distribution.

6.2. **Operations Directive (OD).** The OD is a complete and detailed operations plan used to schedule Range resources through coordination of equipment operation and services needed to support a specific operation or series of operations or tests. The OD fulfills three basic purposes: It provides detailed instructions to operating personnel; it serves as the 45 SW implementation of customer and internal Range requirements; and it becomes the instrument for operation or test scheduling. Additional requirements from the Range Safety Operations Requirement (RSOR) will be addressed in the OD. It is written in sufficient detail to furnish complete instructions for Range execution of a specific activity. ODs will be prepared using the UDS format and produced within the time lines of Attachment 2, Table A2.4. Scheduled Range support/resource utilization may also be executed through an Operations Control Instruction (OCI) when necessary for expediency due to time constraints or other factors (see paragraph 7.8.7.2.). Or, in the case of minor Range support, the OD may be substituted by an OCI when the PRD contains all necessary requirements.

6.2.1. OD Disclaimer. The following disclaimer should be inserted in all ODs in Section 1010-Approval Authority under Remarks: "This OD is based on requirements as defined in the Requesting Agency OR. Further requirements or refinements arising after the date of this directive may result in increased cost and/or the identification of requirements which the government is unable to support. Furthermore, manpower and scheduling priorities may preclude support as outlined in this OD."

6.2.2. If the OD is for a commercial program, the following statement should be added: "The United States Government reserves its right to priority access IAW Article III of the Commercial Space Operations Support Agreement (CSOSA), dated 27 October 1998, or the latest revision of the subject agreement."

7. DOCUMENTATION PROCESS.

7.1. **Purpose.** The 45 SW has a set procedure and process for submitting and evaluating documents. To facilitate mission/program execution, the customer and the wing will follow these procedures as closely as possible. However, the 45 SW is flexible and this process is negotiable to meet customer needs. The earlier in the process that customer concerns are identified and resolved, the smoother the documentation process will flow and the more likely that the mission/program will succeed without delays.

7.2. Procedures:

7.2.1. The 45 SW/XP is the initial OPR for new programs or new mission workloads. When required, a PI shall be submitted by the prospective Range customer to 45 SW/XP. In response, 45 SW/XP will prepare an SC, which will include a ROM cost estimate, if possible, and return it to the prospective customer once it is signed by the wing commander. The ability to provide a cost estimate is dependent on the completeness of the PI. The point of contact for all other UDS documents concerning accepted programs is 1 ROPS.

7.2.2. The Range customer signature on the PI, PRD, and OR signifies that the document represents valid and necessary program information and support requirements and that the customer is requesting 45 SW/Range response to the document.

7.2.3. The 45 SW representative's signature on the PI, PRD, and OR signifies that the document has been accepted to facilitate preparation of a response document. This is not intended to certify requirements or that 45 SW will provide support as requested. The requirements will be confirmed and support determined during upcoming planning conferences.

7.2.4. The 45 SW representative's signature on the SC, PSP, and OD signifies that support will be provided as stated.

7.3. Categories of Objectives and Requirements Classes. Support agency resources and development plans are based on valid support requirements submitted by the Range customers. The requirements are those needed to meet customer program, mission, or operations objectives. To ensure that requirements will be met, the Range customer must determine the category of objectives and the class (accuracy) of requirements and relate these to basic needs. For a full description of categories, requirements, and requirement prioritization refer to the applicable RCC UDS Document.

7.4. Lead Times. Lead times will vary considerably from program to program and are negotiable depending on the scope of support, customer needs, and determinations of priority. 1 ROPS must obtain coordination from all affected wing organizations/contractors prior to committing to a customer that modified lead times can be met.

7.4.1. The PI lead times will be established by negotiation between the customer and 45 SW/XP. Nominal lead times for PIs are shown in Attachment 2, Table A2.2.

7.4.2. A PRD should be submitted immediately when support requirements are identified. The customer should not delay submittal of the PRD because of incomplete knowledge of support requirements. If extensive programming effort is required, a complete PRD with exact telemetry format must be in place prior to mission execution. Attachment 2, Table A2.2 shows required lead times for PRDs.

7.4.3. For final ORs, the minimum lead times shown in Attachment 2, Table A2.3 reflect the number of calendar days required from time of receipt of an OR by the Range until Range support of the first scheduled launch, countdown rehearsal, launch simulation, or mission execution. Failure to meet these lead times could result in support delays due to insufficient planning time. The minimum lead times in Attachment 2, Table A2.3 are

required for acceptance, publication, and distribution of the OR and the preparation, review, approval, publication, and distribution of the OD.

