DOCUMENT 501-12

RANGE OPERATIONS GROUP

UNIVERSAL DOCUMENTATION SYSTEM

WHITE SANDS MISSILE RANGE
REAGAN TEST SITE
YUMA PROVING GROUND
DUGWAY PROVING GROUND
ABERDEEN TEST CENTER

NAVAL AIR WARFARE CENTER WEAPONS DIVISION, PT. MUGU
NAVAL AIR WARFARE CENTER WEAPONS DIVISION, CHINA LAKE
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION, PATUXENT RIVER
NAVAL UNDERSEA WARFARE CENTER DIVISION, NEWPORT
PACIFIC MISSILE RANGE FACILITY
NAVAL UNDERSEA WARFARE CENTER DIVISION, KEYPORT

30TH SPACE WING
45TH SPACE WING
AIR FORCE FLIGHT TEST CENTER
AIR ARMAMENT CENTER
ARNOLD ENGINEERING DEVELOPMENT CENTER

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

DISTRIBUTION A: APPROVED FOR PUBLIC RELEASE
DISTRIBUTION IS UNLIMITED

This page intentionally left blank.

DOCUMENT 501-12

UNIVERSAL DOCUMENTATION SYSTEM

JULY 2012

Prepared by

RANGE OPERATIONS GROUP
RANGE COMMANDERS COUNCIL

Published by

Secretariat
Range Commanders Council
White Sands Missile Range
New Mexico 88002-5110

This page intentionally left blank.

TABLE OF CONTENTS

PREFACE

The Range Commanders Council (RCC) recognizes the need for rapid turnaround of range user requirements and the efficiencies to be derived from electronic data processing systems; therefore, the Universal Documentation System (UDS) handbook was developed and maintains a format adaptable to electronic data processing.

This edition of the UDS handbook supersedes all previous issues of the handbook. Existing programs may use the previous procedures and forms as agreed between the requesting agency (RA) and the support agency (SA). All new programs developing documentation will use the procedures and formats contained in this version of the handbook.

	CHANGES TO THIS 2009 EDITION
NEW	
	Change 1 Appendix C has been modified to get away from the previous "Teletype Format" and wherever possible a "fill in the form" response has been added to simplify and clarify the requester and supplier inputs.
	Change 2 Chapter 5 of this document has been modified to explain the information needed to populate the new "fill in the form" inputs. This chapter also has additional instructions for each input required in the formats. Each of the format sub-headings in Appendix C has an input instruction in chapter 5.

Copies of this handbook may be obtained from any agency listed in paragraph 1.6, from the RCC web site (http://www.wsmr.army.mil/RCCsite/Pages/default.aspx), or by contacting the RCC Secretariat office as follows:

      Secretariat
      Range Commanders Council
      Attn: STEWS-RCC
      White Sands Missile Range, New Mexico 88002-5110

      Comm 575-678-1107 DSN 258-1107
      E-mail: usarmy.wsmr.atec.list.rcc@mail.mil

This page intentionally left blank.

ACRONYMS

μs	microsecond
A	audio
AGCL	automatic ground control landing
AM	amplitude modulation
AOS	acquisition of signal
ATC	approval to connect
ATO	approval to operate
AV	audio/video
BO	burnout
BPS	bits per second
C	confidential
CATEX	categorical exclusion
C.C.	cloud coverage
CD	calendar days
CEP	circular error probable
CNWDI	Critical Nuclear Weapon Design Information
COMSEC	Communication Security
CRT	cathode ray tube
CW	continuous wave
CY	calendar year
C&A	Certification and Accreditation
D	desired
DAA	Designated Approval Authority
dB	decibel
dBi	decibel isotropic
dBm	power ratio in decibels of the measured power referenced to one milliwatt
DD	Department of Defense
Dens	density
DIACAP	DoD IA Certification and Accreditation Process
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DOT	Department of Transportation
DPAS	Defense Priority and Allocations System (Refer to DoD Directive 4400.1)
DSS	Defense Security Service
EA	environmental assessment
EC	Executive Committee
EFTO	encrypt for transmission only
EIA	Electronics Industry Association
EIS	Environmental Impact Statement
EMSEC	Emission Security
EO	Executive Order
FISMA	Federal Information Security Management Act
FM	frequency modulation
FM/FSK	frequency modulation/frequency shift keying

FOPSK	Feher's offset phase shift keying
FTS	flight termination system
FY	fiscal year
gal	gallon
GET	ground elapsed time
GHz	gigahertz
GPS	Global Positioning System
IMP	impact
IPG	information protection guide
ips	inches per second
IRIG	Inter-Range Instrumentation Group
ISDF	Industrial Security Facilities Database
K	Kelvin
kHz	kilohertz
km	kilometers
kpps	thousands of pulses per second
lb	pound
LOS	loss of signal
LOX	liquid oxygen
M	mandatory
MHz	megahertz
MIL-STD	military standard
mm/s	millimeters per second
MRTFB	Major Range and Test Facility Base
ms	millisecond
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NISP	National Industrial Security Program
NISPOM	National Industrial Security Program Operating Manual
NOAA	National Oceanic and Atmospheric Administration
NRZ	non-return-to-zero
OCA	Original Classification Authority
OD	Operations Directive
OPSK	offset phase shift keying
OIS	operational intercommunications system
OPSEC	Operations Security
OR	Operation Requirements
ORE	Operation Requirements Extract
PAM/FM	pulse amplitude modulation/frequency modulation
PCM	pulse code modulation
PCM/FM	pulse code modulation/frequency modulation
PDM/FM	pulse duration modulation/frequency modulation
PM/FM	phase modulation/frequency modulation
PI	program introduction
POC	point of contact
POL	petroleum, oil, and lubricant

PPP	program protection plan
pph	pulses per hour
ppm	pulses per minute
pps	pulses per second
PRD	program requirements document
PRDE	program requirements document extract
PRF	pulse repetition frequency
Precip	precipitation
Pres	pressure
PSP	program support plan
QTR	quarter
QTY	quantity
R	required
RA	requesting agency
RCC	Range Commanders Council
RD	restricted data
RF	radio frequency
R.H.	relative humidity
R.I.	refractive index
ROG	Range Operations Group
RPS	revolutions per second
RTDS	real-time data system
RTZ	return-to-zero
S	secret
SA	support agency
SAR	special access required
SC	statement of capability
SCG	security classification guide
SCO	subcarrier oscillator
SEP	separation
SPS	samples per second
SRO	static return to off
S.S.	sea state
SVP	underwater sound velocity profile
TACAN	tactical air navigation
Temp	temperature
TOPS	transistorized operations phone system
TS	top secret
TVC	thrust vector control
UDS	Universal Documentation System
V	video
Visb	visibility
VTC	video teleconferencing
VV&A	verification, validation, and accreditation
WARC	World Administrative Radio Conference

This page intentionally left blank.

CHAPTER 1

INTRODUCTION

1.1   General

This handbook describes the UDS. The UDS is used to formally document RA program support requirements and SA capabilities and commitments to support those requirements.

A complete list of RCC documents pertaining to the UDS and to other documents is available on the RCC website (http://www.wsmr.army.mil/RCCsite/Pages/default.aspx). Copies can be provided through the RCC Secretariat at the address stated in the preface.

1.2   Applicability

The UDS is expected to be used by all agencies desiring support from RCC member ranges that have adopted the UDS. RA requirements documents and SA response documents will be prepared in accordance with the formats and procedures in this handbook and with those supplemental instructions prepared by the SAs.

1.3   Authority

The Range Operations Group (ROG) of the RCC has the responsibility for design and control of the UDS. The UDS and the procedures contained in this handbook have been approved by the RCC.

1.4   Handbook Revision

Recommendations for revision of this handbook must be made to the ROG. Such recommendations must include the reason for the change, deletion, or addition and a sample of the change with its instructions. The ROG will review the recommendation, and upon approval, will incorporate these changes. At the discretion of the ROG, approval of recommended changes will be deferred to the RCC Executive Committee (EC).

1.5   Definitions

Frequently used terms in this handbook are defined as follows.

Range/Support Agency: An operational facility that provides support services to qualified users as determined by current directives. The words "range," "center," and "support agency" are used interchangeably.

User/Requesting Agency: Any United States or foreign government agency, industrial organization, or other institution with authority to use range or SA resources.

Sponsor: Any element of a government, military, or civilian agency with authority to use range or SA resources.

User Requirement: Any item of support stated by an RA through the UDS.

Requester/Supplier Code: An element of UDS formats (see subparagraph 2.9.3) as identified in Appendix A - Designation for UDS Subscriber Agencies of this handbook.

Interagency Program: The participation of more than one range or SA in a program.

Lead Range/Lead Support Agency: Responsible range/SA for coordinating total support planning and operations for a particular program, mission, or test. The lead range/lead support agency identifies the support required from other agencies and coordinates the total support effort.

1.6   Information and Assistance Sources

Prospective users of range/SA services may obtain assistance in the preparation of requirements documentation from the agencies listed below.

412 TW/TSRO
Edwards AFB, CA 93524-6680
PHONE: DSN - 527-2726   COMMERCIAL - (805) 277-3416
FAX: DSN - 527-5377   COMMERCIAL - (805) 277-5377

Naval Air Warfare Center Weapons Division
NAWCWPNS CODE 52911EE
Point Mugu, CA 93042-5001
PHONE: DSN: 351-7856   COMMERCIAL: (805) 989-7856
FAX: DSN: 351-7418   COMMERCIAL: (805) 989-7418

30th Range Squadron/DOUF
Building 7000
816 13th St., Suite 205
Vandenberg AFB, CA 93437-5233
PHONE: DSN: 276-3953   COMMERCIAL: (805) 734-8232 EXT: 63953
FAX: DSN: 276-1640   COMMERCIAL: (805) 734-8232 EXT: 61640

ITT/FSC/Code 7600
ITT Federal Services Corp
Vandenberg AFB, CA 93437
PHONE: DSN: 276-1245   COMMERCIAL: (805) 734-8232, EXT 61245
FAX: DSN: 275-0364   COMMERCIAL: (805) 734-8232, EXT 50364

45th Space Wing
45SW/XP (Plans)
1201 Minuteman St.
Patrick AFB, FL 32925-3239
PHONE: DSN: 854-4054   COMMERCIAL: (407) 494-4054

FAX: DSN: 854-6839   COMMERCIAL: (407) 494-6839

Pacific Missile Range Facility Barking Sands
P.O. Box 128
Kekaha, HI 96752-0128
PHONE: DSN: COMMERCIAL: (808) 335-4253
FAX: DSN: COMMERCIAL: (808) 335-4484

Kwajalein Support Directorate
CSSD-KH-SP
P.O. Box 1500
Huntsville, AL 35807
PHONE: DSN: 645-1874   COMMERCIAL: (205) 955-1874
FAX: DSN: 645-1979   COMMERCIAL: (205) 955-1979

Teledyne Brown Eng M/S 132
300 Sparkman Dr. N.W.
Huntsville, AL 35807-7007
PHONE: DSN: COMMERCIAL: (205) 726-2581
FAX: DSN: COMMERCIAL: (205) 726-2695

50th Space Wing
750 OSS/DOX
1080 Lockheed Way Box 058
Sunnyvale, CA 94089-1237
PHONE: DSN: 561-3796   COMMERCIAL: (408) 752-3796
FAX: DSN: 561-4084   COMMERCIAL: (408) 752-4084

50th Space Wing
50 SW/XPSV
300 O'Malley Ave STE 74
Falcon AFB, CO 80912-3074
PHONE: DSN: 560-2087   COMMERCIAL: (719) 567-2087
PHONE: DSN: 560-4661   COMMERCIAL: (719) 567-4661
FAX: DSN: 560-2655   COMMERCIAL: (719) 567-2655

Goddard Space Flight Center
Center Mission Services Manager, Code 450
Greenbelt, MD 20771
PHONE: DSN: COMMERCIAL: (301) 286-6724
FAX: DSN: COMMERCIAL: (301) 286-1725

NASA-Air Force Management Office/IM-NAO
Kennedy Space Center, FL 32899
PHONE: DSN: 854-6272   COMMERCIAL: (407) 494-6272
PHONE: DSN: 854-6274   COMMERCIAL: (407) 494-6274

FAX: DSN: 854-9166   COMMERCIAL: (407) 494-9166

U.S. Army White Sands Missile Range/STEWS-NRO-BP
White Sands Missile Range, NM 88002-5113
PHONE: DSN: 258-3812   COMMERCIAL: (575) 678-3812
FAX: DSN: 258-1904   COMMERCIAL: (575) 678-1904

99th Range Group/CCXT
3770 Duffer Drive
Nellis AFB, NV
PHONE: DSN: 682-3655   COMMERCIAL: (702) 652-3655
FAX: DSN: 682-3808   COMMERCIAL: (702) 652-3808

CHAPTER 2

ORGANIZATION AND STRUCTURE

2.1   Purpose

The UDS provides a common language and format for stating requirements and for preparing support responses. The UDS encompasses documentation generated by RAs that states program, mission, or test requirements and those response documents generated by the SAs to define the support to be provided.

2.2   Objectives

The UDS objectives are as follows.

- Establish a common language and format to provide more effective communication between the RA and SA.
- Standardize requirement and support methodology between the RA and the SA that achieves an effective planning/performance interface.
- Provide a standard yet flexible and dynamic system that meets the requirement and support needs of both simple and complex programs.

2.3   Concept

The UDS is intended to establish standardization, yet be flexible enough to be used by a number of different agencies. This flexibility permits individual instructions to be prepared by each SA for implementation of the UDS at that agency. These instructions can contain specific procedures for the scope, submission, and revision of documentation.

2.4   System Criteria

The UDS is based on a common structure that enables users to employ one basic format when presenting requirements to SAs. This structure is defined in a document outline that combines related subjects of the various program, mission, or test phases into broad categories for simplicity and ease of understanding. This system identifies the necessary information that should pass between the RA and all contributing agencies that support the program, mission, or test.

2.5   Document Organization

The UDS handbook describes three levels of RA and SA documentation. Generally the three levels of documentation will be required, with all being negotiable between the RA and the SA.

LEVEL	REQUIREMENTS DOCUMENT	RESPONSE DOCUMENT
1	Program Introduction (PI)	Statement of Capability (SC)
2	Program Requirements Document (PRD)	Program Support Plan (PSP)

| 3 | Operation Requirements (OR) | Operations Directive (OD) |

Level 1 documents (the PI and SC) are used to initiate program support planning between RAs and SAs.

Level 2 documents (PRD and PSP) are used to provide additional or more detailed program information with specific application to the more complex programs.

Level 3 documents (OR and OD) are used to request and plan support for specific test operations within an all-encompassing program.

2.5.1   Level 1 Documents

Program Introduction: The PI is the initial planning document submitted by an RA to the SA immediately on identification of the scope and duration of a program activity. The RA should submit the PI using the best available information, enabling the SA to initiate resource and technical planning. This information, while sometimes fragmentary and incomplete, is of substantial value to the SA in determining the scope of the program. For some programs, the PI could eliminate further documentation if the SA determines the level of detail is extensive enough to proceed with producing an OD.

Statement of Capability: The SC is the SA's response to the PI. When properly signed, the SC is evidence that a program has been accepted for support by the SA. Support conditions, qualifications and resources, or other considerations are initially identified in this document, which serves as a baseline reference for subsequent acceptance and commitment by the SA.

2.5.2   Level 2 Documents

Program Requirements Document: The PRD is prepared by the range user and is a detailed program planning document required for complex or long lead time programs.

Program Support Plan: The PSP is a response to the requirements presented in the PRD and is prepared by the responsible SA.

2.5.3   Level 3 Documents

Operation Requirements: The OR is a detailed description of the program's requirements for each specific test or series of tests. It is prepared by the user.

Operations Directive: The OD is the SA's response to an OR and is the detailed plan for implementation of support for a program, mission, specific test, or series of tests.

2.6   Document Extracts

Document extracts relate to requirements placed on a given SA that result in the generation of additional requirements that must be placed on other agencies. Requirements relate to the lead

SA concept where one agency is given overall support responsibility when the total support involves a number of agencies.

Examples of document extracts are as follows.

Program Requirements Document Extract (PRDE): A PRDE becomes necessary when requirements placed on a supporting agency create requirements that must be levied on other agencies. Requirements are prepared using PRD formats in accordance with the standard UDS outline.

Operation Requirements Extract (ORE): An ORE is similar to the PRDE except that it applies to the OR. It relates to the concept where the lead agency must levy requirements on other agencies. In general, basic ORE requirements will be extracted from the user's original OR and may be expanded upon by the lead agency.

2.7   Other Documentation

Program, mission, or test requirements documents must be understandable and stand on their own; however, there is some supporting information that must be documented and related to the requirements, so support may be provided. Examples are antenna patterns, trajectory data, pyrotechnics, range safety procedures, schedules, test operation procedures, security guides, and mission go/no go rules. If this information is documented separately, it must be referenced in the UDS program documentation.

2.8   Draft Documentation Review Conferences

When PI, PRD, and OR drafts are prepared, conferences should be held to discuss the complexity of the support and to consider foreseeable difficulties. These conferences provide the opportunity to initiate program coordination, to discuss security classifications, and to assess support questions. The RA distributes the draft and advises all interested RA and SA personnel when and if they should attend the review conference.

2.9   Document Structure

The UDS provides a building block concept to develop and to present requirements that result from incomplete program objectives to well-defined operational and developmental objectives for the system to be evaluated.

2.9.1   General
Requirements documents are extensions of each other and are used exclusively or in tandem with each other depending on the size and complexity of the program.

2.9.2   Document Outline
The UDS document outline in Appendix B is a common numbering system providing a standard presentation of information and serving as the framework for all documents within the UDS. Format numbers and associated titles are controlled and assigned by the RCC ROG.

The UDS outline is composed of two major groups:

- Formats 1000 - 1999 contain program administrative and technical information.
- Formats 2000 - 6999 contain test/mission operational requirements.

2.9.3   UDS Formats

The UDS formats are structured to provide a definitive area in which to state requirements and specify SA responses. The UDS outline, coupled with pre-defined formats and instructions contained in the UDS handbook, serves as a checklist to prevent pertinent data from being overlooked. **Only those UDS formats that best suit the needs of the particular program, mission, or test being documented should be used.** The UDS documents are not to be limited to the statement of pure requirements or responses. Informational data may be provided as deemed necessary to clarify stated requirements and responses. Descriptive pictures, sketches, or graphics are encouraged. If the information or background material is voluminous, reference to a supplemental document should be considered. Supplemental documentation should be cross-referenced in the UDS document.

2.10   Document Implementation

The UDS is designed to accommodate as many conditions as practical. While it is most desirable to have single level 1 documents (that is, a PI and SC that contain total program information), it is also acceptable to have several PIs and SCs. This latter approach is used when different SAs provide support for unique and unrelated phases of a program, mission, or test. For example, one agency supports engine tests for program "X" while another agency provides in-orbit support for program "X."

The same philosophy applies to level 2 documents. A single PRD and PSP will, wherever practical, contain all program-level information; however, it is acceptable to have multiple PRDs and PSPs as explained above.

The most detailed level of requirements and support is contained in level 3 documents that describe specific requirements and support. The OR/OD documents will be prepared as single or multiple documents as required for effective management at the RAs and SAs.

2.11   Security Classification

The originating agency of a 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 required. 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. Classified extracts will have limited distribution and be subject to the control imposed by their classification. Classified extracts should be cross-referenced in the basic unclassified document.

2.12   Document Revision

A revision is considered to be any information added, deleted, or revised in any section of a UDS document. Revisions may be made either by preparing a completely new document or by submitting the revised information. In any case, users are requested to discuss all proposed revisions with the lead SA. Pen and ink revisions submitted by letter are permissible for small changes; however, the changes should be incorporated into the next revision to the document. The UDS documents will reflect the revision number and date of the revision. Revisions shall be numbered consecutively beginning at 01. It is recommended that the basic document be reissued, incorporating all revisions when the number of revisions causes the document to be unmanageable. Format 1030 - Revision Control and Classification will be used to identify the scope of the revision and shall be transmitted with any revised pages. Format 1030 also provides a historical record of revisions made to the document.