7.4.4. A combined PRD/OR may be acceptable if sufficient detail is known early. The PRD/OR must have requirements detailed at the OR level.

7.5. Assignment and Numbering of 45 SW Programs. The Range contractor manages assignment of UDS numbers for 45 SW programs. A list of assigned UDS program numbers will be maintained by the Range contractor and published quarterly in the Operations Documentation Index. Program titles will not be used when it results in an unclassified document becoming classified. In such cases, the words "Title Classified" will be used in lieu of the program title. Annexes will be used to describe subsystems or special operations related to the major operation in the basic document. Annexes will be numerically identified.

7.6. Distribution of Documents. The Distribution List Section (UDS 1020) in each support agency document shows the initial distribution which is monitored by 1 ROPS. The Range contractor maintains a current Supplementary Distribution List for the following documents: ORs, PRDs, PRD/ORs, PRD/OR/RDs, and RSORs. The Range contractor extracts and prepares for distribution the needed documents required by all support agencies. Access to electronic media libraries changes the process by which documents are "Distributed." A notification of document availability may substitute for "Distribution." All initial and subsequent changes to the distribution list will be approved by 1 ROPS.

7.7. Document Cancellation. The Range customer or originator will notify 1 ROPS in writing when a PRD or OR is to be canceled, including the number, title, and date of the document. Cancellation of the requirements document automatically cancels the support document. Official cancellation is published in the Quarterly Operations Documentation Index.

7.8. Revisions. A revision is considered to be any information or pages replaced, added to, or deleted from an existing document through the official, established UDS process. Revisions may be made either by preparing a completely new document or by submitting the revised information. The UDS documents will reflect the revision number and date of the revision. Revisions shall be numbered consecutively (for example: 1, 2, etc.). When the basic document becomes unmanageable due to an excessive number of revisions, the basic document should be reissued, incorporating the revisions. The Revision Control and Classification Section (UDS 1030) will be used to identify the scope of the revision and shall be transmitted with any revised pages. Section 1030 also provides a historical record of revisions made to the document. The use of the symbol "R" in the margin identifies revised lines in an automated format and should be used whenever practical.

7.8.1. When a PRD item is referenced in an OR and the PRD is revised, the customer will simultaneously submit a revision to the applicable OR. A PRD revision with significant changes may require revisions to supporting documentation. Examples are additions or deletions of requirements which affect needed resources, variations in data processing or data products, and changes in funding responsibilities. 1 ROPS, in conjunction with the Range Contractor, will evaluate such PRD changes. Support documents will be revised accordingly when requirements documents are revised, changed, or modified.

7.8.2. Expedite PRD Revision. An Expedite PRD Revision is a tool to facilitate new requirements of changes and requires immediate staffing and reply to the customer. Timelines for an Expedite PRD Revision must be met as soon as possible if delays are to be avoided.

7.8.3. When changes in Range instrumentation capabilities occur, 1 ROPS, in conjunction with Range contractor support, is responsible for revising the Range response documents for their identified assigned programs, as applicable.

7.8.4. The 1 ROPS maintains current knowledge of all 45 SW instrumentation capabilities, range configuration, and operating policies as applicable to their assigned programs. When changes in these areas occur, as in the "Support Requirements Which Cannot be Met" Section (UDS 2060), 1 ROPS will initiate actions to revise the PSP wherever applicable.

7.8.5. OR Revision. This is a program OR change prepared when operations support required by the customer needs to be redefined or refined. This change is followed by publication of an OD Revision or a new OD, depending on the extent of the revision.

7.8.6. Expedite OR (EOR). An EOR may be prepared when required for immediate support or one-time changes to support a specific mission. These requirements are implemented by the use of supplemental documents such as OCIs to augment customer support. EORs shall be numbered consecutively starting with "1" and chronologically numbered. If the EOR becomes a permanent change to the OR, then an OR revision must be submitted.

7.8.7. The ODs are supplemented through the use of the following documents:

7.8.7.1. Range Operating Instructions (ROIs). ROIs may contain procedures for operation and management of Range resources and equipment. The appropriate section in the OD may reference the applicable ROI, thereby permitting the OD to limit content to a brief statement identifying the type of equipment or procedures to be used. ROIs are Range contractor documents/processes that are also Contract Data Requirements Lists (CDRLs).