A standard change indicator or the use of the symbol "R" in the right-hand margin to identify revised lines in a format is encouraged. In subsequent revisions of a section, delete all "Rs" applicable to the preceding revision.

2.13   Document Distribution

Each document should contain its own document distribution list (Format 1020). This format lists the agencies or activities to receive the document and the number of copies each should receive. The originator will identify distribution for requirements documents.

Add additional distribution statements and reproduction and destruction notices as information included on the front cover.

2.14   Document Cancellation

The originator notifies the lead SA when a PI, PRD, or OR is to be canceled.

This page intentionally left blank.

CHAPTER 3

REQUESTING AGENCY REQUIREMENTS DOCUMENTATION

3.1 General

Requirements documents PI, PRD, and OR are prepared by the RA according to a schedule negotiated by the lead agency and RA. The requirements for a program, mission, or test are included in a PI, PRD, or OR document, or in combinations as the program, mission, or test size dictate. The initial issue of each document includes the information needed to present the requirements that are known at the time of issue. Emphasis should initially be placed on identifying requirements that call for long-range planning action even though specific use or implementation details may not be known. As more information becomes available, revisions are made to incorporate the additional data. The prime consideration is to ensure the earliest possible receipt of requirement information at the SA. The user is responsible for ensuring that requirements are promptly submitted at the request of the SA and in accordance with scheduled lead times to allow for planning, funding, software development, and construction; that requirements documents reflect all major requirements; that all requirements are necessary to meet the program and mission/test objectives; and that all requirements have been officially approved and signed. The user is also responsible for ensuring that each requirements document contains a Format 1020 - Distribution List and that the list identifies the number of copies needed to fulfill the user organization distribution requirements.

3.2 Requirement Priority Classification

A priority must be defined to evaluate requirements on an overall program, mission, or test basis. The three classifications, defined next, are Mandatory, Required, and Desired.

Mandatory (M): A mandatory classification is the minimum requirement that is essential to achieve program, mission, or test objectives.

Required (R): A required classification is support that would materially aid in achieving all objectives and is necessary for detailed analysis of system performance.

Desired (**D):** A desired classification is any support that can be obtained in addition to the mandatory or required classification.

3.3 Requirements Documentation (PI, PRD, OR)

Requirements documentation is compiled in accordance with the general instructions contained in this handbook and the appended formats.

3.3.1 Program Introduction
The PI is the document that officially introduces a program, mission, or test to an SA and establishes the scope of program activity. Within the defined scope, the user has freedom in planning specific operations in detail.

New program requirements may impose a need for additional tracking coverage, additional data products, different frequencies, or other accommodations not available at the support range. The criteria and qualifications of such requirements should be stressed in the PI. Users with programs involving orbital operations or large weapon systems should consider the program in phases. Phase examples are prelaunch, orbital, recovery, test location, development, and system components. In these cases, the user should identify those requirements that differ and those that are unique to a particular phase. If a particular requirement is program-wide and does not differ, then such a distinction is not necessary.

3.3.2   Program Requirements Document

The PRD, as a detailed program planning document, contains the user's desired support requirements from the SA and may contain supplemental information needed for clarity. The need for a PRD is determined during the analysis of the PI or during early planning meetings and will be stated in the SC. The user should not delay submittal of the PRD because of incomplete knowledge of support requirements. The PRD is normally submitted by the RA according to a schedule negotiated by the lead SA and the user.

3.3.3   Operation Requirements

The OR is a mission-oriented document that describes in detail the program's requirements for each mission, specific test, or series of tests and is prepared by the user. The PRD and OR must be complete documents capable of standing alone. The OR should not reflect new requirements that were not previously stated in the PI and/or PRD.

3.4   Requirements Documentation Lead Time

Lead times for initial documentation may vary considerably from program to program depending on the scope of support needed. Requirements documentation lead times are established through negotiation between the RA and SA. Nominal lead times in years, based on past experience, are presented in the following table.

Nominal Lead Times	
Program Support Requirement	**Lead Time (year)**
New facility construction	3 1/2
Extensive software development or additions to instrumentation (not requiring major facility construction)	2 1/2
Moderate software development or instrumentation additions funded by the user	1
Minor software development or instrumentation improvements	1/2

CHAPTER 4

SUPPORT AGENCY RESPONSE DOCUMENTATION

4.1 General

This chapter pertains specifically to SA documentation. The SA response documents SC, PSP, and OD are prepared by the SA in response to the approved requirements prepared and submitted by the RA. Response documents are revised by the SA when requirements are changed or support is revised.

SAs will assign a document number, establish a suspense date for the publication of the resulting support documentation, notify the various support organizations of the suspense date, and publish requirements document extracts.

4.2 Support Documentation (SC, PSP, OD)

Support documentation is compiled in accordance with the general instructions contained in this handbook and the appended formats.

4.2.1 <u>Statement of Capability</u>
The SC provides a response to the user's PI. The PI, in combination with the approved SC, forms a basic agreement between the RA and the SA and guides the more detailed planning directives to support organizations.

Wherever possible, the SC responds to the PI on an item-for-item basis. Responses may be presented in the general format specified by the UDS when further breakdown is not warranted. In some cases, the SA may respond to the PI on an exception basis rather than with a definitive support plan. Also at the discretion of the SA, commonly supplied items and requirements that can be satisfied with existing capability may be answered in a general all-inclusive statement. The approach taken depends generally on the nature and the purpose of the program.

When the SA capability will not meet the requirements stated in the PI, the SC specifies such restraints and limitations. The SC may also serve to support funding policy directives, provide rough order of magnitude (ROM) cost estimates, and assign existing facilities (such as launch complexes, office space, assembly, and storage areas) available to meet requirements stated in the PI. If the user requires new construction, the SC may provide site approval by the SA.

4.2.2 <u>Program Support Plan</u>
The PSP is the SA's response to the PRD. The initial PSP issue includes an item-for-item response to the program requirements that are known at the time of issue and stated in the PRD.

4.2.3 <u>Operations Directive</u>
The OD is the SA's response to the OR and details each support function, the support equipment, the technical configuration, and the personnel duties involved in supporting the test or operation. The OD may provide management information or technical requirements and guidelines. It is a listing of expected coverage detailing the support posture of the SA for the test covered by the

particular OD. The OD is normally prepared in sufficient detail to furnish instructions for a specific test or test series.

CHAPTER 5

UDS PREPARATION INSTRUCTIONS

5.1 General

The preparation instructions in Section 5.2 provide detailed explanations for each data entry contained within each UDS format and should be followed by both the RA and SA when creating requirements and support documentation.

Not every format is used by both RAs and SAs. The list of formats in Appendix B contains an R to the left of formats that apply only to RAs and an S to the left of formats that apply only to SAs; however, some individual data fields may not apply to either the RA or to the SA. The guide in each instance should be to provide as much data as possible but not to "force-fill" a data entry.

Lastly, by convention, PI and SC documents are limited to the use of formats whose numbers end in "00", for example, 1000, 2200, 5300.

5.2 UDS Format Instructions

5.2.1 <u>Universally Common Entries</u>

In the interest of streamlining this document, this section contains instructions for entries that are shared in common with a vast majority of the formats. Some formats that contain one or more of the following entries require more information than what is covered in this section. Those formats contain additional instructions.

ITEM NO.:
Enter a sequential number, beginning at "01", that identifies each requirement, response, or informational item documented in reference to each format. The item number used for responses to requirements will be the same as that of the corresponding item number appearing in the PRD/OR. The corresponding PRD/OR format number will also be listed for clarification. This may need modification in certain circumstances, especially when combining two ORs into one OD. Also, if there are supplemental SA-generated information items, explain the items on UDS Format 1052 - Special Code Definition.

REQUESTER:
Identify the RA using the code, identified on UDS Format 1052 - Special Code Definition, assigned to the requester of a requirement. Sub-requesters, similarly identified, will be indicated by the use of a slash (/) immediately following the requester code (commas may be used to identify additional requesters, since so many organizations have a slash in their title, e.g. MDA/DTCT). For example, T/DE22 might indicate a requirement established by the National Aeronautics and Space Administration (NASA) Johnson Space Center Flight Requirements Office. Each requester/sub-requester shall be separated by a space. It is recommended that, where possible, either the assigned agency alphabetical code or the agency acronym, shown in the UDS Handbook, Appendix A, be used as standard requester codes.

SUPPLIER:
Identify all suppliers by agency acronym, such as PMRF (Pacific Missile Range Facility), RTS (Reagan Test Site), MDA/DTR (Missile Defense Agency/Directorate, Test Resources), etc. Separate suppliers using a comma, since it is common for suppliers to have slashes in their names.

TEST CODE:
This item is a code that is assigned to a specific test requirement or information item that will identify the various test activities. The test codes are identified on UDS Format 1051 - Test Code Definition. These test codes will be used as a method of correlating support requirements to the test activity involved such that any support requirement referenced to a test code indicates that this support will be required during the particular test program activity.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
Indicate whether each item number submitted is a requirement for support from the SA or is submitted for informational purposes only or requires a response in a supporting document.

REMARKS:
Enter any information that will further explain any entries made.

5.2.2   UDS Format Instructions

FORMAT 1000 - ADMINISTRATIVE

This format is used to enter any administrative information pertaining to the program or mission.

PROGRAM TITLE:
Enter the official title of the program here.

SHORT TITLE:
Enter the official short title here. The short title can be used in all following documents to refer to the program.

RESPONSIBLE AGENCIES & KEY PERSONNEL:
Enter a description of the responsible agencies and the personnel within those agencies who provide support to the program. These personnel should include:

- RA/Project Representative
- Requesting SA/Project Representative
- Contractor/Representative
- Lead SA/Representative

SCOPE AND PURPOSE:
Describe in detail the program's objective and what is involved in accomplishing that objective.

TREATY COMPLIANCE:
Indicate that a competent authority has reviewed the program for applicability under international treaties, such as Strategic Arms Reduction Treaty, Intermediate-Range Nuclear Forces Treaty, Open Skies Treaty, Anti-ballistic Missile Treaty, and Chemical Weapons Convention. Program support requirements resulting from compliance with a treaty should be identified in the appropriate technical section of this requirements document.

ENVIRONMENTAL REQUIREMENTS:
Potential environmental impacts and permitting requirements will be analyzed, evaluated, and documented using the National Environmental Policy Act (NEPA) process. Following the submittal of an appropriate agency environmental analysis document, the host environmental management planning function will determine the necessity for additional environmental evaluation, analysis, and documentation. These actions will result in either a categorical exclusion (CATEX), an Environmental Assessment (EA), or an Environmental Impact Statement (EIS).

PROGRAM IDENTIFICATION INFORMATION:
Provide the following program information.

Beginning Date	Department of Defense (DoD) Element Number
First Test Date	Type of Program
Completion Date	Defense Priority and Allocations System (DPAS) Precedence
Program/Project Number	Priority Number
Contract Number	Program Status

FORMAT 1010 - APPROVAL AUTHORITY

This format is used as an authorization granted by RAs to the SAs for the conduct of operations relevant to the successful accomplishment of a program, mission, or test. The authorization indicates that the information contained in this document levies the official user requirements for support of a given program. It serves as an acceptance of the document by the SAs in recognition of the requirements contained therein. Follow preparation instructions given in Section 5.2.1 for the entry ITEM NO.

PRECEDENCE RATING:
Enter the applicable precedence rating that is assigned to the program.

PRIORITY:
Enter the priority of the program, mission, or test.

INITIATION DATE:
Indicate the date when support is first required. Dates for special facilities or unique instrumentation should be entered in REMARKS.

COMPLETION DATES:
Indicate the date when the program, mission, or test is planned to be completed or when it no longer requires support.

SPONSORING AGENCY:
Enter the military or government organization that has cognizance and prime responsibility for the program.

BASIC CONTRACT NO.:
Enter the basic contract number for the program, where applicable.

AUTHORITY (REFERENCES):
List the basic document that constitutes authority for conduct of the program.

REMARKS:
In addition to the instructions in Section 5.2.1, enter the reason for the assigned security classification and any special handling requirements. List other contractors and their respective contract numbers when necessary. Enter, if necessary, general information pertinent to the applicability and authorization of the document.

APPROVAL:
Use this table for approval by the RAs of the needs submitted. Enter the name, rank (if applicable), title, agency, phone number, and date. Leave space for signatures.

FORMAT 1020 - DISTRIBUTION LIST

This format is used as a distribution list for this document and for both new issues and revisions.

ORGANIZATION ADDRESS:
Enter the title of the organization, address (include the post office zip code plus 4 digits), addressee's name and title, email address, and applicable office symbol for each organization that wants a copy. Make additional entries as necessary to ensure distribution to the appropriate recipients.

NUMBER OF COPIES:
Enter the number of copies the organization will receive.

FORMAT 1030 - REVISION CONTROL AND CLASSIFICATION

This format is used as a means of revision control in an unclassified or classified document. Classified entries will not be included in the basic unclassified document. Appropriate referenced pages should be included in the basic unclassified document where the classified information would appear. The classified pages then appear in a classified addendum

to the basic document. Care should be exercised to ensure that the complete title and other data do not render the collective pages classified under operations security (OPSEC) guidelines.

All revisions, both classified and unclassified, will require Format 1010 to show approval of the revisions. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Enter a description of the update, including its purpose.

UDS SECTION:
List each UDS format used in the document by its four-digit number.

ITEM:
For automated documentation systems, indicate the item numbers within the sections.

PAGE:
For manual documentation systems, enter the page number for each section.

CLASS:
Enter the classification (TS - Top Secret, S - Secret, or C - Confidential) required by the security guides beside each applicable section and its page number in this column.

CHANGE ##:
List pages affected by changes only. Most documents are nearing 500 pages now and listing every page makes this section unusable.

DATE:
Enter the date the change was approved and becomes effective.

REMARKS:
In addition to the instructions in Section 5.2.1, this entry will have any amplifying information about change pages.
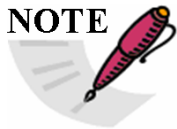
NOTE	As with all UDS documentation, the revision control format/section should be tailored to user/support range requirements. In Format 1030 it is encouraged that some form of synopsis of change be provided.

FORMAT 1031 - INDEX

This format is used to present the index of sections used in the document (not used in PI/SC). This list should be used as a checklist to ensure all pertinent information or requirements are documented. Only those UDS formats that are applicable need be used. The list is preprinted for reference, but when an "X" is entered opposite the format used, this format serves as an outline of contents for the document.

Enter an "X" opposite those UDS format numbers used in the document.

FORMAT 1040 - SECURITY INFORMATION

This format is used to list the security classification of classified data/information pertaining to the program, mission, or test. This format is used by the project office and not by the contractors. It will serve as a security guide for the program for those that handle data, drawings, and equipment. A fill-in table (Appendix C) is provided for the inputs. Use only that portion of the table that applies to each program. A narrative-type input can be substituted for the table inputs where required. In addition to the table, fill out all entries A-FF for which data are available. If the table is not the appropriate choice for the program, fill out the narrative-style entries listed under the table in Appendix C, following preparation instructions in Section 5.2.1 for the entries REQUESTER and REMARKS and the preparation instructions below for the rest of the entries.

INFORMATION:
Enter a brief description of the items described in the DATA PRODUCTS AND HARDWARE SECURITY CLASSIFICATION table.

SECURITY GUIDES AND DOCUMENTS:
List the various security guides and documents used to establish the classification and to control the documentation of the information elements listed in the PROGRAM/MISSION ELEMENTS entry.

PROGRAM/MISSION ELEMENTS:
Identify program/mission information elements for which security classification is required.

SECURITY CLASSIFICATION:
Enter the security classification of the program/mission elements identified in the PROGRAM/MISSION ELEMENTS entry. Designators used will be in accordance with instructions in the PROGRAM/MISSION ELEMENTS entry.

The following security classification symbols will be used throughout the document:

TS	TOP SECRET	C	CONFIDENTIAL
S	SECRET	U	UNCLASSIFIED

Special Warning Designators

RD	RESTRICTED DATA
CNWDI	CRITICAL NUCLEAR WEAPON DESIGN INFORMATION

SAR   SPECIAL ACCESS REQUIRED

CLASSIFICATION AUTHORITY:
Identify the authority that issued the classification for the item in question.

DECLASS DATE:
Identify the date, if available, the classification authority listed as the date on which the item is declassified.

SIGNATURE:
Have a representative of the classification authority sign this entry.

NAME:
List the name of the signatory.

TITLE:
List the title of the signatory.

AGENCY:
List the agency the signatory represents. This should be the same as the CLASSIFICATION AUTHORITY entry above.

DATE:
Enter the date on which the classification authority representative signed the format.

FORMAT 1041 - FACILITY CLEARANCE INFORMATION

        This format is used by the RA to list those nongovernment agencies that are entitled to receive classified range material, the clearance possessed by that agency, the agency that granted the clearance, and the degree of safeguarding ability that the nongovernment agency has. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

FACILITY:
Enter the full name of the nongovernment agency facility to which the classified material is to be forwarded.

ADDRESS:
Enter the address of the agency involved.

CAGE CODE:
Enter the cage code for the nongovernment facilities to which the classified material is to be sent.

FACILITY CLEARANCE:
Enter the facility clearance and cage number of the nongovernment agency concerned.

GRANTING AGENCY:
Enter the name of the government agency granting the facility clearance and the date the clearance was granted or last renewed.

SAFEGUARDING ABILITY:
Enter the degree of capability the agency has for storing and safeguarding classified material.

AUTHORIZED ACCESS TO:
Enter the level of the material the agency is authorized to access based on the Industrial Security Facilities Database (ISDF) (DoD Defense Security Service [DSS]) website.

FORMAT 1042 - OPERATIONS SECURITY (OPSEC) AND SECURITY

Follow instructions in Section 5.2.1 for the entry REQUESTER.

ITEM:
Describe the item or event for which the OPSEC and Security reviews are being performed.

INFORMATION:
Fill out the OPSEC and Security checklist and provide any additional information. The following text describes the sections of the checklist.

Part I.　　PROGRAM IDENTIFICATION

A.　　The intent of this paragraph is to address OPSEC/Security issues that must be considered when preparing to support test and training programs. Additional information on recommended OPSEC practices is provided in the RCC document Operations Security Guide (version concurrent with publication date of UDS 501-12: 600-11). Users of a member range of the Major Range and Test Facility Base (MRTFB) are required to provide an OPSEC/Security analysis with submittal of the Level I (PI) or Level II (PRD) documentation, as appropriate. See the Operations Security (OPSEC) and Security checklist in Appendix D to identify particular program needs and requirements. Completion of the checklist is required from all users (DoD, NASA, commercial, etc.) requiring range support whether classified or unclassified. The checklist is a "living" document and used throughout the test/training life cycle. The checklist is not all-inclusive and may be modified to fit the needs of both the user and the range.

The subject matter below provides a more detailed explanation of the type of information that is required to successfully meet the required objectives of the program. Convening of a security working group to address the application/implementation of OPSEC and security requirements to operations is of paramount importance and mandatory for program success. As the range user's requirements are further refined from Level II to Level III UDS, the security working group will play a more important role in ensuring OPSEC and security requirements continue to be understood, coordinated, and implemented.

B.   UDS Paragraph 1040 – SECURITY INFORMATION

1.   SECURITY GUIDES AND DOCUMENT: Use this section to identify all security documentation and references. Note: List only those guides and plans that apply specifically to the range.

2.   CONFIRMATION – PROGRAM SECURITY MANAGER: At Level I UDS or no later than Level II PRD, a point of contact (POC) must be identified who will be acting as the range user's official authority to address OPSEC and security issues. This POC or designated alternate is a key member of the security working group established at the range.

3.   The range user's POC for OPSEC and security will be responsible for:

a.   Ensuring the critical information or critical program information (as applicable) reflects changing mission and/or operational requirements based on range and sponsor support;

b.   Providing classification interpretation/guidance between the Original Classification Authority (OCA) and the most current executive order (EO) covering the process of identifying and protecting classified information (at the time of publication of UDS 501-12, EO13526);

c.   Providing any waivers that affect mission support configuration and identify any applicable security classification guide (SCG) or information protection guide (IPG) section;

d.   Providing copies of Designated Approval Authority (DAA) Certification and Accreditation (C&A) documentation based on the applicable guidance (refer to Part IV);

e.   Ensuring the current SCGs/IPGs and plans are available;

f.   Acting as the range user/program POC to review data items marked "Protect as Secret" for classification determination;

g.   Completing the OPSEC and security checklist;

h.   Developing the site-specific OPSEC plan;

i.   Identifying/developing foreign national visit requirements:

(1)   Delegation of Disclosure letter describing release of information requirements;

(2)   Who will escort;

(3)   How they will be escorted;

(4) Length of visit;

(5) Limitations;

(6) Escort briefings;

(7) Export control requirements.