7.8.7.2. Operations Control Instructions (OCIs). OCIs are detailed procedures addressing last minute requirements, usually provided in an EOR. OCIs are developed by the Range contractor and delivered as Contract Data Requirements Lists (CDRL) items via the Range contractor portal, VPort.

7.8.8. Revision Approval. Section UDS 1010 (Approval Authority) shows approval of the revision by the customer and acceptance by the Range. This is used as a cover sheet for transmission, revised, or added pages and summarizes the major changes in support requirements included in the revision. In the case of EORs and OD revisions, a separate sheet is used to transmit the revised or added pages but is not filed in the document as is a 1010 section.

7.9. Other Documents and Processes Supporting UDS Execution.

7.9.1. RSOR. An RSOR shall be published for each major program and is used to document exceptions to the standard provisions of missile flight operations IAW either EWR 127-1, Range Safety Requirements or AFSPC 91-710, Range Safety Publication

Series, and to levy requirements peculiar to a launch vehicle series. The RSOR should be submitted IAW lead times shown in Attachment 2, Table A2.4. The draft RSOR will be prepared by 45 SW/SELP, approved by the 45 SW Chief of Safety, and forwarded to 1 ROPS. Following resolution of any changes, the final RSOR will be prepared, approved, and forwarded in the same manner to 1 ROPS for the safety requirements levied. 1 ROPS is responsible for printing and distributing the RSOR. 45 SW/SE will provide the Range customer, through 1 ROPS, all required safety documentation, checks, and timelines. The timelines will include Safety's response turnaround times back to the customer through 1 ROPS. The requirements from the RSOR will be included in the PSP for the safety functional area requirements.

7.9.2. RSOR OPSUP. The RSOR OPSUP contains additional information or requirements peculiar to an operation, but not contained in the RSOR. This document is produced by 1 ROPS, coordinated through 45 SW/SE and approved by 45 OG/CC. A copy will be provided to the Range customer through 1 ROPS.

7.9.3. Range safety data is required and will include such items as a Flight Analysis Data Package, telemetry information including calibration and sensing data, and analysis of propellants used and their radio frequency propagation effects. Specific program requirements will be provided by 45 SW/SE to 1 ROPS.

7.9.4. If the range customer supplements basic information in the PRD and OR in separate correspondence or on other appropriate forms (e.g. RS 1320, EOR, PRDR), a comprehensive list of these requirements with appropriate time lines will be provided with the next UDS document revision or update IAW lead times listed in Attachment 2.

7.9.4.1. Customers must ensure that any communications-electronics equipment that radiates or receives electromagnetic energy used in support of their operations has an approved frequency allocation. Submitting a PI or a PRD is not a request by the Range customer for either an allocation or authorization of frequency usage. The Frequency Management Office (45 SCS/SCBMM) will verify the frequency allocation status of equipment approved for use by or in support of a Range customer. A DD Form 1494, Application for Equipment Frequency Allocation, must be submitted to the Military Communications-Electronics Board (MCEB) through 1 ROPS to 45 SCS/SCMMP for any equipment not having an approved frequency allocation. Additionally, a DD Form 1494 normally requires a lead time for processing. Therefore, submission of the DD Form 1494 must be made as early as possible to avoid unnecessary program delays. Reference Attachment 2 for the lead time associated with this document.

7.9.4.2. AFI 33-118_45SWSUP1, Electromagnetic Spectrum Management and 45 SWI 33-102, Radio Frequency Environment Working Group (RFEWG). The RFEWG is co-chaired by the 45 OG/TD and 45 LCG/TD or his/her designated representatives. Its purpose is payload RF sensitivity and protection and all related issues pertaining to the RF environment. In addition, 45 SW routinely limits the RF field intensity to 1 V/m at the payload for launch complexes and processing facilities which have requested this protection. This limit increases significantly during launch operations. Any Range customer requirement for limitation should be coordinated

early in the planning cycle. NOTE: This is only applicable to emitters under 45 SW control.

7.9.4.3. The 45 SWI 40-201, Radiation Protection Program, defines the requirements for protecting personnel from the biological hazards of ionizing and non-ionizing radiation on the ER. AFI 48-148, Ionizing Radiation Protection, AFOSHSTD 48-9, Radio Frequency Radiation (RFR) Safety Program and AFOSHSTD 48-139, Laser Radiation Protection Program, further specify Air Force personnel protection requirements for ionizing, radio frequency, and laser radiation hazards respectively.

7.9.4.4. A theoretical trajectory package must be furnished in addition to the PRD, if applicable. The package should be submitted IAW lead times shown in Attachment 2, Table A2.5. The package must provide coverage from lift-off through the end of 45 SW support requirements and should include the complete mission requirements. The trajectory data must be formatted per AFSPCMAN91-710, Volume 2, Attachment 5 - Ver 2 Draft.

7.9.4.5. Information concerning missile antennas must be provided. The data must be forwarded on a CD IAW pre-defined lead times to 1 ROPS prior to the first launch of any program. The data must be re-submitted IAW pre-defined lead times prior to the first use of an antenna that is different, or in a new configuration, or relocated on the launch vehicle per IRIG Standard 253-93, Missile Antenna Pattern Coordinate System and Data Formats. Reference Attachment 2, Table A2.3 for the lead times associated with this information.

7.9.4.6. The Customer Countdown lists the sequence of specific actions and events which occur or are to be performed to execute a particular operation. It is considered a hazardous procedure by 45 SW Wing Safety and must be written IAW either EWR 127-1 or AFSPC 91-700 series publications, and submitted to 45 SW/SE through 1 ROPS for approval IAW lead times listed in Attachment 2, Table A2.3.

7.9.4.7. The 45 SW Form 2091, Mission Operations Schedule Record Card; 45 SW Form 2050, Launch Operation Schedule Request; and 45 SW Form 2010, Launch Forecast, indicate date and range use time for scheduling the OD. The forms are submitted to 1 ROPS/DOUS for scheduling purposes. Procedures are provided in 45 SWI 13-206.

7.9.4.8. The 45 SWI 99-103, Time Division Multiplexed Data Information Required for Eastern Range Telemetry Support, defines format and lead times to be supplied for use in programming telemetry decommutators used in providing data to the customer. Telemetry format changes must be submitted IAW pre-defined lead times prior to launch. If this time line or any requirements in 45 SWI 99-103 cannot be met, a new schedule must be negotiated during the PI/SC phase. Reference Attachment 2, Table A2.3 for the lead time associated with this information.

7.9.5. Any aircraft supporting ER operations or any aircraft operations with their own ODs (therefore an associated operation) must provide the 1 ROPS with written notification of the intended support IAW lead times in Attachment 2. The Intended Support Plan (ISP) gives Mission Support Positions (MSPs) as well as alternate MSPs, for weather or other constraints. The ISPs and MSPs are approved by 45 SW/SELF and

forwarded to 1 ROPS and 45 SW/SE. Associated operations approval and ISP/MSP approval requirements are general provisions for all such activities in the air, on land or water which require 45 SW or ER support, are in ER controlled areas, which may present a safety hazard, or which may affect Range/other customer missions.

7.10. Guidelines for Preparing UDS Documents. Instructions for preparing UDS formatted documents are found in the applicable RCC UDS Document which is available from 45 SW/XP and 1 ROPS. 45 SW/XP and 1 ROPS will provide assistance necessary for the customer to utilize the UDS. The RCC UDS Document describes the total UDS structure, the individual documents within the system, and the use and control of the system. It includes sample formats and describes procedures for preparation of the PI, PRD, and OR. It also includes sample formats and describes procedures for preparation of the SC, PSP, and OD. The UDS can be implemented using either the automated or manual methods as described. 45 SW/XP, 1 ROPS, and 45 LCSS (as required) will assist and act in a team effort to support the customer.