Part II.   OPSEC CONCERNS

A.   Program Protection Plan (PPP)/OPSEC Plan

1.   The PPP is intended to protect the program's capability to support the U.S. warfighter and provides a baseline of required protection. It is paramount that critical information and critical system resources be identified in a timely manner to ensure protection from program initiation through execution.

2.   The range user must submit a PPP covering all government-protected resources whether commercial or government. A PPP should be submitted with Level I UDS (but no later than submittal of the PRD) and include threat and vulnerability assessments, anti-tamper information, system security and vulnerabilities, international requirements/restrictions including foreign disclosure, counter-intelligence threat assessments, protected cost information, technology assessment and control mechanisms, and test protection. The counter-intelligence support plan should be included in the PPP. Note that some of these documents may become classified due to identification of limiting factors or vulnerabilities that could be exploited by an adversary.

3.   The range user's OPSEC plan is to be submitted no later than Level II UDS. A site-specific annex to the user's OPSEC plan can be used to meet this requirement.

B.   Information Protection

1.   Correct handling markings must be applied to prevent unauthorized or inadvertent disclosure of a program's critical information during the pre- and post-operational planning phases.

   a.   For Official Use Only: For Sensitive But Unclassified, mark Level I, Level II, and Level III UDS at a minimum of "For Official Use Only".

   b.   Export Control Markings: UDS marked with the export control markings at Level I UDS must identify the specific information claimed to be Export Control by physically marking the specific items.

   c.   Distribution Statements: Mark the UDS beginning at Level I with the appropriate distribution statement.

   d.   Proprietary Information: Any UDS marked as Proprietary Information must identify the specific information claimed to be proprietary. If it becomes

necessary to relay proprietary information in the UDS, use a supplement to relay the information.

Part III.   COMMUNICATION SECURITY (COMSEC) /EMISSION SECURITY (EMSEC) CONCERNS

A.   The range user must identify any COMSEC requirements by Level II UDS and their sponsor.

B.   An EMSEC certification is required for all Classified RED systems that will be used in a stand-alone mode or networked to a range system. The EMSEC assessment will be performed in accordance with the applicable EMSEC guidance documents and the assessment must be accomplished when the final facility/site location has been decided, no later than Level II UDS (refer to Part IV, paragraph B). The EMSEC assessment is required to obtain a final DAA Approval to Operate (ATO).

Part IV.   COMPUTER SECURITY CONCERNS

A.   All computer systems must have a C&A package approved by the range user's DAA prior to use of any stand-alone system or connection to a networked system. Format must follow the National IA Certification and Accreditation Process (NIACAP) in accordance with NSTISSI No. 1000 or DoD IA Certification and Accreditation Process (DIACAP) Guidance, Jul 06, in accordance with the Federal Information Security Management Act (FISMA), DoD Directive (DoDD) 8500.1, and DoDD 8100.1 and supersedes DoD Instruction (DoDI) 5200.40 and DoD 8510.1-M. The certifier's ATO fulfills the DoD 8500.1/8500.2 requirements for information assurance controls.

B.   At UDS Level II (PRD), the C&A authority and ATO with required documentation is submitted to the range certifier for an Approval to Connect (ATC).

C.   A computer system is any telecommunications and/or computer related equipment or interconnected system or subsystems of equipment that is used in the acquisition, storage, manipulation, management, movement, control, display, switching interchange, transmission, or reception of voice and/or data, and includes software, firmware, and hardware. A computer system may be a stand-alone system or may consist of several interconnected systems. Personal computers, microcomputers, minicomputers, multi-user systems, all standard multi-user small computer requirements contract systems, text processors, word processors, intelligent typewriters, and workstations are examples of computer systems.

Part V.   INDUSTRIAL SECURITY CONCERNS

A.   Defense contractors performing on classified government contracts fall into two categories: cleared facilities and long-term visitor groups. The level(s) of involvement will vary with each contract. The Department of Defense (DD) Form 254, Contract Security Classification Specification, is the determining factor.

1. An evaluation of National Industrial Security Program (NISP) requirements and involvement must be made at Level I UDS; however, the evolution of the program may require another review no later than Level II (PRD).

2. Contracts requiring the contractor to receive, store, and/or generate classified information or store classified hardware will be categorized as a cleared facility and conform substantially to the National Industrial Security Program Operating Manual (NISPOM). The contractor must also be compliant with the range's security directives.

3. Long-term visitor groups perform under the direction of their base government sponsor, and while portions of the NISPOM will apply, they generally are compliant with the sponsor's operating instructions.

Part VI.   MISCELLANEOUS CONCERNS

A.   Foreign National Visitors: Identification of foreign national involvement, whether short-term or long-term, is required at UDS Level I. Appropriate staff coordination and approval is required for all foreign visit requests. This process applies to all foreign visits regardless of the origin of the request or the areas visited. The Delegation of Disclosure letter must be provided for each visit.

Part VII.   RANGE SPECIFIC REQUIREMENTS

Enter any requirements specific to the ranges involved in the program.

Part VIII. REMARKS

Add any information here that supports the OPSEC and Security checklist.

FORMAT 1050 - ABBREVIATIONS/ACRONYMS

This format is used to define any word or abbreviation that, because of limited use or technical affiliation, may not be readily understood. Any word used in this document that cannot be found by a spell check program before words are added to the dictionary should be included; also, standard words with special meaning pertaining to this document should be included. A fill-in-formatted table is provided for your inputs.

WORD/ABBREVIATION & DEFINITION:
List in the ACRYN column the words, abbreviations, or acronyms used in the document. List the definitions for those words, abbreviations, or acronyms in the DEFINITION column.

FORMAT 1051 - TEST CODE DEFINITION

This format is used to define the test codes that will be used throughout the document. These test codes will identify the various test activities during the course of the program. These

test codes will be used as a method of correlating support requirements to the test activity involved such that any support requirement referenced to a test code indicates that this support will be required during the particular test program activity. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

TEST CODE:
Enter a test code letter (A, B, C...) for each portion of the test program that has similar support requirements. This apportionment might separate test series, development phases of the program, time periods within the program, variations in equipment being used, or any other meaningful breakout of the program with regard to support requirements. Double letters may be used to further break down the single-letter test code (such as AA, AB, AC..., within A).

TEST CODE DESCRIPTION:
Enter a short title to identify the test series or phase of the program to be conducted. Examples of test series, each of which might be assigned a separate test code, are launch, dry run, static firing, simulated flight, instrumentation test, and recoveries.

The test code could also be used to designate various time intervals or development phases of the program. Examples of these phases might be pad buildup, launch phase, or any other phase that would divide the program with regard to support requirements. Still another use of the test code would be to designate various types or groups of similar test series, such as demonstration and shakedown operations or follow-on training launches. Different missions or series of missions that are covered in the same PRD/OR could thus be designated by different test codes.

FORMAT 1052 - SPECIAL CODE DEFINITION

This format is used to define any special codes that will be used throughout the document, such as item number supplemental definition, requester, or supplier.

ITEM NO.:
In addition to the instructions in Section 5.2.1, enter an explanation of the basic elements, the method of constructing the code, and any code number-letter designators that are used in the document (see UDS Handbook, Appendix A).

FORMAT 1060 - KEY TECHNICAL PERSONNEL

This format is used to list the technical personnel who may be contacted regarding matters connected with the program or concerning information contained in the document. They are to be listed in alphabetical order by last name in the table provided (Appendix C). Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

NAME/TITLE:
Enter last name, first name, and middle initial. Provide military rank and branch of service or the person's title if applicable.

ADDRESS (With Office Symbols):
Enter the organization and address of the person listed. Include complete zip code and the complete mail address if applicable.

PHONE FAX CELL:
Enter the person's telephone number, fax number, and cell phone number in the appropriate locations.

EMAIL:
Enter the complete email address.

FORMAT 1070 - TECHNICAL REFERENCES

This format is used to list sources of supplemental information concerning the program or to provide additional background for specific requirements listed on individual UDS formats and their corresponding pages of the document. References cannot be used for the purpose of levying requirements, but they may be used to explain details that are too lengthy or complicated to be incorporated into the document. A fill-in table is provided to enter the required information (Appendix C). Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Enter a description about the technical references listed in the table.

UDS SECT.:
Indicate the UDS sections where the technical reference is used.

ITEM NO.:
List the item number of the requirement to which the reference pertains, if applicable. List the page numbers to which the reference pertains, if applicable.

TITLE:
Enter the title of the reference.

PUBLISHER/SOURCE:
Enter the publisher and date of each referenced document and the organization and its complete address from which copies of the reference may be obtained.

CLASS:
Enter the security classification of each reference.

FORMAT 1100 - PROGRAM DESCRIPTION

This format is used to provide a general description of the entire program. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, give a general description of the overall program. A brief description of each test or category of tests may be included. When a specific test or category of tests may require unique support, the test should be described.

FORMAT 1110 - EXPERIMENTS DESCRIPTION

This format is used to provide a general description of the various experiments assigned to the program. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter a general description of the experiments assigned to the overall program. A brief description of each experiment or category of experiments may be included. Identify the agency to which a particular experiment is assigned for support. Include the type of +-data resulting from each experiment, such as tape, film, material samples, telemetry, flight log, and voice recordings.

FORMAT 1120 - SYSTEM FUNCTIONAL DESCRIPTION

This format is used to provide the SA with an insight into the basic philosophy that governs the system design, fabrication, test program, and ultimate use. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

SUBSYSTEM/MAJOR COMPONENT:
List the subsystems and major components of the final operational system. These should correspond to the functional blocks illustrated in the SYSTEM FUNCTIONAL BLOCK DIAGRAM entry.

FUNCTIONAL CHARACTERISTICS:
Enter a brief description of functional characteristics of each major component and subsystem.

SYSTEM FUNCTIONAL BLOCK DIAGRAM:
Using block diagram methods, indicate the functional relationship between subsystems and major components of the complete operational weapon system. Such items as the target, target acquisition unit, target data processor, guidance system, control mechanisms, and necessary support supplied may be considered as major functional components. Also include and note items considered to be unusual.

FORMAT 1130 - TEST DESCRIPTION

This format is used to provide a detailed description of the mission or test. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, give a detailed description of the mission or test. Each phase of the test and test objectives should be identified and described.

LOCATION:
This defines where the test will be conducted.

DURATION TIME (HRS):
This is the exact time in hours of the actual test when the SA is collecting data for the program.

SUPPORT TIME (HRS):
This is the time in hours when the SA is manned to start the events through the complete wrap-up of all support.

REMARKS:
In addition to the instructions in Section 5.2.1, enter other amplifying information needed to clarify the test description.

FORMAT 1140 - TEST SCHEDULE

This format is used to describe the schedule of the test series events or activities that will require support during the course of the test program or mission. The scheduling (forecast) information will be used by the SA to coordinate these activities with other test program activities on the range. A fill-in table is provided for this item (Appendix C). Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TEST OPERATIONS:
Fill out the following columns of the table.

Test Series:
Enter the title of principal test series or operations to be conducted.

Activity:
Identify the agency requesting test and/or range services.

Range HRs/Test:
Enter the number of support hours required for each of the test events listed in the Test Series table column.

No. per QTR.:
Enter the last two digits of the applicable calendar year (CY) or fiscal year (FY) in the column heading. For each test series entry, enter the planned number of tests per quarter (QTR).

FORMAT 1300 - TEST VEHICLE SYSTEM INFORMATION

This format is used to describe the entire test vehicle system item/spacecraft/payload to be tested. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REQUESTER.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter a brief description of the units to be tested. Provide identification of each unit.

FORMAT 1305 – SYSTEM-LEVEL TEST INFORMATION/PARTICIPANTS

This format is used to describe the system-level test to be performed and provide a list of participants in each test. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REQUESTER.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter a brief description of the system-level test with the participants.

FORMAT 1310 - TEST VEHICLE SYSTEM DESCRIPTIONS

This format is used to show the external characteristics of the test vehicle system. Include such items as antenna locations, paint patterns, and camera targets. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REQUESTER.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter the following information. Provide a drawing of the test vehicle system in the space provided, showing basic dimensions of length, station number of all separation planes, width, and body diameter. Special features should also be shown, such as paint patterns, characteristic markings, and station number locations of antennas, stages, and other pertinent components. All station numbers of the test vehicle system must be referenced to a common point.

FORMAT 1311 - TEST VEHICLE SYSTEM CHARACTERISTICS

This format is used to enter test vehicle system characteristics. Units of measure must be identified. A fill-in form is provided for this information (Appendix C). Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a description of the test vehicle in the table below.

STAGE-MODULE NOMENCLATURE:
Identify the stage module.

PHYSICAL DIMENSIONS:
Enter the stage module dimensions as requested.

WEIGHTS:
Enter the weight data as requested. List the weight of the propellant or fuel. If the propellant is mixed on-board prior to combustion, list the fuel and the oxidizer. Gases consist of all gases used for propulsion, control, and pressurization. Miscellaneous items are those too numerous to mention and those not covered in other listings in this entry. In burnout (BO), list BO weight per stage.

PROPULSION SYSTEM:
List type as liquid, solid, or nuclear. The specific impulse (Isp) value will be assumed at sea level (SL) unless otherwise noted in the applicable entry.

PROPELLANTS AND GASES:
Identify the type (name or designation) of propellants and gases used in each stage or phase. List the propellant or fuel. If the propellant is mixed prior to combustion, list the fuel and the oxidizer. List the pressure of the larger-quantity gaseous item and identify the item in each entry.

PERFORMANCE:
Enter the unit of measure that best fits the flight particulars. Normally, range is in nautical miles, altitude is in feet, and velocity is in feet per second. List the more applicable or appropriate time items per stage and identify, in the entry, each value used, that is, BO, Separation (SEP), and Impact (IMP).

NOTES:
Enter notes and pertinent operational characteristics or capabilities of the system being tested.

FORMAT 1320 - TEST VEHICLE SYSTEM ORDNANCE ITEMS DESCRIPTION

This format is used to describe the test vehicle system ordnance items. These data provide the SA with knowledge of electrically-initiated ordnance items and RA's radio frequency (RF) radiation sources. Thus, precautions can be taken to prevent accidental ignition of electrically-initiated ordnance items. Reference any applicable technical documents,

handbooks, notes, and prints on this format and describe them on Format 1070. A fill-in table is provided for this item.

PURPOSE:
Enter the purpose of the device (that is, destruct, separation, ignition, or impact data).

TYPE/QUANTITY:
Enter the type and quantity of the device (for example, 2 squibs, 5 explosive bolts, or 2 solid propellants).

STAGE:
Enter the location of the device using the stage number.

MANUFACTURER'S PART NUMBER:
Enter the manufacturer and part number of each device and drawings if applicable.

INSTALLATION:
Enter the ordnance item installation information using the following two-letter code:

First Letter - Installation

    F - Factory   P - Pad   I - Industrial Area

Second Letter - Agency Doing Installation

    T - Test Agency   S - Support Agency

LEADS:
Enter "yes" if the device has external leads prior to installation. Enter "no" if the device is a plug-in type with no external leads prior to installation.

LEAD LENGTH:
Enter "yes" if leads are shielded or "no" if leads are unshielded. If both shielded and unshielded leads are used, enter "yes" and "no" on separate lines. Enter lengths as specified for the remaining lead length entries. Include the unit of measure used.

CURRENT AMPS:
Enter the maximum current (in amperes) that, when passed through the device, will fire no more than one device per thousand. Enter the minimum current that is required to fire normally-functioning devices of this type. Enter the firing current to be used in this installation.

BRIDGE:
Enter the bridge material. Use BW for bridge wire, EBW for exploding bridge wire, or C for carbon. Enter the maximum and minimum impedance data.

CLASS:

Enter the Department of Transportation (DOT) class number of the ordnance item as described in the applicable ordnance safety manual used on the program.

RF SAFE:
Enter an "S" only when the ordnance device is safe for handling and installation in the radiation environment described in applicable regulations of the launch range.

REMARKS:
In addition to the instructions in Section 5.2.1, enter any information that is related to the safe handling of devices and that may be helpful in the prevention of accidental firing.

FORMAT 1330 - TEST VEHICLE SYSTEM FLAME PLASMA INFORMATION

This format is used to describe the test vehicle system item's flame plasma model of the exhaust plume. The data on this format will be employed by SAs to evaluate the interference the exhaust plume produces with the propagation of electromagnetic signals to and from the test vehicle system item to determine the degree of coverage that can be provided by range instrumentation. The flame plasma model will be used to compute attenuation and phase shift at various frequencies and for the aspect angles encountered in powered flight. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REQUESTER.

INFORMATION:
Enter a description of the test vehicle system and the flame plasma being recorded.

MODEL: ELECTRON DENSITY ( ) COLLISION FREQUENCY ( ):
Both electron density and collision frequency contours are required for each stage. Check which applies.

STAGE:
Enter the stage for which the model applies. One model for each test vehicle system item stage is required. For the first stage, the model should apply to the plume structure just prior to the beginning of tail off (or separation, for a test vehicle system item designed without tail off). For the second and higher stages, the model should apply to conditions at a time in the middle of the burning period.

ALTITUDE:
Enter the altitude or range of altitudes for which the model applies.

PLANE: PITCH ( ) YAW ( ):
Enter the plane for which the model applies. If applicable to both planes, check both pitch and yaw.

EXIT PLANE PARAMETERS:
Enter the average value of the exit plane electron density and exit plane collision frequency and indicate whether the values are experimental or theoretical. For stages employing thrust vector

control (TVC) by fluid injection, provide the electron density and collision frequency values for both TVC ON and TVC OFF.

FLAME PLASMA MODEL:
Draw contour lines of constant electron density for levels of 10 to the powers of 7, 8, 9 ... up to the highest level that applies. Also show contours of constant collision frequency (electron collision frequency for momentum transfer) up to the highest level that applies. Each contour is to represent the locus of points for which the electron density (or collision frequency) has the value indicated.

The scale factor shall be indicated and should be suitably chosen for each stage so as to approximately fill the page for the 10^7 contour.

The models should be derived from gas dynamic and chemical kinetic considerations. For multiple nozzles, an equivalent single nozzle may be used. Where available, provide experimentally-determined values of exit plane electron and collision frequency, by means of the usual two-frequency attenuation method.

Units of measure must be identified where applicable.

FORMAT 1340 - TEST VEHICLE SYSTEM REENTRY PLASMA INFORMATION

This format is used to provide a description of the vehicle reentry plasma effects. Follow preparation instructions in for the entry ITEM NO.

INFORMATION:
Enter a brief description of the vehicle reentry plasma. Provide a description of the effects reentry plasma will have on any of the applicable systems.

FORMAT 1400 - TEST VEHICLE INSTRUMENTATION SYSTEMS

This format is to be used to provide information of a general nature about the instrumentation carried aboard the vehicle/test item/spacecraft/watercraft. Follow preparation instructions in for the entry ITEM NO.

INFORMATION:
Provide, as necessary, information of a general nature concerning on-board instrumentation not contained elsewhere in the document and that will aid the SA in understanding the program/mission. Information about telemetry system attributes will be provided in accordance with the latest edition of Inter-Range Instrumentation Group (IRIG) Standard 106, Telemetry Standards, chapter 9, Telemetry Attributes Transfer Standard (TMATS).

FORMAT 1405 - TEST VEHICLE INSTRUMENTATION FREQUENCY SUMMARY

This format is used to present a consolidated list of all frequencies that support requirements in the document. This list serves as a summary and is not to be considered as a request for frequency authorization. Requests for specific frequencies requiring protection also will be documented on Format 3420. Use the Instrumentation Frequency Summary table at the end of Appendix C to provide this information. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REMARKS.

INFORMATION:
Provide a description of the test vehicle instrumentation, including any information not included in the table in Appendix C.

FREQUENCY (MHz):
List the transmitted and received frequency and state units in measurements, such as megahertz (MHz) or kilohertz (kHz).

EMISSION CHARACTERISTICS:
List the type of emission (for instance, amplitude modulation [AM], frequency modulation [FM], continuous wave [CW], or pulse), bandwidth in kHz, and power output (average and peak), as the case may be. Use current World Administrative Radio Conference (WARC) bandwidth and emission designators as required.

PURPOSE:
State the purpose for which the frequency is required: air/ground voice, air/ground telemetry, point-to-point voice, or telemetry receivers.

GUARD BAND:
State the desired guard band.

TIME:
Enter the estimated agency time in hours per test that the frequency will be used.

LOCATION:
List the location of the RF transmitter/receiver whose frequencies are listed in the FREQUENCY (MHz) entry above.

FORMAT 1410 - TEST VEHICLE METRIC SYSTEMS DESCRIPTION

This format is used to describe the operation of all test vehicle, system item, spacecraft, underwater, and/or payload metric tracking systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a general description of all test unit metric or underwater tracking systems, including details of subsystems with their location and function. Provide also an operational description to

clarify the operation of each metric or underwater tracking system, including system diagrams or drawings if applicable.

FORMAT 1411 - TEST VEHICLE METRIC TRANSPONDER CHARACTERISTICS

This format is prepared by the RA to provide the SAs with the information to evaluate the compatibility of the test vehicle system item/spacecraft/payload transponder, beacon, or pinger system with range instrumentation for each transponder, beacon, or pinger. Use the Test Vehicle Metric Transponder Characteristics table at the end of Appendix C to provide this information. The following instructions cover sections of the table.

GENERAL INFORMATION:
Enter a description of the test vehicle metric transponder.

TRANSMITTER CHARACTERISTICS:
Enter the data required. Indicate measurement units where necessary. Indicate calibration requirements and desired accuracies.

The information required by the spectrum analysis reports may be required for certain support organizations and should be provided in accordance with applicable SA specifications.

Transmitting systems that require extensive periods of RF checkout time will be required to be equipped with a closed-loop or non-radiating checkout device.

REMARKS:
Enter any remarks that will further explain any of the previous entries.

RECEIVER CHARACTERISTICS:
Enter the data required. Indicate measurement units where necessary.

REMARKS:
Enter any remarks that will further explain any of the previous entries.

ANTENNA CHARACTERISTICS:
Enter the information as specified. Antenna azimuth should be given from true north when the test unit is in a launch position.

If maximum gain (in decibels [dB]) with respect to isotropic (dB) gain is greater than 12 dB, indicate main lobe beam width in elevation and azimuth at the 3-dB points in REMARKS.

The power delivered to antenna termination is the same as that of the transmitter power, less the transmission system losses.

Check the applicable entry and submit antenna patterns in accordance with applicable directives of the support range. SAs requiring antenna patterns in other formats should acquire the data

through their normal channels. Phasing networks and couplers associated with antenna arrays are considered part of the antenna system. Losses in these elements should be included in the antenna pattern as inherent in the pattern measurement.

If separate antennas are used to transmit and to receive, submit two sets of format pages, one for each antenna system.

The information required by transmitter and antenna characteristics, spectrum analysis reports, and antenna patterns may be required for certain support organizations and should be provided in accordance with applicable SA specifications.

REMARKS:
Enter any remarks that will further explain any of the previous entries.

FORMAT 1412 - TEST VEHICLE METRIC ANTENNA SYSTEMS

This format is used to diagram the test vehicle system item/spacecraft/payload metric tracking antenna systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a block diagram/drawing/picture of the antenna system including module number, cable numbers, and schematic numbers, as applicable. A cross section drawing showing the test unit antenna location should be included.

FORMAT 1415 - TEST VEHICLE GLOBAL POSITIONING SYSTEM (GPS) DESCRIPTION

This format is used to describe the operation of the test vehicle system item/spacecraft/ payload GPS systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide the proposed or existing system functional design. Indicate the location of the system by stage and module.

FORMAT 1416 - TEST VEHICLE GPS ANTENNA SYSTEMS

This format is used to diagram the test vehicle system item/spacecraft/payload GPS tracking antenna systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:

Provide a block diagram of the antenna system, including module number, cable numbers, and schematic numbers, as applicable. A cross section drawing showing the test unit antenna location should be included.

FORMAT 1420 - TEST VEHICLE TELEMETRY SYSTEM DESCRIPTION

This format is used to describe the operation of the test vehicle system item/spacecraft/ payload telemetry systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a general description of all test unit telemetry systems, including details of subsystems with their location and function. Provide also an operational description to clarify the operation of each telemetry system. Telemetry system attributes information will be provided in accordance with the latest edition of IRIG Standard 106, Telemetry Standards, chapter 9, Telemetry Attributes Transfer Standard (TMATS).

FORMAT 1421 - TEST VEHICLE TELEMETRY TRANSMITTER CHARACTERISTICS

This format is used by the SA to evaluate the compatibility of the test vehicle system unit/spacecraft/payload telemetry systems with range instrumentation. Use the Test Vehicle Telemetry Transmitter Characteristics table at the end of Appendix C to provide this information. Use a separate column for telemetry transmitting systems with different characteristics. If applicable, provide five copies of the spectrum analysis report and five copies of the spectrum response report to the SA. Quantitative data furnished on this format should be measured values after nominal warm-up, where applicable. The data source of unmeasured values should be indicated by a footnote. Use the cells labeled REMARKS to provide any additional information for the section of the table immediately preceding.

GENERAL INFORMATION:
Enter the data requested. Include details on nonconformance to RCC standards.

TRANSMITTER CHARACTERISTICS:
Enter the data requested to describe the transmitter characteristics listed on this format down through the item entitled Pulse Code Modulation (PCM) Filtering Before Transmission. The spectrum analysis report number information requested is mandatory and should be provided in accordance with the applicable SA specifications. The range periodically publishes a list of equipment for which spectrum analysis requirements have been met. If the model number of the transmitter is identical to one listed as satisfactorily documented, the spectrum analysis report number information needs to be completed as appropriate.

ANTENNA SYSTEM CHARACTERISTICS:

As an aid, refer to the UDS section/item number describing the circuits and component description of the antenna system. To complete the antenna pattern data entry form, submit antenna patterns in accordance with applicable directives of the support range. SAs requiring antenna patterns in other formats should acquire the data through their normal channels. Phasing networks and couplers associated with antenna arrays are considered part of the antenna system. Losses in these elements should be included in the antenna pattern as inherent in the pattern measurement.

If separate antennas are used to transmit and to receive, submit two format pages, one format for each antenna system.

If a spectrum analysis report is not available, the SA may perform the spectrum analysis. Submit a request to the SA referencing the UDS document containing this UDS format.

If required, an RF spectrum analysis report for a transmitter will consist of such items as:

- Actual measurements of harmonic and spurious outputs, including all signals greater than 60 dB down from the center frequency signal. Frequencies to be investigated should be in the band from 0.15 to 10,000 MHz per second.
- Power output curves with respect to power and frequency.
- Measured frequency stability in actual or simulated environments.
- Any other measurements that would assist in assessing the interference-generating capability while operating in the transmitter-receiver system. If a military standard (MIL-STD) is available to help clarify this information, identify the MIL-STD and which portion or portions.

LINK FREQUENCY (MHz):
Enter the link frequency in MHz.

PCM DATA:
For PCM fill in the appropriate values.

FORMAT 1422 - TEST VEHICLE TELEMETRY ANTENNA SYSTEMS

This format is used to diagram the test vehicle system item/spacecraft/payload telemetry antenna system. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a block diagram of the test unit antenna system, including module number, cable numbers, and schematic numbers as applicable. A cross section drawing showing the antenna location on the test unit should be included.

FORMAT 1424 - TEST VEHICLE TELEMETRY ANALOG DESCRIPTION

This format is used to provide a listing of the continuous and commutated channels of the various telemetry links on the test vehicle system item/spacecraft/payload. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a general description of the vehicle telemetry analog sign information.

RCC ( ) NON-RCC ( ):
Check the appropriate box. If the characteristics vary from the RCC standards, describe the variations in REMARKS.

LINK:
Enter the link number, frequency, and modulation (that is, Phase Modulation/Frequency Modulation [PM/FM], Pulse Duration Modulation/Frequency Modulation [PDM/FM], or Pulse Amplitude Modulation/Frequency Modulation [PAM/FM]).

CHANNEL:
Identify each channel by number. Enter the subcarrier oscillator (SCO) frequency in kHz (if non-RCC). List the deviation in kHz from the center frequency (if non-RCC) of the SCO. Identify if the channel contains continuous information.

SEGMENTS AND RATE:
If the channel contains commutated data, enter the number of segments and sampling rate in the appropriate entry. For example, 90 X 10 means 90 segments each sampled 10 times per second. If the channel has a sub-commutator or sub-sub-commutator, enter the number of segments and sampling rate in the appropriate entry.

REMARKS:
In addition to the instructions in Section 5.2.1, provide the following information. If the channel is PAM, indicate if it is Return-to-Zero (RTZ) or Non-Return-to-Zero (NRZ). Indicate sync information on sub and sub-sub-commutated channels.

FORMAT 1425 - TEST VEHICLE TELEMETRY DIGITAL FORMAT

This format is used to describe the encoding and data format of the test vehicle system item/spacecraft/payload digital telemetry systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a description of word encoding and data format organization. Include word structure, sampling rates, and sync word. Provide a pictorial representation of frame and sub-frame construction, including channel identification. Telemetry system attributes information will be provided in accordance with the latest edition of the IRIG Standard 106, Telemetry Standards, chapter 9, Telemetry Attributes Transfer Standard (TMATS).

FORMAT 1426 - TEST VEHICLE TELEMETRY DATA RECORDER CHARACTERISTICS

This format is used to describe the test vehicle system item/spacecraft/payload recorders and recorded data. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

RCC ( ) NON-RCC ( ):
Place an "X" in the applicable space if RCC or NON-RCC.

GENERAL INFORMATION:
Enter the information required. Include measurement units where necessary.

TRACK:
Identify the recorder track on which the data are recorded.

CHANNEL:
Identify the link/channel being recorded, if applicable.

SCO FREQUENCY:
If RCC, no entry is required. Otherwise, enter the information required.

INFORMATION BANDWIDTH:
If RCC, no entry is required. Otherwise, enter the information required.

FREQUENCY DEVIATION:
If RCC, no entry is required. Otherwise, enter the information required.

TYPE DATA:
Identify the type of data associated with each channel, such as telemetry or voice.

REMARKS:
In addition to the instructions in Section 5.2.1, enter additional information that may be required to describe the test unit recording system adequately.

FORMAT 1430 - TEST VEHICLE COMMAND SYSTEM DESCRIPTION

This format is used to describe the operating of the test vehicle system item/spacecraft/ payload/underwater command systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a general description of all test unit command systems, including details of subsystems with their location and function. Provide also an operational description to clarify the operation of each command system. Denote the special command capability information for this program

or mission. Also, provide the proposed or existing system functional design. Indicate the location of the Command/Flight Termination System(s) (FTS) by stage or module.

FORMAT 1431 - TEST VEHICLE COMMAND SYSTEM CHARACTERISTICS

This format is prepared by the RA to provide the SAs with the information to evaluate the compatibility between a command destruct generator (frequencies/tones/etc) and the test vehicle system item/underwater/spacecraft/payload systems. Use the Test Vehicle Command System Characteristics table at the end of Appendix C to provide this information. Follow preparation instructions in Section 5.2.1 for the entry REMARKS.

GENERAL INFORMATION:
Enter information as specified.

DATA CHARACTERISTICS:
Enter information as specified.

VERIFICATION LINK:
Enter information as applicable and list the link identity (telemetry, PCM).

COMMAND FORMAT:
Enter information as specified.

RECEIVER CHARACTERISTICS:
Enter information as specified.

ANTENNA CHARACTERISTICS:
Enter the information as specified. Antenna azimuth should be given from true north when the test unit is in a launch position.

Use Format 1432 and reference any appropriate item identifier to provide antenna and transmission system schematics.

If maximum gain is greater than 12 dB, indicate main lobe beam width in elevation and azimuth at the 3-dB points in REMARKS. Check the applicable entry in the antenna pattern form and submit antenna patterns in accordance with applicable directives of the support range. Any SAs requiring antenna patterns in other formats should acquire the data through their normal channels. Phasing networks and couplers associated with antenna arrays are considered part of the antenna system. Losses in these elements should be included in the antenna pattern as inherent in the pattern measurement.

VERIFICATION SYSTEM:
Enter the information as specified.

FORMAT 1432 - TEST VEHICLE COMMAND SYSTEM ANTENNA SYSTEMS

This format is used to diagram the test vehicle system item/underwater/spacecraft/ payload command antenna systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a block diagram of the antenna system, including module number, cable numbers, and schematic numbers as applicable. A cross section drawing showing the antenna location on the test unit should be included.

FORMAT 1440 - TEST VEHICLE VOICE COMMUNICATIONS OPERATING DESCRIPTION

This format is used to describe the operation of the vehicle system test item/underwater/ spacecraft/payload voice communications system. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a general description of the test unit voice communications system. Include block diagrams where necessary to ensure a comprehensive description.

FORMAT 1441 - TEST VEHICLE VOICE COMMUNICATIONS CHARACTERISTICS

This format is prepared by the RA to provide the SAs with the information to evaluate the compatibility of the test vehicle system item/underwater/spacecraft/payload communication system with the SA equipment. Use the Test Vehicle Voice Communications Characteristics table to provide this information.

TRANSMITTER CHARACTERISTICS:
Enter the data required. Include measurement units where necessary.

RECEIVER CHARACTERISTICS:
Enter the data required. Include measurement units where necessary.

The information provided in spectrum analysis reports is antenna patterns. Measurements are mandatory for certain support organizations and should be provided in accordance with applicable SA specifications.

ANTENNA CHARACTERISTICS:
Enter the data required.

If maximum gain is greater than 12 dB, indicate main lobe beam width in elevation and azimuth at the 3-dB points in REMARKS.

"Power to Antenna-Termination (watts)" information is the same as that of the transmitter power, less the transmission system losses.

Submit antenna patterns in accordance with applicable directives of the support range. SAs requiring antenna patterns in other formats should acquire the data through their normal channels. Phasing networks and couplers associated with antenna arrays are considered part of the antenna system. Losses in these elements should be included in the antenna pattern as inherent in the pattern measurement. If separate antennas are used to transmit and to receive, submit two pages of this format, one for each antenna system.

Use Format 1442 - Test Vehicle Voice Communications System Antenna Systems and reference appropriate item numbers for a system schematic.

REMARKS:
In addition to the instructions in Section 5.2.1, enter additional information, such as operational mode and the use of equipment, that may be helpful in describing the characteristics of this equipment.

FORMAT 1442 - TEST VEHICLE VOICE COMMUNICATIONS ANTENNA SYSTEMS

This format is used to describe the test vehicle system item/underwater/spacecraft/ payload voice communications antenna systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a block diagram of the antenna system, including module number, cable numbers, and schematic numbers as applicable. A cross section drawing showing the antenna location on the test unit should be included.

FORMAT 1460 - TEST VEHICLE TELEVISION/VIDEO OPERATING DESCRIPTION

This format is used to describe the test vehicle system item television systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a general description of the test vehicle system item television systems. Include an operating description detailing the function and location of each subsystem.

FORMAT 1461 - TEST VEHICLE TELEVISION/VIDEO CHARACTERISTICS

This format is prepared by the RA to provide the SAs with the information to evaluate the compatibility of the test vehicle system with the network receivers. Use the Test Vehicle

Television/Video Characteristics table at the end of Appendix C to provide this information. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REMARKS.

GENERAL INFORMATION:
Make entries as applicable. Include measurement units where necessary.

TRANSMITTER CHARACTERISTICS:
Make entries as applicable. Include measurement units where necessary.

The information required in entries "Spectrum Analysis" and "Antenna Patterns" may be required for certain support organizations and should be provided in accordance with the applicable SA specifications.

ANTENNA CHARACTERISTICS:
Make entries as applicable. If maximum gain is greater than 12 dB, indicate main lobe beam width in elevation and azimuth at the 3-dB points in REMARKS.

The "RF Power per Link into Antenna System Termination (watts)" information is the same as that of the Transmitter Power, less the RF Losses Between Transmitter and Antenna Terminations.

Networks and couplers associated with antenna arrays that are part of the antenna losses should be included in the antenna pattern or be made inherent in the pattern measurement.

FORMAT 1462 - TEST VEHICLE VIDEO ANTENNA SYSTEMS

This format is used to diagram the test vehicle system item video antenna systems. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Provide a block diagram of the antenna systems, including module number, cable numbers, and schematic numbers as applicable. A cross section drawing showing the test vehicle system item antenna locations should be included.

FORMAT 1463 - TEST VEHICLE VIDEO FORMAT DESCRIPTION

This format is used to describe the test vehicle system item video format. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REMARKS.

COMPOSITE WAVEFORM:
Illustrate a composite video signal showing maximum white and black amplitudes. Include the following:

    (1)   horizontal sync

      (2)   one line of video
      (3)   horizontal and vertical sync
      (4)   one line of video and horizontal sync

SYNC FORMAT INFORMATION:
Provide the values for each item listed.

SECTION DETAIL - VERTICAL BLANK AND SYNC:
Illustrate the vertical sync signal and identify the time intervals.

SECTION DETAIL - HORIZONTAL BLANK AND SYNC:
Illustrate the horizontal sync signal and identify the time intervals.

SECTION DETAIL - LINE PERIOD:
Illustrate the line period of the composite waveform. Specify the time interval and the relative amplitude of the video signal (white to black) to sync signal.

SECTION DETAIL - OTHER:
Use for additional illustrations or details as appropriate.

FORMAT 1470 - TEST VEHICLE RECOVERY AIDS DESCRIPTION

This format is used to describe the test vehicle system item/underwater/spacecraft/ payload recovery location aids. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REMARKS.

FLOTATION DURATION:
Enter flotation duration of the test unit to be recovered.

ELECTRONIC AIDS:
Enter the type of recovery aid (HF beacon transmitter, VHF recovery beacon, VHF telemetry) and its characteristics. Enter when the recovery aid is activated (main chute deployment, impact, after landing, continuous).

VISUAL AIDS:
Enter all visual aids (sea marker, flashing lights) and their characteristics. Enter the time and method of activation of the visual aid (at impact, manually, automatic).

FORMAT 1480 - OTHER TEST VEHICLE SYSTEMS

This format is used to provide technical information on other test vehicle system item/ spacecraft/payload data acquisition equipment that has not been covered elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

INFORMATION:
Enter the vehicle, stage, and module where the equipment is located. Provide a brief technical description of the test unit equipment that requires support or that will aid in the support activities.

FORMAT 1500 - CUSTOMER-PROVIDED SUPPORT EQUIPMENT

This format is prepared by the RA to provide the SAs with a current listing of RA equipment other than transmitters and receivers. Include airborne, ship-borne, and ground instrumentation equipment, such as X-ray or fluoroscopic equipment, optical tracking, or infrared measuring equipment, data converters, and computers that require support or that interface with SA equipment. Follow preparation instructions in Section 5.2.1 for the entry ITEM NO.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, list and briefly describe any instrumentation not listed elsewhere in the document that will be used during the program/mission and require support or interface with SA equipment.

FORMAT 1600 - SYSTEM READINESS TESTS

This format is used by the RA to provide general information and requirements pertaining to the systems readiness/prelaunch tests. Tests described in this format should correspond to the Format 1140 list. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, give a general description of pre-launch tests requested along with suggested sensors in the case of customer requirements. The OD document will contain specific tests to be scheduled along with timelines and planned sensor participants.

FORMAT 1610 - READINESS TESTS IDENTIFICATION

This format is used to list the readiness/prelaunch tests and the associated identification numbers that are assigned to each test document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TEST NAME:
List the titles of the readiness/prelaunch tests. List the tests in the order the test requirements appear in the document, if appropriate.

NUMBER:

Enter the identification number assigned to each test document.