RORY D. WELCH, Colonel, USAF
Vice Commander

Attachment 1**GLOSSARY OF REFERNCES AND SUPPORTING INFORMATION*****References***

45 SWI 10-601, Acceptance of New Workloads, 15 November 2004

45 SWI 13-206, Eastern Range Scheduling, 19 July 2011

45 SWI 33-102, Radio Frequency Environment Working Group, 15 December 2002

45 SWI 40-201, Radiation Protection Program, 15 December 2004

45 SWI 99-103, Time Division Multiplexed Data Information Required for Eastern Range Telemetry Support, 1 August 2005

45 SWI 25-203, Support Agreements Program, 16 December 2011

45 SWI 25-204, Mission-Related Agreements Program, 1 November 2005

AFI 10-1211, Space Launch Operations, 17 July 2006

AFI 10-701, Operations Security (OPSEC), 18 October 2007

AFI 31-401, Information Security Program Management, 1 November 2005

AFI 33-118_45SWSUP1, Electromagnetic Spectrum Management, 22 August 2008

AFI 48-148, Ionizing Radiation Protection, 12 October 2001

AFI 99-103, Capabilities-Based Test and Evaluation, 26 February 2008

AFMAN 33-363, Management of Records, 1 March 2008

AFOSHSTD 48-139, Laser Radiation Protection Program, 10 December 1999

AFOSHSTD 48-9, Radio Frequency Radiation (RFR) Safety Program, 1 August 1997

AFPD 10-12, Space, 1 February 1996

AFPD 99-1, Test and Evaluation Process, 22 July 1993

AFSPCI 10-1208, Spacelift Operations, 1 October 2008

AFSPCI 10-1215, Support to FAA-Licensed Space Launch Activities

AFSPC 91-700, Range Safety Publications Series, 1 May 2004

DoD 5200.1-R, Information Security Program, January 1997

EWR 127-1, Range Safety Requirements, 31 October 1997

IRIG Standard 253-93, Missile Antenna Pattern Coordinate System and Data Formats, August 1993

RCC Document 501-08, Universal Documentation System (UDS), January 2008

Prescribed Forms

45 SW Form 2010, Launch Forecast, 1 October 1996

45 SW Form 2050, Launch Operation Schedule Request, 1 October 1996

45 SW Form 2091, Mission Operations Schedule Record Card, 1 October 1996

Adopted Forms

AF Form 847, Recommendation for Change of Publication, 22 September 2009

DD Form 1494, Application for Equipment Frequency Allocation, August 1996

Abbreviations and Acronyms

AFI—Air Force Instruction

AFOS—Air Force Occupational, Safety & Health

AFSC—Air Force Systems Command (disestablished)

AFSPC—Air Force Space Command

CCAFS—Cape Canaveral Air Force Station

CCM—Cost Center Manager

CCSMO—Cape Canaveral Spaceport Management Office

CCTV—Closed Circuit Television

CDRL—Contract Data Requirements List

CLSA—Commercial Launch Support Annex

CSLA—Commercial Space Launch Act

CSOSA—Commercial Space Operations Support Agreement

DoD—Department of Defense

EELV—Evolved Expendable Launch Vehicle

EOD—Explosive Ordnance Disposal

EOR—Expedite Operations Requirement

ER—Eastern Range

ERS—Eastern Range System

EWR—Eastern/Western Range

FPM—Field Program Manager

IAW—In Accordance With

IRIG—Inter-Range Instrumentation Group

ISA—Initial Support Agreement

ISP—Intended Support Plans

JON—Job Order Number

KSC—Kennedy Space Center

LSIM—Launch Site Integration Manager
LOA—Letter of Assignment
LOD—Letter of Delegation
LRA—Lead Range Agency
MCEB—Military Communications-Electronics Board
MDA—Missile Defense Agency
MOC—Morrell Operations Center
MRTFB—Major Range Test Facility Base
MSP—Mission Support Positions
NASA—National Aeronautics and Space Administration
OCI—Operations Control Instructions
OD—Operations Directive
OPR—Office of Primary Responsibility
OPSEC—Operations Security
OPSUP—RSOR Operations Supplement
OR—Operations Requirements
ORE—Operations Requirements Extract
OT&E—Operations, Test, and Evaluation
PA—Program Analyst
PI—Program Introduction
PRD—Program Requirements Document
PRDE—Program Requirements Document Extract
PSP—Program Support Plan
RCC—Range Commanders' Council
RF—Radio Frequency
RFEWG—Radio Frequency Environmental Working Group
RFR—Radio Frequency Radiation
ROI—Range Operating Instructions
ROM—Rough Order of Magnitude
RS—Requirements Statement
RSA—Range Standardization and Automation
RSOR—Range Safety Operations Requirement

RVB—Requirements Validation Board
SC—Statement of Capability
SMC—Space and Missile Systems Center
SW—Space Wing
UDS—Universal Documentation System
USAF—United States Air Force
WPE—Wing Planning Engineer

Terms

Lead Range Agency (LRA).—The Range that is responsible for coordination of total support planning and operations for a particular program, mission, or test. After initial program acceptance by 45 SW, the customer submits detailed needs to the lead range. The lead Range identifies the support required from other agencies and coordinates the total support effort.