FORMAT 1620 - READINESS TESTS SEQUENCE

This format is used to identify the sequence and nominal time of major events for each of the readiness/prelaunch tests. Time, as specified, is nominal and subject to change. A fill-in table is provided for this information. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TEST:
Enter the title of any readiness/prelaunch test.

TEST NAME NUMBER:
Enter the test name and number in this column.

NOMINAL TIME:
Enter the nominal time that each major event is programmed, starting from a time reference that may be simulated lift-off or simulated stage firing. Time, as specified, is nominal and subject to change.

DURATION TIME:
Enter the time duration of the corresponding major events.

SUPPORT TIME:
Enter the amount of time that will be required in support of the corresponding major event.

MAJOR EVENTS:
List the major events that will be performed at the time listed (start transmission of test unit PCM telemetry or start test unit systems check, for example).

FORMAT 1630 - CUSTOMER TEST COUNTDOWN

This format is used to describe the relationship of the major milestones that occur during a countdown (pre-count, mid-count, and terminal-count). Included in this format should be only those items that affect the requirements in the remainder of the document. Fill in the table to provide the required data for this item. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and TEST CODE.

The countdown contained in this format is a minimal countdown and is to be used for planning purposes only. For a detailed sequence of operations, the applicable test and checkout procedure should be consulted.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

In addition to the instructions in <u>Section 5.2.1</u>, fill out the following columns of the table.

Time to Interceptor Launch:
Enter in chronological order the times from T-0 when each operation is to be started and completed or when each service is to be rendered. An event that occurs 4 hours before T-0 will be shown as occurring at T-4 hours. The specific units of time must be included: days, hours, minutes, and seconds.

Events:
Describe the events expected to occur during countdown.

Location:
Describe the location where the events are expected to occur.

FORMAT 1700 - TRAJECTORY INFORMATION

This format is used to establish a general test envelope in the early stages of the program. Follow preparation instructions in <u>Section 5.2.1</u> for the entries ITEM NO., TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

Fill in the applicable items listed in the form provided and delete those that do not apply to this program. For the maximum, typical, and minimum trajectories, enter the known or probable values of the characteristics requested. The typical trajectory will be used in the bulk of flight testing and is not necessarily the average as concerns characteristics. Use the remaining entries to enter known or probable values of range, altitude, error probabilities, azimuth, and maximum performance (velocity). For test distribution, enter the percentage of total firings or tests in which each different trajectory will be used.

FORMAT 1710 - MAJOR MISSION EVENTS

This format is used to provide trajectory parameters for each major mission event that occurs during the launch phase of the mission from lift-off through insertion (outboard engine cutoff, escape system jettison). Follow preparation instructions in <u>Section 5.2.1</u> for the entries ITEM NO., TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

SPHEROID:
Designate the spheroid used in deriving the trajectory parameters and give the major axis and minor axis.

EVENT NO.:
Enter the event numbers sequentially, beginning with number (1).

EVENT DESCRIPTION:

Describe the event for which the information is to be provided.

EVENT:
Enter the corresponding event number from above or an abbreviated event description.

TIME:
Give the time referenced to lift-off at which the event occurs. If another time base is used, it must be defined in REMARKS.

ANGLE:
Give the Earth-fixed flight path angle of the vehicle at the time specified.

VEL:
Give the Earth-fixed velocity of the vehicle at the time specified. Enter in the heading the units used (feet/sec, meters/sec).

ALT:
Give the altitude of the vehicle at the time specified. Enter in the heading the units used (feet, meters, or kilometers [km]).

RANGE:
Give the ground range from the vehicle point to the launcher at the time specified. Enter in the heading the units used (feet, meters, or nautical miles).

X:
Give the X coordinate of the vehicle at the time specified. Enter in the heading the units used (feet, meters).

Y:
Give the Y coordinate of the vehicle at the time specified above. Enter in the heading the units used (feet, meters).

Z:
Give the Z coordinate of the vehicle at the time specified. Enter in the heading the units used (feet, meters).

COORDINATE SYSTEM:
Describe the coordinate system used to derive the coordinates provided previously. Include the location of the origin and the orientation of each axis.

FORMAT 1720 - SPACE MANEUVER

This format is used to describe each event that results in changes to those orbital parameters that could affect acquisition of signal (AOS) and loss of signal (LOS) at a subsequent ground station or where computer programs must account for the change in conditions. Follow

preparation instructions in Section 5.2.1 for the entries ITEM NO., TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

EVENT NUMBER:
Enter the corresponding event number as referenced on Format 1710.

TRAJECTORY PARAMETERS AT MANEUVER INITIATION:
Enter parameters planned at initiation of thrust period.

TRAJECTORY PARAMETERS AT MANEUVER CONCLUSION:
Enter parameters planned at conclusion of thrust period.

Inertial flight path angle entries are the angles between the initial velocity vector and the local horizontal plane, measured positive above the horizontal plane. The local horizontal plane is defined as a plane normal to the geocentric position vector. Inertial azimuth heading angle entries are the angles measured east of north to the projection of the initial velocity vector on the local horizontal plane.

MANEUVER THRUST PARAMETERS:
Enter the thrust parameters for the maneuver.

FORMAT 1730 - TRAJECTORY PLAN VIEWS

This format is used to provide a plan view of the trajectory of the test unit. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter a plan view of the trajectory indicating the trajectory azimuth in degrees from true north. Provide the impact point of various stages of the vehicle or test unit, as appropriate, and a maximum probable dispersion pattern (Circular Error Probable [CEP]) for each impact point in accordance with applicable directives of the launching agency. For orbital or space flights, show only the launch and terminal phases on one format page. Use separate format pages to show the plan view for the planned orbital or space trajectory.

The most convenient scale may be used.

FORMAT 1731 - TRAJECTORY PROFILE VIEWS

This format is used to show the profile view of the planned trajectories for powered, ascent, and terminal phases on Earth-curvature graphs. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

In addition to the instructions in [Section 5.2.1](), show the planned trajectory on scaled Earth-curvature graphs/illustrations. The most convenient scale may be used. Indicate altitude, BO locations, SEP, and IMP points as appropriate. Suitable abbreviations may be used to identify the various functions. Enter any such abbreviations on Format 1050.

FORMAT 1732 - LAUNCH TRAJECTORY

This format is used to plot the vehicle trajectory during the launch phase (booster only or from launch to first stage BO). In addition to the nominal trajectory, the maximum probable deviation as dispersion above and below the nominal will be plotted.

This format may also be used for describing complete trajectories for tests that cover a range of 1000 nautical miles or less. Format 1731 must be used for longer-range trajectories. Follow preparation instructions in [Section 5.2.1]() for the entries ITEM NO., TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

LAUNCH AZIMUTH:
Enter the initial launch azimuth.

FLIGHT AZIMUTH:
Enter the planned flight azimuth.

PLOTS:
The following plots are required on test vehicle performance or trajectories.

ALTITUDE VERSUS RANGE:
VELOCITY VERSUS TIME:
ALTITUDE VERSUS TIME:

The scales used must be identified on plots. The most convenient scale may be used.

FORMAT 1733 - ORBITAL AND SPACE TRAJECTORY

This format is used to illustrate the planned orbital and space trajectories. Follow preparation instructions in [Section 5.2.1]() for the entries ITEM NO., TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

SPACE PATH DIAGRAM - PLANNED TRAJECTORY:
Use an appropriate Earth model. Use the largest scale practicable, and indicate the earth scale used.

Enter orbiting vehicle trajectories to show the Earth orbit phase by placing the plane of the orbit or trajectory in the plane of the paper, indicating the location of the geographic poles. Show apogee and perigee distances of orbit trajectories. Also on the format, show a side view of the

Earth and the plane of the equator to indicate the plane of orbit, inclination of orbit to equatorial plane, and the geographic location of the poles.

Enter, as appropriate, space vehicle trajectories for Earth-Moon trajectories to indicate the Moon's position, showing pertinent information such as lunar orbit injection point, impact point (if applicable), miss distance, lunar orbit, and landing site. Omit as much of the midcourse as is desirable to provide enough space for all trajectory data. Indicate the direction of the Sun at the intended time of injection. For interplanetary trajectories, show the Earth, Sun, and target body positions at launch and when the vehicle reaches its destination. Indicate trajectory aphelion and perihelion. Use additional formats as required.

FORMAT 1734 - TERMINAL TRAJECTORY

This format is used to plot the vehicle (or nose cone or reentry body) trajectory during the terminal or reentry phase. The reentry phase is generally considered to begin at approximately 300,000 feet. The altitude scale does not need to exceed 300,000 feet unless special sequences or events occur prior to this phase. Units of measure used must be identified. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

FLIGHT AZIMUTH ON REENTRY (degrees true north):
Enter the flight azimuth of the reentry body from true north.

IMPACT POINT:
Enter the impact point location information in the following entries. For Target Number Reference, enter the appropriate unclassified target number reference point.

- Target Number Reference
- Latitude
- Longitude
- Time

PLOTS:
The following plots are required:

- ALTITUDE VERSUS RANGE
- VELOCITY VERSUS TIME
- ALTITUDE VERSUS TIME

The scales must be identified on plots. The most convenient scale may be used.

FORMAT 1800 - OPERATIONAL SAFETY HAZARDS ISSUES

This format is used by the RA to specify hazards that will be present during the test program. List and give a brief description of each hazard that will be present during the test program. Examples of hazards are presented below. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, define all operational hazards including but not limited to information for the occupational medical program. There are entries for six types of operational hazard, each described in detail below. The RA/customer/user is required to list Not Applicable in each entry that covers an operational hazard not included in the test program. The intent of these entries is to obtain information about the hazards that will be present during the test program. The item number breakdown will be determined by the type and complexity of program/test.

PROPELLANTS AND OTHER TOXIC OR HAZARDOUS MATERIALS:
List the chemical and physical properties and approximate quantity of each substance normally used in conjunction with testing that may be toxic, poisonous, flammable, explosive, or that otherwise presents a hazard to humans, animals, fish, vegetation, and soil. Include specific information of the effect on humans and the treatment, control, and preventive measures recommended. List the recommended procedures to control any spill or escape of a potentially toxic or dangerous substance. List manufacturer, trade name, and chemical ingredients.

RADIATION HAZARDS:
List all sources of ionization or RF radiation that may be a hazard to humans. Include the type, amount, normal radiation level, and recommended control procedures.

ACOUSTIC HAZARDS:
List the noise spectrum covering the range from 16 to 10,000 Hz for each piece of equipment having a noise level in excess of 85 dB (vehicle engines, generator sets, air conditioners).

BLAST PARAMETERS FOR 0.4 AND 0.65 PSI:
List the blast parameters of 0.4 and 0.65 psi, giving hazard radii and TNT equivalents that result from accidental or planned vehicle explosions.

PROTECTIVE EQUIPMENT NEEDED:
Furnish all information available on special (uncommon) protective clothing, equipment, and monitoring devices that are to be used during this test program.

HUMAN FACTORS ANALYSIS:
List any environmental and job-related conditions that tend to adversely affect the health and efficiency of employees.

FORMAT 2000 - TEST REQUIREMENTS/SUPPORT PLANS

This format is used to present a narrative summary of the requirements in other UDS formats as deemed appropriate by the requester or provider of services/support. The detailed instrumentation requirements will be entered in the appropriate instrumentation formats. Follow preparation instructions in Section 5.2.1 for the entries in this format. Enter a narrative summary of the support instrumentation system requirements in the entry REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

FORMAT 2010 - SUPPORT PLAN SUMMARY

This format is used by the SA to provide a narrative description of the overall support planned to meet the program requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

LOCATION:
Enter a description of the location at which the personnel of the SA will perform their duties.

INSTRUMENTATION/REQUIREMENT CATEGORY:
On a program level, give a brief narrative description of the support plan by instrumentation/ requirement category (metric, telemetry, communications).

PLAN:
The support plan may be structured to include a brief description of the support corresponding to each UDS format of the PRD/OR document.

FORMAT 2020 - SUPPORT REQUIREMENTS THAT CANNOT BE MET

This format is used by the SA to itemize and explain any requirement items that cannot be supported as stated in the PRD/OR. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, and SUPPLIER.

UDS FORMAT NUMBER:
Enter the PRD/OR UDS format number where the requirement is identified.

REVISION NUMBER:
Enter the PRD/OR UDS document revision number where the requirement is identified.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, explain why the requirement item cannot be met. Where appropriate, state best results or tolerances that are obtainable with existing equipment.

FORMAT 2030 - ENGINEERING PLAN

This format is used by the SA to present a plan that will adequately support the requirement item that cannot be met by the use of additional equipment/facilities. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, describe the engineering plan and how it will resolve the lack of a current capability. Describe the support that can be provided to satisfy adequately the requirement item that cannot be met. This plan should include the latest state-of-the-art equipment/facilities to meet or exceed the support necessary to satisfy the program requirement item.

REFERENCE PSP FORMAT NUMBER:
Enter the PSP format number to which the engineering plan responds.

REFERENCE PSP ITEM NUMBER:
Enter the PSP item number to which the engineering plan responds.

FORMAT 2040 - FUNDING INFORMATION

This format is used by the SA to provide funding information estimates for the support of the overall program. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, state the agency that will provide the funds. Indicate costs, time scale, and any other information that will support the funding information. Indicate the UDS format/item number from the PRD/OR for which additional funds are required for equipment/facilities necessary to satisfy the requirement.

FORMAT 2050 - IMPLEMENTATION SCHEDULE

This format is used by the SA to indicate the schedule for the installation, checkout, and operational turnover of additional equipment/facilities for the support of certain requirements delineated in the PRD/OR. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

PRD/OR REFERENCE FORMAT/ITEM NUMBER:
Indicate reference to a specific requirement in the PRD/OR.

STATION DESIGNATION:
List the station designation along with the station call letters.

DATES:
Enter the CY and indicate the start and completion dates for satisfying the requirement item.

FORMAT 2060 - CUSTOMER RESPONSIBILITIES

This format is used by the SA to identify specific requirement item support that requires action on the part of the RA before a total support commitment can be made. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, use this entry to provide a narrative discussion of the action required by the RA.

PRD/OR FORMAT NUMBER:
Enter the PRD/OR format number requiring the action.

PRD/OR ITEM NUMBER:
Enter the PRD/OR item number requiring the action.

FORMAT 2070 - FLIGHT SAFETY OPERATIONAL CONCEPTS

This format is completed by the SA when appropriate. The information presented does not respond to requirement items in the requirement documents. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, present a narrative description of the flight safety operational concepts of the SA that pertain to the program or test.

FORMAT 2080 - RANGE-DERIVED REQUIREMENTS

This format is used by the SA to present pertinent range-derived requirements. A derived requirement is any item of support required by one agency from another agency to meet the first agency's responsibility. It does not include direct support of an RA requirement item. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

DERIVED REQUIREMENTS:
Enter the derivative requirement that is pertinent to the program or test.

FORMAT 2100 - METRIC DATA

This format is used to list general information relating to metric tracking data requirements and should contain a narrative description of such data. Follow preparation instructions in for the entries in this format. The following is an example of data types.

- Coordinate System and Point of Origin Desired
- Physical Quantities Required and Attitude Definition
- Corrections to Physical Quantities and Instructions
- Units and Linear Measurements of Range and Flight Test Data
- Basic Systems Parameters
- Instrumentation and Operating Support Instructions
- Recorder Requirements
- Recorder Instructions
- Calibration Standards and Methods

Include the accuracy and priority of metric data that is required.

FORMAT 2110 - METRIC DATA - LAUNCH

This format is used to specify the launch data requirements. The launch phase is normally from lift-off until booster or first stage BO. Follow preparation instructions in for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS. All metric data are normally recorded with timing. It is not necessary to state metric timing requirements or that data required are versus time unless a specific or unique timing signal or rate is required.

DATA REQUIRED:
Enter the name of the data requested in the following order: position (X, Y, Z), velocity, acceleration, and attitude. If attitude (roll, pitch, yaw) data are not similar, identify each requirement separately. Repeat, in the order above, the data requirements if different for each test series category or flight. Also, identify any unique data parameters desired other than the ones listed. Identify the coordinate systems in which the data are required.

MISSION INTERVAL (RANGE, ALTITUDE, TIME):
Enter the range, altitude, time interval, or function during which coverage is required. Separate the interval into the smallest increments necessary to properly cover the various accuracies required (0 - 50 miles, 50 - 1500 miles).

For orbital phase and beyond, indicate vehicle position by appropriate coordinates. Use REMARKS if additional space is required to define the intervals.

Where appropriate for further clarity, include the geographic location or desired site.

DATA POINTS/SECOND:

Enter the minimum number of data points that should be read or tabulated during data reduction (1, 2, 4, 10, 1/10 sec).

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

DATA ACCURACY:
Indicate the required data accuracy value, such as ± 5 ft or ± 2 percent.

REAL-TIME RELAY:
State whether information is needed in voice or digital form and to what point it is to be relayed.

FORMAT 2111 - METRIC DATA - MIDCOURSE

This format is used to specify the midcourse data requirements. The midcourse phase is normally from booster or first stage BO to start of terminal or reentry phase for ballistic or probe launches. If the launch is an orbital launch, the midcourse phase normally begins at booster or first stage BO and terminates at injection. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS. All metric data are normally recorded with timing. It is not necessary to state metric timing requirements or that data required are versus time unless a specific or unique timing signal or rate is required.

DATA REQUIRED:
Enter the name of the data requested in the following order: position (X, Y, Z), velocity, acceleration, and attitude. If attitude (roll, pitch, yaw) data are not similar, identify each requirement separately. Repeat, in the order above, the data requirements if different for each test series category or flight. Also, identify any unique data parameters desired other than the ones listed. Identify the coordinate systems in which the data are required.

MISSION INTERVAL (RANGE, ALTITUDE, TIME):
Enter the range, altitude, time interval, or function during which coverage is required. Separate the interval into the smallest increments necessary to properly cover the various accuracies required (0 - 50 miles, 50 - 1500 miles).

Indicate vehicle position by appropriate coordinates. Use REMARKS if additional space is required to define the intervals.

Where appropriate for further clarity, include the geographic location or desired site.

DATA POINTS/SECOND:
Enter the minimum number of data points that should be read or tabulated during data reduction (1, 2, 4, 10, 1/10 sec).

DATA PRIORITY:

Indicate whether the data requirement is M, R, or D.

DATA ACCURACY:
Indicate the required data accuracy value, such as ± 5 ft or ± 2 percent.

REAL-TIME RELAY:
State whether information is needed in voice or digital form and to what point it is to be relayed.

FORMAT 2112 - METRIC DATA - ORBITAL AND SPACE

This format is used to specify orbital and space metric data requirements. The orbital phase starts at injection (midcourse terminates at injection when the vehicle attains orbital velocity). Enter data requirements in the same sequence they occur, such as those for the first parking orbit, restart and powered flight, coast period in one orbit, and other phases in space. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS. All metric data are normally recorded with timing. It is not necessary to state metric timing requirements or that data required are versus time unless a specific or unique timing signal or rate is required.

DATA REQUIRED:
Enter the name of the data requested in the following order: position (X, Y, Z), velocity, acceleration, and attitude. If attitude (roll, pitch, yaw) data are not similar, identify each requirement separately. Repeat, in the order above, the data requirements if different for each test series category or flight. Also, identify any unique data parameters desired other than the ones listed. Identify the coordinate systems in which the data are required.

MISSION INTERVAL (RANGE, ALTITUDE, TIME):
Enter the range, altitude, time interval, or function during which coverage is required. Separate the interval into the smallest increments necessary to properly cover the various accuracies required (0 - 50 miles, 50 - 1500 miles).

Indicate vehicle position by appropriate coordinates. Use REMARKS if additional space is required to define the intervals.

Where appropriate for further clarity, include the geographic location or desired site.

DATA POINTS/SECOND:
Enter the minimum number of data points that should be read or tabulated during data reduction (1, 2, 4, 10, 1/10 sec).

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

DATA ACCURACY:

Indicate the required data accuracy value, such as ± 5 ft or ± 2 percent.

REAL-TIME RELAY:
State whether information is needed in voice or digital form and to what point it is to be relayed.

FORMAT 2113 - METRIC DATA - TERMINAL

This format is used to specify the terminal or reentry metric data requirements. The reentry phase begins at approximately 300,000 feet altitude unless specific functions occur prior to this altitude that will require range support. Terminal phase normally begins for an aircraft or ordnance when on the final trajectory to a designated vehicle splash/impact/engagement area. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS. All metric data are normally recorded with timing. It is not necessary to state metric timing requirements or that data required are versus time unless a specific or unique timing signal or rate is required.

DATA REQUIRED:
Enter the name of the data requested in the following order: position (X, Y, Z), velocity, acceleration, and attitude. If attitude (roll, pitch, yaw) data are not similar, identify each requirement separately. Repeat, in the order above, the data requirements if different for each test series category or flight. Also, identify any unique data parameters desired other than the ones listed. Identify the coordinate systems in which the data are required.

MISSION INTERVAL (RANGE, ALTITUDE, TIME):
Enter the range, altitude, time interval, or function during which coverage is required. Separate the interval into the smallest increments necessary to properly cover the various accuracies required (0 - 50 miles, 50 - 1500 miles).

Indicate vehicle position by appropriate coordinates. Use REMARKS if additional space is required to define the intervals.

Where appropriate for further clarity, include the geographic location or desired site.

DATA POINTS/SECOND:
Enter the minimum number of data points that should be read or tabulated during data reduction (1, 2, 4, 10, 1/10 sec).

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

DATA ACCURACY:
Indicate the required data accuracy value, such as ± 5 ft or ± 2 percent.

REAL-TIME RELAY:

State whether information is needed in voice or digital form and to what point it is to be relayed.

FORMAT 2120 - METRIC DATA - OTHER

This format is used to specify other metric data requirements not easily covered on Formats 2110, 2111, 2112, and 2113. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS. All metric data are normally recorded with timing. It is not necessary to state metric timing requirements or that data required are versus time unless a specific or unique timing signal or rate is required.

DATA REQUIRED:
Enter the name of the data requested in the following order: position (X, Y, Z), velocity, acceleration, and attitude. If attitude (roll, pitch, yaw) data are not similar, identify each requirement separately. Repeat, in the order above, the data requirements if different for each test series category or flight. Also, identify any unique data parameters desired other than the ones listed. Identify the coordinate systems in which the data are required.

MISSION INTERVAL (RANGE, ALTITUDE, TIME):
Enter the range, altitude, time interval, or function during which coverage is required. Separate the interval into the smallest increments necessary to properly cover the various accuracies required (0 - 50 miles, 50 - 1500 miles).

Indicate vehicle position by appropriate coordinates. Use REMARKS if additional space is required to define the intervals.

Where appropriate for further clarity, include the geographic location or desired site.

DATA POINTS/SECOND:
Enter the minimum number of data points that should be read, tabulated, etc., during data reduction (1, 2, 4, 10, 1/10 sec).

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

DATA ACCURACY:
Indicate the required data accuracy value, such as ± 5 ft or ± 2 percent.

REAL-TIME RELAY:
State whether information is needed in voice or digital form and to what point it is to be relayed.

FORMAT 2130 - METRIC DATA NETWORK COVERAGE

This format is used to illustrate the metric tracking coverage that is desired during all phases. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, provide a diagram that depicts the vehicle tracking during flight, recommended tracking station location, and desired coverage from each station. Identify the phases of the tracking coverage required.

FORMAT 2140 - METRIC DATA COVERAGE

This format is used to identify the optical and electronic instrumentation systems being used. In addition, it will provide information as to location, coverage time, usage, and the phases covered by the metric instrumentation system being used. In the matrix, show the relationship between the stations and the system by entering an appropriate code in the proper location. Fill in the form provided. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TEST UNIT/STAGE:
Enter the test unit/stage involved (booster, 1st stage, payload, etc.).

SUBITEM:
Enter an appropriate sequential number or identification as a subset suffix to the main item number.

SYSTEM NAME:
In the vertical column under SYSTEM NAME, enter the associated metric tracking system class (MIPIR, FPS-16).

RADAR/OPTICS:
Enter the station name and code of the system in the space provided (6-digit geodetic and call sign on all networks).

COVERAGE INTERVAL:
Enter the time interval for the support to be provided.

REMARKS:
In addition to the instructions in Section 5.2.1, use this entry to explain all codes or designators assigned to the entries on this format.

FORMAT 2150 - GPS DATA

This format is used for listing GPS metric data requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

MISSION INTERVAL (RANGE, ALTITUDE, TIME):
Enter the range, altitude, time interval, or function during which coverage is required (0 to 800 feet, T-4 sec to T+10 sec, SEP).

FORMAT 2160 - SIGNATURE DATA

This format is used to specify radar and optical signature data requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA REQUIRED:
Enter each type of radar, acoustical, and optical signature data required. Specify objects of interest for each type of data. Include wavelengths required for optical signature data on each object. Identify each item separately.

MISSION INTERVAL (RANGE, ALTITUDE, TIME):
Enter the range, altitude, time interval, or function during which coverage is required (0 - 50 miles, 50 - 1500 miles). Indicate vehicle position by appropriate coordinates. Use REMARKS if additional space is required to define the intervals. Where appropriate for further clarity, include the geographic location or desired site.

DATA POINTS/SECOND:
Enter the minimum number of data points that should be read and tabulated during data reduction (1, 2, 4, 10, 1/10 sec).

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

DATA ACCURACY:
Indicate the required data accuracy value, such as ± 5 ft, ± 2 percent.

REAL-TIME RELAY:
State whether information is needed in voice or digital form and to what point it is to be relayed.

NOTE	All metric data are normally recorded with timing. It is not necessary to state metric timing requirements or that required data are versus time unless a specific or unique timing signal or rate is required. Signature data are normally recorded at the pulse repetition frequency (PRF) rate and with timing. It is not necessary to specify data points/second or timing unless a specific or unique timing signal or data rate is required.

FORMAT 2200 - TELEMETRY DATA

This format is used to list general information and instructions relating to telemetry data requirements, such as recommended recording practices and calibration standards and methods. Telemetry system attributes information will be provided in accordance with the latest edition of IRIG Standard 106, Telemetry Standards, chapter 9, Telemetry Attributes Transfer Standard (TMATS). Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, include a brief narrative/description of telemetry data requirements applicable. Typical general telemetry instructions and requirements are:

- Special Recording Instructions and Techniques
- Instrumentation and Operating Support Instructions
  - o Calibration Standards and Methods
  - o Operators' Log (Data Sheet) Requirements
- Accuracy and priority of telemetry data required

FORMAT 2210 - TELEMETRY RECORDING INTERVAL

This format is used to describe the telemetry events to be recorded and the type and interval required. The information in this format will conform to RCC standards unless otherwise stated. Use the Telemetry Recording Interval table at the end of Appendix C to provide telemetry and payload recording information. Follow preparation instructions in Section 5.2.1 for the entry REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

MEASURED EVENT:
Enter the assigned measurement number and name.

LINK (MHZ) TYPE:
Enter the RF link frequency MHz of each link to be used. Enter the frequency and type of modulation (FM/FM, PDM/FM, PAM/FM, PCM/FM, PCM, Feher's Offset Phase Shift Keying [FOPSK], Offset Phase Shift Keying [OPSK], etc.).

RECORDING INTERVAL (TIME, POSITION, OR FLIGHT PHASE):
Enter time (minutes), position (feet, nautical miles) flight phase interval, or period during which telemetry recordings or coverage will be required.

MEASURE RATE (RPS/BPS):
Enter the measuring (commutation or repetition) rate. For commutated channels, list the revolutions per second (RPS) (2.5, 5, 10, 20, 30). Enter "CONT" for continuous (non-commutated) channels. For each PCM link, list the bit rate in bits per second (bps) such as 40 K, 60 K, 300 K, 400 K, 600 K, 800K (K=1000).

REQUIRED IN REAL TIME:
Identify the data required in real time (performed during the actual flight or test of the test vehicle).

RECORDINGS:
Enter information for CD-ROM, TAPE, and OSCILLOGRAPH recordings.

CONSOLE PRESENTATION:
Enter real-time console presentations of specific test data (velocity, temperature, sequential events).

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

DATA ACCURACY:
Indicate the required reduced data accuracy value (±, %, or parts per million).

REMARKS:
Enter any information that helps to clarify entries in the table.

NOTES:
Enter notes to provide information not covered in the table.

FORMAT 2220 - TELEMETRY STRIP CHART RECORDING FORMAT

This format is used by the RA to list analog telemetry recording requirements. Appendix C contains an optional table to provide more information. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TRACE NUMBER:
Indicate the trace number sequentially from the left side of the recorder and show unused traces if applicable.

MEASUREMENT:
Identify the assigned measurement name and number.

LINK:
Identify the telemetry link to be associated with each measurement to be recorded. Give the frequency or other acceptable designation.

CHANNEL:
Identify the telemetry link channel associated with each measurement to be recorded.

SEGMENT:
Identify the telemetry link channel segment associated with each measurement to be recorded.

ACCURACY:
List the deflection and calibration requirements that may be needed.

RECORDER IDENTIFICATION AND SPEED:
Identify the recorder by station, facility, or other unique identification; also, indicate recording speed in inches per second (ips) or millimeters per second (mm/s).

FORMAT 2221 - TELEMETRY EVENT RECORDING FORMAT

This format is used by the RA to list telemetry event recording requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

STATION RECORDER NUMBER:
Identify the station event recorder to be used (1, 2, 3).

SPEED:
Indicate the recording speed in ips or mm/s.

TRACE NUMBER:
Indicate the trace number sequentially from the left side of the recorder. Show unused traces if applicable.

MEASUREMENT IDENTIFICATION NUMBER:
Indicate the identification number of the event to be recorded.

EVENT:
List the name of event to be recorded.

LINK (MHZ):
Identify the telemetry link in MHz associated with the measurement to be recorded.

TELEMETRY CHANNEL:
Identify the telemetry link channel associated with each event to be recorded.

BIT NUMBER:
Indicate the bit number containing the event to be recorded.

SAMPLE RATE (SPS):
Indicate sample rate in samples per second (SPS).

FORMAT 2230 - TELEMETRY DECOMMUTATION PROCESSING SPECIFICATIONS

This format is used to outline telemetry decommutation requirements in the areas of cathode ray tube (CRT) presentations, line printer displays, analog digitizing, and data compression. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

DATA DESCRIPTION:
Enter the type of data to be processed.

DATA SECURITY CLASSIFICATION:
Enter the security classification of the data being processed.

PROCESSING TIME:
Enter the time (Zulu or flight time) to begin (FROM) and stop (TO) processing.

DATA SAMPLE RATE:
Enter the rate at which the data should be sampled and stored on analog magnetic tape.

DATA COMPRESSION TYPE:
Enter the type of data compression to be performed on the data (fixed limits, floating limits, pass, mask) if applicable.

CRT UPDATE RATE:
Enter the rate at which the data/measurement value should be updated (5/sec, 15/sec).

LINE PRINTER RATE:
Enter the rate at which the data/measurement value should be updated (5/sec, 15/sec).

DATA PLOT RATE:
Enter the rate at which the data should be taken from the sampled data and plotted or printed.

DATA FORMAT/GENERAL INSTRUCTIONS:
Enter all special data formats for general instructions that are needed to further define the specifications of the processed data.

FORMAT 2240 - TELEMETRY COVERAGE

This format is used to summarize the telemetry coverage required. In addition, it will provide information as to location, coverage time, link frequency, and the phases covered by the telemetry systems. Show the relationship between the stations and the telemetry link by entering an appropriate code in the proper location. Use the Telemetry Coverage table at the end of Appendix C to provide this information. Follow preparation instructions in Section 5.2.1 for the

entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( )
INFORMATION ( ) RESPONSE ( ).

SUBITEM:
Enter an appropriate sequential number or identification as a subset suffix to the main item
number.

TEST UNIT/STAGE:
Enter the test unit/stage involved. When more than one is involved, provide vertical separation
for the entries.

FREQUENCY:
Enter the frequency in MHz in the vertical column opposite FREQUENCY.

LINK:
Enter the number designator of the telemetry link in the vertical column opposite LINK.

COVERAGE INTERVAL:
Enter the time interval for the support to be provided.

STATION/LOCATION:
Enter the station name or designator and code of the system in the space provided.

REMARKS:
In addition to the instructions in Section 5.2.1, use this entry to explain all codes or designators
assigned to the entries on this format.

FORMAT 2300 - COMMAND SYSTEMS

This format is used to define general command requirements. Follow preparation
instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST
CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

DATA ACCURACY:
Indicate the required data accuracy.

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

FORMAT 2310 - COMMAND CONTROL

This format is used by the RA to list functions to be accomplished using the command
control system. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO.,

REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

COMMAND FUNCTION:
List the name of the function to be performed.

TIME:
Give the time the function is to be performed. If the time listed in this entry is nominal, explain in PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS the method of arriving at the actual time.

FUNCTION CODE:
Give the code that must be transmitted to perform the function.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
Use this entry to explain the purpose of the requirement. Also, use this space for any remarks or special instructions that would be informative to those who must plan the support.

FORMAT 2320 - COMMAND DESTRUCT

        This format is used to describe the destruct responsibility. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter each requirement that must be supported to evaluate situations relevant to the command destruct function and to carry out this responsibility.

FORMAT 2330 - COMMAND UPLINK

        This format is used to describe the command uplink data requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter each requirement that must be supported to evaluate situations relevant to the command uplink data function and to carry out this responsibility.

FORMAT 2331 - COMMAND UPLINK RECORDINGS

This format is used to describe the recording requirements for the command uplink data system. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, provide a description of the support requirements for the command uplink data recording system during the various mission phases.

FORMAT 2332 - COMMAND UPLINK STATIONS COVERAGE

This format is used to present the coverage of the command systems being used. In addition, it will provide information as to location, coverage time, usage, and the phases covered by the command system. Show the relationship between the station/frequency and the test unit/ stage/data type/modulation by entering the appropriate designators in the proper locations. Fill in the form provided. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TEST UNIT STAGE:
Enter the test unit stage involved.

FREQ:
Enter the frequency in MHz for the column in the vertical column opposite FREQUENCIES.

MODULATION:
Enter the RF and keying modulation information (PM/FM, Frequency Modulation/Frequency Shift Keying [FM/FSK]).

DATA TYPE:
Enter the type of data (command or destruct).

COVERAGE INTERVAL:
Enter the time interval for the support to be provided.

FORMAT 2400 - TIMING

This format is used by the RA to list its requirements for timing. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TIMING SIGNAL:
List the RCC standard format designator (letter plus numbers) for each timing signal required. Refer to the latest editions of the following RCC documents: Standard 200 - IRIG Serial Time Code Formats, Standard 205 - IRIG Standard Parallel Binary and Parallel Binary Coded Decimal

Time Code Formats, and Standard 212 - <u>IRIG J Asynchronous ASCII Time Code Formats</u>. Timing signals and required pulse repetition rates not listed in the RCC documents should be entered and described in REMARKS.

FORMAT 2410 - TIMING SIGNAL DETAIL

This format is used by the RA to list its requirements for timing. Follow preparation instructions in <u>Section 5.2.1</u> for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TIMING SIGNAL:
List the RCC standard format designator (letter plus numbers) for each timing signal required. Refer to the latest editions of the following RCC documents: Standard 200 - <u>IRIG Serial Time Code Formats</u>, Standard 205 - <u>IRIG Standard Parallel Binary and Parallel Binary Coded Decimal Time Code Formats</u>, and Standard 212 - <u>IRIG J Asynchronous ASCII Time Code Formats</u>. Timing signals not listed in the RCC documents, as well as required pulse repetition rates, should be entered and described in REMARKS. List the correlation accuracy or tolerance limits in milliseconds (ms) or microseconds (µs). Special requirements as to tolerable jitter may be listed in REMARKS. The synchronization of all timing signals with the master generator should be requested from the SA receiving the document.

LOCATION OF END INSTRUMENT:
Enter the name or symbol of the station/site, center, base, vehicle/van, and if known, the building number, the room number, and the rack number (title or name) and any other information to assist the range in determining where the service is required.

SIGNAL REQUIRED:
List the type of timing signal required (RCC designator or other standard designator).

WHEN REQUIRED:
List the duration or the requirement, start and stop dates and times, and whether intermittent or continuous.

END EQUIPMENT:
Specify a general description or make/model of the end device to which the required timing signal will be connected, input impedance, balanced or single-ended input, and required voltage. List the number of devices required at each location. Describe any unusual conditions imposed on timing end equipment, such as size/weight limitation or accessibility restrictions.

TIME CORRELATION:
State the relationship between the required timing signals and some external time (GPS, range time, master station timing, vehicle time, or Universal Coordinated Time [UTC]).

ENVIRONMENT:

Indicate the maximum ambient temperature, pressure/altitude, humidity, vibration, or other condition to be imposed on timing terminal/end equipment at each of the locations where the equipment will be operating.

FREQUENCY RESPONSE:
Enter this information if available.

FORMAT 2411 - PULSE RATES

This format is used by the RA to list its requirements for pulse rates at each location, end equipment, or recording/display device. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TIMING SIGNAL:
List the RCC standard format letter designator for the timing signal repetition rates required. Refer to the latest edition of RCC document Standard 200, IRIG Serial Time Code Formats. Signals not listed should be noted as such in REMARKS.

LOCATION OF END INSTRUMENT:
Enter the name or symbol of the station/site, center, base, and vehicle/van and if known, the building number, the room number, and the rack number (title or name) and any other information to assist the range in determining where the service is required.

RATES REQUIRED:
List the rates required in terms of pulses per second (pps), thousands of pulses per second (kpps), pulses per minute (ppm), or pulses per hour (pph).

FORMAT 2412 - TIMING SEQUENCER REQUIREMENTS

This format is used by the RA to list any requirement for automatic sequential control. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

EVENTS:
List those functions that are sequences for control by the automatic function control circuits. Each automatic function control circuit is capable of automatically initiating or terminating an external function at a predetermined time during the countdown. The time of either initiation or termination is determined by the path panel program. Enter the functions to be controlled in chronological order based on start times (for example, start gyro, stop liquid oxygen [LOX] topping, start spin rockets, or start recorder).

List the functions preselected for sampling by the automatic hold fire control circuits. Each automatic hold fire circuit provided is capable of sampling the off or on condition of an external function. The sampling time of these circuits is determined by preselecting the sampling interval on the patch panel. Each circuit has an automatic/manual control. In the automatic condition, if the malfunction of an external circuit clears during the sampling time, countdown will automatically restart. In the manual condition, the countdown can be restarted only by the sequence start button. Enter the functions to be sampled. These functions should be incorporated into the chronological order (based on start times) that were generated by the list of automatic function control circuits.

SIGNAL SEQUENCE:
Enter the time in hours, minutes, and seconds with respect to T-0 that the functions listed in EVENTS are initiated.

ELECTRICAL CHARACTERISTICS:
Enter the quantity of make or break contacts that will occur at the time listed above and enter the letter "M" or "B" to indicate a make or break condition. If the electrical characteristics differ for each make or break contact, enter each on a separate line. Enter the excitation voltage, current rating, and type of signal in these entries as required.

FORMAT 2413 - VISUAL COUNTDOWN

This format is used by the RA to list its requirements for visual countdown. Carefully plan the entries on this format so all requirements can be clearly and completely displayed in the proper sequence of entries. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

INFORMATION TO BE DISPLAYED:
State the information to be displayed, such as countdown information range or sequencer count, sequence status information, range safety officer hold fire, master hold, superintendent of range operations proceed, Static Return to Off (SRO) hold fire, and other function and status items.

OPERATION PERIOD:
Enter the start (FROM), stop (TO), and total time to the nearest minute and second (or tenth of a second, if applicable).

INDICATORS:
Enter the number of indicators required to display the information. Enter the type of mounting for panel-mounted or bulkhead-mounted.

LOCATION OF VISUAL INDICATORS:
State the location of the indicator as closely as possible. The station entry can include name or symbols of stations participating in the operation.

FORMAT 2414 - STATUS INDICATORS

This format is used by the RA to list its requirements for status indicators. Carefully plan the entries on this format so that all requirements can be clearly and completely displayed in the proper sequence of entries. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

INFORMATION TO BE DISPLAYED:
State the information to be displayed, such as countdown information range or sequencer count, sequence status information, range safety officer hold fire, master hold, superintendent of range operations proceed, SRO hold fire, and other function and status items.