Mission.—An operation, research and development project, launch, or other activity requiring 45 SW support and use of Range resources.

New Workload. Any new activity not previously accepted by the 45 SW which requires wing support and commitment or expenditure of 45 SW resources, or any activity changing a previously accepted workload to require a \$500,000 or more increase in resources or a significant reevaluation of the 45 SW support effort (reference 45 SWI 10—601, Acceptance of New Workloads).

Range Customer or Requesting Agency.—Any Department of Defense (DoD) organization, other U.S. Government agency, state or local government, civic, private, or commercial organization, or foreign government with authority to use Range resources.

Range Instrumentation Scheduling Meeting.— A meeting hosted by 1 ROPS/DOUS at the Morrell

Operations Center (MOC) every Thursday at 0900 to review and de—conflict all operations scheduled for the following Monday through Sunday.

Support Agency (SA).— An agency which commits its resources in support of LRA program, mission or test requirements. Goddard Space Flight Center and White Sands Missile Range can be agencies in support of lead range requirements when the ER is lead Range for an operation.

Support Range Agency.— MRTFB or operational facility that provides support services to qualified customers as determined by current directives. KSC is considered a Support Range for the Lead Range Agency, 45 SW.

Attachment 2

UDS ORGANIZATION AND LEAD TIMES

Table A2.1. Document Organization.

LEVEL	CUSTOMER REQUIREMENTS DOCUMENTS	SUPPORT AGENCY RESPONSE DOCUMENTS
1	Program Introduction (PI)	Statement of Capability (SC)
2	Program Requirements Document (PRD)	Program Support Plan (PSP)
3	Operations Requirements (OR)	Operations Directive (OD)

Table A2.2. Lead Times prior to Mission Execution (PI / PRD).

NEEDED	PI	PRD
New Construction of Facilities	3 1/2 years	3 years
Extensive Additions	3 years	2 1/2 years
Extensive Programming and/or Siting	2 years	1 1/2 years
Instrumentation Additions	2 years	1 1/2 years
Minor Improvements	1 year	1/2 year

Table A2.3. Documentation Lead Times (In Calendar Days).

DOCUMENT (See Notes 1 thru 5)	ER	REMARKS
PI		See Table 2
PRD		See Table 2
Missile Antenna Data	365	Prior to Mission Execution (Note 4)
Telemetry Format Changes	310	Prior to Mission Execution
OR	90	Prior to Mission Execution
Customer Countdown	30	Prior to Mission Execution
Mandatory Hold Letter	20	Prior to Mission Execution
Expedite OR	5	Prior to Mission Execution

Table A2.4. Documentation Production Lead Times (In Calendar Days).

DOCUMENT	ER	REMARKS
SC	125	After receipt of PI
PRDE		After receipt of PRD
PSP Preparation Notice	7	After receipt of PRD
Response To Requirements Tasking	30	After receipt of PRD
PSP	110	After receipt of PRD (Note 6)
OD/ORE	30	Prior to Mission Execution
Draft RSOR	30	After receipt of PRD
Final RSOR	90	Prior to Mission Execution
OPSUP	35	Prior to Mission Execution

Table A2.5. Lead Time for Theoretical Trajectories for Ballistic Missile Flights and Space Missions (In Calendar Days).

	New System	Operational System
Initial Submission	550	260
Final Submission	120	65

NOTES:

1. The Range will attempt to assist with any draft reviews.
2. If the Range customer permanently supplements basic information in the PRD or OR in separate correspondence (i.e., RS 1320, EOR), these requirements modifications will be included in a UDS document revision or update within 180 days.
3. Application for Equipment Frequency Allocation (DD Form 1494) normally requires 180 days lead time for processing. Submission must be made as early as possible to prevent unnecessary program delays.
4. Missile antenna data must be re-submitted 105 days prior to the first use of an antenna that is different, or in a new configuration, or relocated on the launch vehicle.
5. Service/commodity provider information for organizations/commercial entities providing support for customer requirements must be identified not later than 14 days prior to first use.
6. For PSP production lead times, 20 days are included for 45 SW review, signature, printing, and distribution.

7. Any aircraft supporting ER operations or any aircraft operations with their own ODs (therefore an associated operation) must provide 1 ROPS with written notification of the intended support at least 30 days prior to mission execution.