OPERATION PERIOD:
Enter the start (FROM), stop (TO), and total time to the nearest minute and second (or tenth of a second, if applicable).

INDICATORS:
Enter the number of indicators required to display the information. Enter the type of mounting for panel-mounted or bulkhead-mounted.

LOCATION OF VISUAL INDICATORS:
State the location of the indicator as closely as possible. The station entry can include names or symbols of stations participating in the operation.

FORMAT 2415 - TIMING SYNCHRONIZATION

This format is used by the RA to list requirements for timing synchronization. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

EVENTS:
List those functions that are sequences for control by the automatic function control circuits. Each automatic function control circuit is capable of automatically initiating or terminating an external function at a predetermined time during the countdown. The time of either initiation or termination is determined by the path panel program. Enter the functions to be controlled, in chronological order, based on start times (for example, start gyro, stop LOX topping, start spin rockets, or start recorder).

SIGNAL SEQUENCE:
Enter the time in hours, minutes, and seconds with respect to T-0 that the functions listed in EVENTS are initiated.

ELECTRICAL CHARACTERISTICS:

Enter the quantity of make or break contacts that will occur at the time listed above and enter the letter "M" or "B" to indicate a make or break condition. If the electrical characteristics differ for each make or break contact, enter each on a separate line. Enter the excitation voltage, current rating, and type of signal in these entries as required.

FORMAT 2600 - OTHER SYSTEMS

This format is used to define systems required other than those specified in other UDS formats. Follow preparation instructions in Section 5.2.1 for the entries in this format.

FORMAT 2610 - OTHER SYSTEMS - DIRECTED ENERGY

This format is used to list and identify laser or other directed energy system requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REMARKS.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to instructions in Section 5.2.1, enter a narrative description of the directed-energy system requirement. Systems information should include:

- Type Emitter (CW, pulse)
- Pulse Width (sec)
- Power (peak pulse, watts)
- Pulse Rate (sec)
- Half Angle Divergence (radians)
- POC (message, letter)

Enter the specific location or area where the equipment is to be installed or used.

FORMAT 2620 - OTHER SYSTEMS - SUPPORT INSTRUMENTATION

This format is used to list special requirements for support instrumentation equipment that cannot be covered elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

RA ( ) SA ( ):
State whether the RA or SA will supply the equipment in question.

NAME/TYPE:
Enter the name and type of equipment required.

MANUFACTURER:

List the manufacturer and model number if the requirement demands a specific system or piece of equipment.

LOCATION:
Enter the specific location or area where the equipment is to be installed or used.

PURPOSE/REMARKS:
State the purpose for which the equipment is required. Enter remarks that will clarify the requirement.

FORMAT 2630 - OTHER SYSTEMS - ENVIRONMENTAL

This format is used to state any environmental data requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter any environmental data requirements. State the various conditions of interval data points (range, altitude, time) or accuracy required. Include a statement of purpose for the data and any remarks or clarifying instructions. Include the accuracy and priority of the data required.

FORMAT 2640 - OTHER SYSTEMS - DATA

This format is used to state any data requirements that do not conveniently fit or have not been covered. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter any data requirements that have not been covered in other UDS formats. State the various conditions of interval data points (range, altitude, time) or accuracy required. Include a statement of purpose for the data and any remarks or clarifying instructions. Include the accuracy and priority of the data required.

FORMAT 2650 - OTHER SYSTEMS - COVERAGE

This format is used to identify coverage for other test unit systems not covered elsewhere in the document. Follow the outline provided in the forms. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TIME (GET) OR TIME PERIOD:

Enter the Ground Elapsed Time (GET) or time period during which the coverage is to be provided.

GEOGRAPHICAL LOCATION OR RECOMMENDED SITE:
Enter the recommended geographic or site locations for the coverage to be provided.

COVERAGE:
Indicate the frequency and number of systems that will be provided to communicate with the composite system of the vehicle.

FORMAT 2660 - OTHER SYSTEMS – RANGE AUXILIARY SENSORS

This format is used to identify coverage for other test unit systems not covered elsewhere in the document. Follow the outline provided in the forms. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TEST EVENT:
List the test event number.

FORMAT 2670 - OTHER SYSTEMS – NON-RANGE AUXILIARY SENSORS

This format is used to identify coverage for range auxiliary sensors not covered elsewhere in the document. Follow the outline provided in the forms. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO. and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

FORMAT 2680 – OTHER SYSTEMS - ELEMENTS/OTHER

This format is used to identify coverage for other systems not covered elsewhere in the document. Follow the outline provided in the forms. Follow preparation instructions in Section 5.2.1 for the entries in this format.

FORMAT 2700 – GROUND COMMUNICATIONS

This format is used to describe in a general way the inter-station communication requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, generally describe each inter-station ground communications link, giving the purpose for which it is to be used (type of communication

[voice, teletype, facsimile, data]). Include any comments that have an effect on overall network provisioning.

FORMAT 2710- AIR/GROUND VOICE COMMUNICATIONS

This format is used to specify the general air/ground voice communication requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, summarize requirements that must be supported to provide effective air/ground voice communications.

FORMAT 2711 - AIR/GROUND VOICE COVERAGE

This format is used to identify the voice communication equipment/systems for air/ ground communications that will be used. In addition, it will provide information as to location, coverage time, and the phases covered by the system. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

SYSTEM:
List the recommended system that supplied the coverage described below.

TIME (GET) OR TIME PERIOD:
Enter the GET or time period for which coverage is provided.

RECOMMENDED SITE OR LOCATION:
Enter recommended geographic or site locations for the provided coverage.

FORMAT 2712 - AIR/GROUND VOICE RECORDINGS

This format is used to levy requirements for recording radio, television, telephone, and other types of communications. Fill in the form provided (Appendix C). Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

SUBITEM:
Enter an appropriate sequential number or identification as a subset suffix to the main item number.

TEST CODE:
Enter the applicable test code for each subitem.

STATION OR LOCATION:
Indicate the station or location that will record the communication data.

RECORDING REQ.:
List the data to be recorded, the method of recording, and any special recording format.

AUDIO/VIDEO RECORDING:
Enter the time the recording is to be initiated (START) (for example: T-0, AOS); the time the recording is to be terminated (STOP) (for example, T-350 sec, LOS); enter the type of recording (for example, audio [A], video [V], or both [AV]); and enter the recording speed (SPED) in ips or mm/s. Indicate units and state the reel size limitations of the playback equipment (for example, 3, 5, 7, or 10-1/2 inches).

TIME CORL (TIME CORRELATION):
Enter Yes or No to indicate whether or not time correlation is required on the recording.

REMARKS:
In addition to the instructions in Section 5.2.1, use this entry to explain any subitems.

FORMAT 2720 - COMMUNICATIONS DETAIL

This format is used to state requirements for all ground communications except telephone and recording requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ). Separate formats will be used for the following types of requested communications.

Teletype	Public address
Voice	Voice radio
Television/data	Other
Facsimile	Satellite Communications

USE: ADMINISTRATIVE ( ) OPERATIONAL ( ):
Indicate the type, administrative or operations, for which service is requested.

TYPE OF SERVICE:
Enter the type of communications requested and the service desired, such as voice-transmission, voice-continuous wave, television/data transmission, public address, and paging. Include the technical characteristics of the signal to be transmitted.

QUANTITY:
Enter the number of circuits required.

LOCATION OF OPERATING TERMINALS:

Complete appropriate sections of the table in Appendix C, the columns of which are described below.

SUBITEM:
Enter an appropriate sequential number as a subset suffix to the main item number.

CIRCUIT NAME/TYPE:
Identify the circuit name and type.

LOCATION:
Indicate the originating location of the circuit followed below by the terminating location(s).

BLDG/ROOM:
Indicate the building and room number of the originating circuit followed by the building and room numbers (if known) at the terminating locations.

CIRCUIT NO.:
Identify the circuit numbers at the originating and termination locations.

NOTE NO.:
Use this entry to numerically code (1, 2) references to notes placed on the format to clarify entries made.

FORMAT 2730 - VOICE NETWORK TRANSMISSION

This format is used to outline communications requirements for voice transmission requirements that have been specified elsewhere. These communication requirements are geographically separated circuits that require leasing negotiations with an appropriate communications carrier. Fill in a form similar to the sample provided. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

This format, when completed, is a matrix that shows the relationship between stations and circuit descriptions for communications circuit requirements. Any abbreviations, designators, or special notes peculiar to this matrix may be entered on a separate page using a UDS GEN format and included on Format 1050, Abbreviations/Acronyms. The subsequent pages will then reflect the instructions that are below.

LOCATION AND STATION:
Enter the circuit location and station in the columns. Circuit types may be simplex, duplex, half-duplex, or other. Circuit uses may be voice, voice/data, air-to-ground, tracking coordination, telemetry coordination, command coordination, operational administration, meteorology, biomedical, recovery, or other. In the last column, enter the total number of circuits.

CALL SIGN:

This is the name used on the network.

LOCATION:
This is the physical location of the unit.

NETS:
These are the names of each network.

FORMAT 2731 - SECURE VOICE NETWORK TRANSMISSION

This format is used to outline communications requirements for secure voice transmission requirements that have been specified elsewhere. These transmissions are to geographically separated locations and require leasing negotiations with an appropriate communications carrier. Fill in a form similar to the sample provided. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

This format, when completed, is a matrix that shows the relationship between stations and circuit descriptions for communications circuit requirements. Any abbreviations, designators, or special notes peculiar to this matrix may be entered on a separate page using a UDS GEN format and included on Format 1050, Abbreviations/Acronyms. The subsequent pages will then reflect the instructions below.

MISSION COMMUNICATION CIRCUITS:
Enter the circuit type and use in the columns. Circuit types may be simplex, duplex, half-duplex, or other. Circuit uses may be voice, voice/data, air-to-ground, tracking coordination, telemetry coordination, command coordination, operational administration, meteorology, biomedical, recovery, or other.

In the last column, enter the total number of circuits.

FORMAT 2732 – NON-SECURE DATA NETWORK TRANSMISSION

This format is used to outline communications for non-secure data transmission requirements that have been specified elsewhere. These transmissions are to geographically separated locations that require leasing negotiations with an appropriate communications carrier. Fill in a form similar to the sample provided. Follow preparation instructions in Section 5.2.1 for the entries in this format.

Enter the circuit type and use in the columns. Circuit types may be simplex, duplex, half-duplex, or other. Circuit uses may be voice, voice/data, air-to-ground, tracking coordination, telemetry coordination, command coordination, operational administration, meteorology, biomedical, recovery, or other. In the last column, enter the total number of circuits.

FORMAT 2733 - SECURE DATA NETWORK TRANSMISSION

This format is used to outline communications for secure data transmission requirements that have been specified elsewhere. These transmissions are to geographically separated locations that require leasing negotiations with an appropriate communications carrier. Use the fill-in form to provide the required data (Appendix C). Follow preparation instructions in Section 5.2.1 for the entries in this format.

This format, when completed, is a matrix that shows the relationship between stations and circuit descriptions for communication circuit requirements. Any abbreviations, designators, or special notes peculiar to this matrix may be entered on a separate page and included on Format 1050, Abbreviations/Acronyms.

FORMAT 2734 - VIDEO/DATA NETWORK TRANSMISSION

This format is used to outline communications for television/data transmission requirements that have been specified elsewhere. These transmissions are considered as those circuits to geographically separated end users that require leasing negotiations with the telephone company or appropriate communications carrier and include video teleconferencing (VTC) services. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

This format, when completed, is a matrix that shows the relationship between stations and circuit descriptions for communications circuit requirements.   Any abbreviations, designators, or special notes peculiar to this matrix may be entered on a separate page using a UDS GEN R format and included on Format 1050, Abbreviations/Acronyms. The subsequent pages will then reflect the instructions that are below.

CIRCUIT DESCRIPTION:
Enter the circuit type and use in the columns. Circuit types may be simplex, duplex, half-duplex, or other. Circuit uses may be voice, voice/data, air-to-ground, tracking coordination, telemetry coordination, command coordination, operational administration, meteorology, biomedical, recovery, or other.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

STATION:
Enter the sites or centers from which the information originates. Enter the sites or centers to which the information is going. If the information flow is in both directions (duplex), either site may be entered. Use standard site letter designators.

TOTAL CKTS:

Enter the total number of circuits needed to satisfy all the requirements within the line items.

FORMAT 2735 - FACSIMILE NETWORK TRANSMISSION

This format is used to outline communications for facsimile transmission requirements that have been specified elsewhere. These transmissions are considered as those circuits with geographically separated end users that require leasing negotiations with the telephone company or appropriate communications carrier. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

This format, when completed, is a matrix that shows the relationship between stations and circuit descriptions for communications circuit requirements. Any abbreviations, designators, or special notes peculiar to this matrix may be entered on a separate page and included on Format 1050, Abbreviations/Acronyms. The subsequent pages will then reflect the instructions that are below.

CIRCUIT DESCRIPTION:
Enter the circuit type and use in the columns. Circuit types may be simplex, duplex, half-duplex, or other. Circuit uses may be voice, voice/data, air-to-ground, tracking coordination, telemetry coordination, command coordination, operational administration, meteorology, biomedical, recovery, or other.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

STATION:
Enter the sites or centers from which the information originates. Enter the sites or centers to which the information is going. If the information flow is in both directions (duplex) either site may be entered. Use standard site letter designators.

TOTAL CKTS:
Enter the total number of circuits needed to satisfy all the requirements within the line items.

FORMAT 2736 - C-BAND/INMARSAT/MINI-M

This format is used to outline communications for C-Band/INMARSAT/Mini-M requirements that have been specified elsewhere. These transmissions are considered as those circuits with geographically separated end users that require leasing negotiations with the telephone company or appropriate communications carrier. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

This format, when completed, is a matrix that shows the relationship between stations and circuit descriptions for communications circuit requirements. Any abbreviations, designators, or special notes peculiar to this matrix may be entered on a separate page and included on Format 1050, Abbreviations/Acronyms. The subsequent pages will then reflect the instructions that are below.

CIRCUIT DESCRIPTION:
Enter the circuit type and use in the columns. Circuit types may be simplex, duplex, half-duplex, or other. Circuit uses may be voice, voice/data, air-to-ground, tracking coordination, telemetry coordination, command coordination, operational administration, meteorology, biomedical, recovery, or other.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

STATION:
Enter the sites or centers from which the information originates. Enter the sites or centers to which the information is going. If the information flow is in both directions (duplex) either site may be entered. Use standard site letter designators.

TOTAL CKTS:
Enter the total number of circuits needed to satisfy all the requirements within the line items.

FORMAT 2740 - INTERCOMMUNICATIONS SYSTEMS

This format is used to state requirements for distribution within the operational intercommunication systems (OIS). It is the connections required between the local area and the various sites normally satisfied by OIS and transistorized operations phone system (TOPS) type systems. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

NET TITLE OR NUMBER:
Enter the net title, number, or function of the system. Place the title, number, or function in a vertical position in the space provided. If notes are required to clarify the entries, enter a reference letter under the relevant net and explain in the REMARKS. Do not use the letters M or X as reference letters. Box A - If notes are required to clarify the net title or number entries, enter a reference letter in Box B under the relevant net and explain in REMARKS.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TYPE INST (TYPE INSTRUMENTATION):
Indicate the end instrument type desired. Use the following symbols:

S - Standard   W - Weather   SP - Special Purpose   E - Explosion Proof

STATION OR LOCATION:
Identify the location or station where the end instrument will be installed. Box B - If notes are required to clarify the station or location entries, enter the reference letters in the column entries below Box B and explain in REMARKS. Do not use the letters M or X as reference letters. Using a matrix, show the relationship between this station and the net title or number by placing an X in the appropriate boxes. If only a monitor capability of a net function is required, place an M in the appropriate boxes. If notes are required to clarify the relation between the nets and the station or location entries, enter a reference letter in the appropriate place in lieu of the X or M. Explain the letter used in REMARKS.

REMARKS:
In addition to the instructions in Section 5.2.1, use this space to explain all letter designations assigned to the entries in this format.

FORMAT 2750 - VOICE TERMINATIONS

This format is used to state requirements for voice communications except telephone and recording requirements. Either this format or Format 2720 may be used depending on the type of presentation desired. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

CIRCUIT TITLE:
All circuits must be identified by their proper, official title to facilitate implementation and access control. If desired, the common name or abbreviation may be entered in parentheses after the proper title. If used, enter circuit numbers, call signs, or bit rates.

RESPONSIBLE AGENCY:
Enter the name of the responsible agency involved in the circuit termination.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the applicable test code for each subitem.

NOTE:
If notes are required to clarify the entries, enter a reference number and explain in a note.

CAP (CAPABILITY):
Enter one of the following communications circuit capability symbols opposite each item:

   T   Talk and monitor (headset only)

T w/M/S	Monitor with speaker
T/S	Talk and monitor with headset and speaker
M	Monitor with headset only

TERMINATION LOCATIONS:
Show the terminations sequentially in each location under the responsible agency. Each termination should have a subitem number, test code, and an entry to show the capability. To complete the circuit between agencies, an entry should be made for each location. Entries are used for information only when the termination is the customer's responsibility.

NOTES:
Provide any additional information here to explain the entries above.

FORMAT 2751 - SECURE VOICE TERMINATIONS

This format is used to state requirements for secure voice communications except telephone and recording requirements. Either this format or Format 2720 may be used depending on the type of presentation desired. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

CIRCUIT TITLE:
All circuits must be identified by their proper, official title to facilitate implementation and access control. If desired, the common name or abbreviation may be entered in parentheses after the proper title. Circuit numbers, call signs, or bit rates, if they are to be used, are to be entered.

RESPONSIBLE AGENCY:
Enter the name of the responsible agency involved in the circuit termination.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the applicable test code for each subitem.

NOTE:
If notes are required to clarify the entries, enter a reference number with the note.

CAP (CAPABILITY):
Enter one of the following communications circuit capability symbols opposite each item:

| T | Talk and monitor (headset only) |

T w/M/S	Monitor with speaker
T/S	Talk and monitor with headset and speaker
M	Monitor with headset only

TERMINATION LOCATIONS:
Show the terminations sequentially in each location under the responsible agency. Each termination should have a subitem number, test code, and an entry to show the capability. To complete the circuit between agencies, an entry should be made for each location. Entries are used for information only when the termination is the customer's responsibility.

NOTES:
Provide any additional information here to explain the entries above.

FORMAT 2752 - POINT-TO-POINT TERMINATIONS

This format is used to state requirements for point-to-point communications except telephone and recording requirements. Either this format or Format 2720 may be used depending on the type of presentation desired. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

CIRCUIT TITLE:
All circuits must be identified by their proper, official title to facilitate implementation and access control. If desired, the common name or abbreviation may be entered in parentheses after the proper title. If used, enter circuit numbers, call signs, or bit rates.

RESPONSIBLE AGENCY:
Enter the name of the responsible agency involved in the circuit termination.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the applicable test code for each subitem.

NOTE:
If notes are required to clarify the entries, enter a reference number and explain in a note.

CAP (CAPABILITY):
Enter one of the following communications circuit capability symbols opposite each item:

| T | Talk and monitor (headset only) |

T w/M/S	Monitor with speaker
T/S	Talk and monitor with headset and speaker
M	Monitor with headset only

TERMINATION LOCATIONS:
Show the terminations sequentially in each location under the responsible agency. Each termination should have a subitem number, test code, and an entry to show the capability. To complete the circuit between agencies, an entry should be made for each location. Entries are used for information only when the termination is the customer's responsibility.

NOTES:
Provide any additional information here to explain the entries above.

FORMAT 2753 - TERMINATIONS

This format is used to state requirements/support responses for communication except long line telephone and recording requirements. Either this format or Format 2720 may be used depending on the type of presentation desired. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

CIRCUIT TITLE:
All circuits must be identified by their proper, official title to facilitate implementation and access control. If desired, the common name or abbreviation may be entered in parentheses after the proper title. Circuit numbers, call signs, or bit rates, if they are to be used, are to be entered.

RESPONSIBLE AGENCY:
Enter the name of the responsible agency involved in the circuit termination.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the applicable test code for each subitem.

NOTE:
If notes are required to clarify the entries, enter a reference number and explain in a note.

CAP (CAPABILITY):
Enter one of the following communications circuit capability symbols opposite each item:

| T/O | Transmit only |

R/O	Receive only
R/T	Receive and transmit
H	Half duplex
F	Full duplex

TERMINATION LOCATIONS:
Show the terminations sequentially in each location under the responsible agency. Each termination should have a subitem number, test code, and an entry to show the capability. To complete the circuit between agencies, an entry should be made for each location. Entries are used for information only when the termination is the customer's responsibility.

NOTES:
Provide any additional information here to explain the entries above.

FORMAT 2754 - SECURE DATA TERMINATIONS

This format is used to state requirements for secure data communications except long line telephone and recording requirements. Either this format or Format 2720 may be used depending on the type of presentation desired. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

CIRCUIT TITLE:
All circuits must be identified by their proper, official title to facilitate implementation and access control. If desired, the common name or abbreviation may be entered in parentheses after the proper title. If used, enter circuit numbers, call signs, or bit rates.

RESPONSIBLE AGENCY:
Enter the name of the responsible agency involved in the circuit termination.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the applicable test code for each subitem.

NOTE:
If notes are required to clarify the entries, enter a reference number and explain in a note.

CAP (CAPABILITY):
Enter one of the following communications circuit capability symbols opposite each item:

T/O	Transmit only
R/O	Receive only
R/T	Receive and transmit

H	Half duplex
F	Full duplex

TERMINATION LOCATIONS:
Show the terminations sequentially in each location under the responsible agency. Each termination should have a subitem number, test code, and an entry to show the capability. To complete the circuit between agencies, an entry should be made for each location. Entries are used for information only when the termination is the customer's responsibility.

NOTES:
Provide any additional information here to explain the entries above.

FORMAT 2755 - VIDEO/DATA TERMINATIONS

This format is used to state requirements for television/data communications except telephone and recording requirements. Either this format or Format 2720 may be used depending on the type of presentation desired. Indicate the TV circuits and terminations required. The Format 2800 series will be used to request the required TV cameras or monitors and to stipulate the subject or coverage to be viewed. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

CIRCUIT TITLE:
All circuits must be identified by their proper, official title to facilitate implementation and access control. If desired, the common name or abbreviation may be entered in parentheses after the proper title. If used, enter circuit numbers, call signs, or bit rates.

RESPONSIBLE AGENCY:
Enter the responsible agency involved in the circuit termination.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the applicable test code for each test item.

NOTE:
If notes are required to clarify the entries, enter a reference number and explain in a note.

CAP (CAPABILITY):
Enter one of the following communications circuit capability symbols opposite each item:

T/O	Transmit only
R/O	Receive only
R/T	Receive and transmit

H	Half duplex
F	Full duplex

TERMINATION LOCATIONS:
Show the terminations sequentially in each location under the responsible agency. Each termination should have a subitem number, test code, and an entry to show the capability. To complete the circuit between agencies, an entry should be made for each location. Entries are used for information only when the termination is the customer's responsibility.

NOTES:
Provide any additional information here to explain the entries above.

FORMAT 2756 - VOICE RADIO TERMINATIONS

This format is used to state requirements for voice radio communications except telephone and recording requirements. Either this format or Format 2720 may be used depending on the type of presentation desired. Follow preparation instructions in for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

CIRCUIT TITLE:
All circuits must be identified by their proper, official title to facilitate implementation and access control. If desired, the common name or abbreviations may be entered in parentheses after the proper title. If used, enter circuit numbers, call signs, or bit rates.

RESPONSIBLE AGENCY:
Enter the responsible agency involved in the circuit termination.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the applicable test code for each subitem.

NOTE:
If notes are required to clarify the entries, enter a reference number and explain in a note.

CAP (CAPABILITY):
Enter one of the following communications circuit capability symbols opposite each item:

T/O	Transmit only
R/O	Receive only
R/T	Receive and transmit
H	Half duplex
F	Full duplex

T	Talk and monitor (headset only)
T w/M/S	Monitor with speaker
T/S	Talk and monitor with headset and speaker
M	Monitor with headset only

TERMINATION LOCATIONS:
Show the terminations sequentially in each location under the responsible agency. Each termination should have a subitem number, test code, and an entry to show the capability. To complete the circuit between agencies, an entry should be made for each location. Entries are used for information only when the termination is the customer's responsibility.

NOTES:
Provide any additional information here to explain the entries above.

FORMAT 2757 - MISCELLANEOUS TERMINATIONS

This format is used to state requirements for miscellaneous communications except telephone and recording requirements. Either this format or Format 2720 may be used depending on the type of presentation desired. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

CIRCUIT TITLE:
All circuits must be identified by their proper, official title to facilitate implementation and access control. If desired, the common name or abbreviation may be entered in parentheses after the proper title. If used, enter circuit numbers, call signs, or bit rates.

RESPONSIBLE AGENCY:
Enter the responsible agency involved in the circuit termination.

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the applicable test code for each subitem.

NOTE:
If notes are required to clarify the entries, enter a reference number and explain in a note.

CAP (CAPABILITY):
Enter one of the following communications circuit capability symbols opposite each item:

T/O	Transmit only
R/O	Receive only
R/T	Receive and transmit

H	Half duplex
F	Full duplex
T	Talk and monitor (headset only)
T w/M/S	Monitor with speaker
T/S	Talk and monitor with headset and speaker
M	Monitor with headset only

TERMINATION LOCATIONS:
Show the terminations sequentially in each location under the responsible agency. Each termination should have a subitem number, test code, and an entry to show the capability. To complete the circuit between agencies, an entry should be made for each location. Entries are used for information only when the termination is the customer's responsibility.

NOTES:
Provide any additional information here to explain the entries above.

FORMAT 2760 - COMMUNICATIONS RECORDINGS

This format is used to levy requirements for recording radio, television, telephone, intercom (TOPS, OIS), and other communications. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the test code for each subitem.

STATION OR LOCATION:
Indicate the station or location that will record the communication data.

RECORDING REQ:
List the data to be recorded, the method of recording, and any special recording format.

AUDIO/VIDEO RECORDING:
Enter the following information in the remaining columns.
- Start: Enter the time the recording is to be initiated (START) (for example: T-0, AOS)
- Stop: Enter the time the recording is to be terminated (STOP) (for example, T-350 sec, LOS);
- Aud/Vid: Enter the type of recording (for example, A, V, or AV);
- Tape Speed: Enter the recording speed (SPED) in ips or mm/s.
- Reel Size: Indicate units and state the reel size limitations of the playback equipment (for example, 3, 5, 7, or 10-1/2 inches).

- Time Corl (Time Correlation): Enter Yes or No to indicate if time correlation is required on the recording.

REMARKS:
In addition to the instructions in Section 5.2.1, list any special instructions or remarks that clarify the recording requirements. If more space is required, use a reference subitem number and explain.

FORMAT 2770 - TELEPHONE

This format is used by the RA to list the requirements for telephone service. Fill in the form provided (Appendix C). Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

NOTES:
Enter any extra information here to clarify entries in the table.

FORMAT 2780 - OTHER COMMUNICATIONS

This format is used to define general communication requirements not covered in other categories, such as underwater communications. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, define general requirements not specified on other communication formats.

FORMAT 2800 - VIDEO

This format is used by the RA to specify operations, documentary, and public relations television requirements. This equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the Electronics Industry Association (EIA) and the National Television Standards Committee. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:
Specify whether cameras and monitors are required to cover the items listed in SUBJECT TO BE VIEWED and whether the equipment is to be fixed, mobile, or portable.

SUBJECT TO BE VIEWED:

Describe the object or action to be viewed, including size of area to be covered, direction of motion (if any), day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more specific the information furnished by the user, the better the planning will be for proper equipment to meet the RA's needs. The RA's recommendations for obtaining the desired coverage and any other pertinent information should be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is required by using Secure Circuit, Unsecure Circuit, or Encrypt for Transmission Only (EFTO). Video recordings disposition will be listed on Format 4232 - Data Disposition - Detail - Voice/ TV Recording. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 2810 - ON-BOARD VIDEO

This format is used by the RA to specify operations video located on the test video or target. This equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the EIA and the National Television Standards Committee. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:
Specify whether cameras and monitors are required to cover the items listed in SUBJECT TO BE VIEWED and whether the equipment is to be fixed, mobile, or portable.

SUBJECT TO BE VIEWED:
Describe the object or action to be viewed, including size of area to be covered, direction of motion (if any), day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more information furnished by the user, the better the planning of proper monitor equipment to meet the RA's needs. The RA's recommendations for obtaining the coverage desired and any other pertinent information may be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is used, such as Secure Circuit, Unsecure Circuit, or EFTO. Video recordings disposition will be listed on Format 4232 - Data Disposition - Detail - Voice/TV Recording. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 2811 - ON-BOARD VIDEO DOWNLINK

       This format is used by the RA to specify the type of video downlink from the vehicle or target if present. This equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the EIA and the National Television Standards Committee. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:
Specify the type of equipment required to cover the items listed in SUBJECT TO BE VIEWED and where the equipment is located.

SUBJECT TO BE VIEWED:
Describe the link sending the video to be viewed, including size of area to be covered, direction of motion, day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more information furnished by the user, the better the planning of proper equipment to meet the RA's needs. The RA's recommendations for obtaining the coverage desired and any other pertinent information may be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is required by adding Secure Circuit, Unsecure Circuit, or EFTO. Video recordings disposition will be listed on Format 4232 - Data Disposition - Detail - Voice/TV Recording. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 2812 - ON-BOARD VIDEO DISPLAYS

This format is used by the RA to specify the video displays from on-board systems. This equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the EIA and the National Television Standards Committee. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:
Specify whether monitors are required to cover the items listed in SUBJECT TO BE VIEWED and where the equipment is to be located.

SUBJECT TO BE VIEWED:
Describe the object or action to be viewed, including size of area to be covered, direction of motion, day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more information furnished by the user, the better the planning of proper equipment to meet the RA's needs. The RA's recommendations for obtaining the coverage desired and any other pertinent information may be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is required by adding Secure Circuit, Unsecure Circuit, or EFTO. Video recordings disposition will be listed on Format 4232 - Data Disposition - Detail - Voice/TV Recording. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 2813 - ON-BOARD VIDEO RECORDINGS

This format is used by the RA to specify video recording requirements from on-board video equipment. The equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the EIA and the National Television Standards Committee. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:

Specify the type of video equipment required to cover the items listed in SUBJECT TO BE VIEWED and where the equipment is to be located.

SUBJECT TO BE VIEWED:
Describe the object or action to be viewed, including size of area to be covered, direction of motion, day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more information furnished by the user, the better the planning of proper equipment to meet the RA's needs. The RA's recommendations for obtaining the coverage desired and any other pertinent information may be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is required by adding Secure Circuit, Unsecure Circuit, or EFTO. Video recordings disposition will be listed on Format 4232, Data Disposition. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 2820 - LAUNCH PAD VIDEO

This format is used by the RA to specify launch pad video requirements. This equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the EIA and the National Television Standards Committee. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:
Specify whether cameras and monitors are required to cover the items listed in SUBJECT TO BE VIEWED and whether the equipment is to be fixed, mobile, or portable.

SUBJECT TO BE VIEWED:
Describe the object or action to be viewed, including size of area to be covered, direction of motion, day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more information furnished by the user, the better the planning of proper equipment to meet the RA's needs. The RA's recommendations for obtaining the coverage desired and any other pertinent information may be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is required by adding Secure Circuit, Unsecure Circuit, or EFTO. Video recordings disposition will be listed on Format 4232, Data Disposition. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 2821 - TRACKING VIDEO TELEVISION

This format is used by the RA to specify tracking video television requirements. This equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the EIA and the National Television Standards Committee. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:
Specify whether cameras and monitors are required to cover the items listed in SUBJECT TO BE VIEWED and whether the equipment is to be fixed, mobile, or portable.

SUBJECT TO BE VIEWED:
Describe the object or action to be viewed, including size of area to be covered, direction of motion, day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more information furnished by the user, the better the planning of proper equipment to meet the RA's needs. The RA's recommendations for obtaining the coverage desired and any other pertinent information may be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is required by adding Secure Circuit, Unsecure Circuit, or EFTO. Video recordings disposition will be listed on Format 4232,

Data Disposition. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 2822 - VIDEO DISPLAYS

This format is used by the RA to specify operations, documentary, and public relations television requirements. This equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the EIA and the National Television Standards Committee. Fill in the form provided (Appendix C). Follow preparation instructions in Section 5.2.1 for the entries in this format.

FORMAT 2823 - VIDEO RECORDINGS

This format is used by the RA to specify video recording requirements. This equipment will be furnished, installed, and maintained in accordance with existing agreements between the SA and the RA. All systems will be in accordance with the standards of the EIA and the National Television Standards Committee. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:
Specify whether cameras and monitors are required to cover the items listed in SUBJECT TO BE VIEWED and whether the equipment is to be fixed, mobile, or portable.

SUBJECT TO BE VIEWED:
Describe the object or action to be viewed, including size of area to be covered, direction of motion, day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more information furnished by the user, the better the planning of proper equipment to meet the RA's needs. The RA's recommendations for obtaining the coverage desired and any other pertinent information may be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is required by adding Secure Circuit, Unsecure Circuit, or EFTO. Video recordings disposition will be listed on Format 4232

- Data Disposition - Detail - Voice/TV Recording. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 2824 - OTHER VIDEO

This format is used to define general video requirements not covered in other categories. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE EQUIPMENT:
Specify whether cameras and monitors are required to cover the items listed in SUBJECT TO BE VIEWED and whether the equipment is to be fixed, mobile, or portable.

SUBJECT TO BE VIEWED:
Describe the object or action to be viewed, including size of area to be covered, direction of motion, day or night coverage, and other considerations. Describe pertinent details that will help the planning engineers.

LOCATION:
Give the location or area of usage.

PERIOD:
Specify the period during which the item is to be viewed.

REMARKS:
In addition to the instructions in Section 5.2.1, state the purpose for which the requirement is needed. The more information furnished by the user, the better the planning of proper equipment to meet the RA's needs. The RA's recommendations for obtaining the coverage desired and any other pertinent information may be included in this entry; however, they will not be considered part of the requirements. Indicate whether transmission protection is required by adding Secure Circuit, Unsecure Circuit, or EFTO. Video recordings disposition will be listed on Format 4232 - Data Disposition - Detail - Voice/TV Recording. Identify the recorded signal by using the number of the requirement that describes the subject to be viewed.

FORMAT 3000 - REAL-TIME DATA DISPLAY/CONTROL

The real-time data section of the UDS has been designed to provide for the most complex programs. It includes all known categories of real-time data requirements and provides for supplemental documentation where this may be necessary.

This format is used to describe the real-time data requirements. Real-time data are defined as data available (in usable form) in time to permit their use in affecting the test while it is in progress. Real-time data fall into two categories: digital data and analog data.

Real-time digital data are the products of the Real-time Data System (RTDS). Support from RTDS is provided when the need for precise real-time data is critical, as in positioning vehicles used in reentry studies or controlling multiple targets.

Real-time data are produced by a particular sensor system, such as radar and telemetry, and displayed as needed for flight safety decisions, aircraft and target vectoring, and vehicle performance observation. These data are either in analog form or digital readout form and are essentially raw data except for such corrections or limited processing as may be provided within the sensor system. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, describe the real-time data requirements of the program mission or test in sufficient detail to ensure complete understanding of the organization and requirements of this UDS format. Identify categories of requirements to be addressed, although specifics for that category are not presently available. Large programs or tests should identify all supplemental documentation by title, number, and minimum contents. Include broad outlines wherever possible. Small programs or tests will not require all of the categories of real-time data requirements. Those requirements that are to be covered and those that are not applicable are to be identified.

Any request for display of real-time analog data as defined here should be included with the basic data/support reference, such as telemetry display on Format 2200 series or tracking radar display (trajectory) on Format 2100 series.

FORMAT 3010 – REAL-TIME FLIGHT CONTROL/SUPPORT CENTERS

This format is used to describe the functions of each flight control/support center with respect to the program/mission. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, show how each agency controls or supports the program or mission through its general or unique capabilities.

FORMAT 3011 – REAL-TIME FLIGHT CONTROL DATA ACQUISITION

This format is used to specify the control data acquisition and control requirements and configurations at the remote sites and control centers. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

In addition to the instructions in <u>Section 5.2.1</u>, specify the control data acquisition and control requirements for each mission and the data display and control configurations at the remote sites and the control centers.

If supplementary format documentation is to be required from the RA, state the documentation requirements, including title, number, and minimum contents.

FORMAT 3020 – REAL-TIME DISPLAYS

This format is used to plan all real-time display requirements so they can be clearly and completely displayed in the proper sequence. Follow preparation instructions in <u>Section 5.2.1</u> for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

PERIOD REQUIRED:
Enter the periods (quarter and year) during which the requirements must be supported.

INFORMATION TO BE DISPLAYED:
State the information to be displayed, such as countdown information, sequencer status information, hold/fire, master hold, and other information and status time.

PERIOD OF OPERATION:
Enter the start (FROM), stop (TO), and total time to the nearest minute and second (or tenth of a second, if applicable).

INDICATORS:
Enter the number of indicators required to display the information and enter the type of display (for example, plotting board, AV, and strip chart).

LOCATION OF VISUAL INDICATORS:
State the location of the indicator as closely as possible. Give location of display in the designated area (west wall, console number, rack or panel, or numbered location of display, such as plotting board number 1).

FORMAT 3021 – REAL-TIME CONSOLE COMMAND PANELS

This format is used to identify the functions performed by the command console. This format is to be completed whether the console is provided by the RA or SA. Prepare the form (Appendix C) as outlined below. Follow preparation instructions in <u>Section 5.2.1</u> for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

SUMMARY:

Use the LOCATION table to provide a summary of the real-time console command panels. Enter information in the following cells.

- Communication Instruments: Enter one instrument per cell in this row. Each column of the table will contain information for that instrument.
- Organization: Enter one organization per cell in this column. Place an X in each column that coincides with an instrument for which the organization is responsible.

FORMAT 3022 – REAL-TIME CONSOLE ANALOG RECORDERS

This format is used to identify the real-time console analog measurements required and is to be completed whether the console is provided by the RA or SA. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

MEASUREMENT:
Enter the measurement name and number to be recorded.

LINK:
Identify the RF link, as appropriate, by which the measurement is transmitted.

SOURCE:
Identify the telemetry SCO by which the measurement is transmitted.

PEN NUMBER:
Specify the desired recorder pen number for each measurement.

REMARKS:
In addition to the instructions in Section 5.2.1, use this entry to identify the console of which the recorder will be a part, its recommended location, paper speed, calibration requirements, and other clarifying remarks.

FORMAT 3023 - REAL-TIME CONSOLE DRAWINGS

This format is to be used to provide a drawing of the layout of the consoles and associated panels. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, provide a drawing of the desired or actual (if supplied by the RA) layout of the consoles and associated panels.

FORMAT 3024 – REAL-TIME CONSOLE MODULE DESCRIPTION

This format is used by the SA to describe the equipment provided to support the console module requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, use this section to describe each of the console modules to be provided and explain the operational concept where applicable.

STATION DESIGNATION:
Enter the station designator along with the station call letters and number.

FORMAT 3025 – REAL-TIME SUMMARY OF CONSOLE LOCATIONS

This format is used by the SA to summarize the consoles located at each station. Follow preparation instructions in Section 5.2.1 for the entries in this format.

FORMAT 3026 – REAL-TIME SUMMARY OF CONSOLE MODULE LOCATIONS

This format is used by the SA to summarize the modules used on each console. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

CONSOLE/STATION DESIGNATION:
List the applicable type of consoles. Enter the station designator where the console module is located.

MODULE:
List the console modules to be provided and enter the quantity of the modules in the matrix under the appropriate console type.

FORMAT 3030 – REAL-TIME OTHER GROUP DISPLAYS AND CONTROL

This format is used by the SA to describe displays and controls not covered elsewhere in this document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, describe the displays and controls provided but not covered in other UDS formats. Include fast access sites, digital clock displays, plot boards, flight dynamics, teleprinters, and alphanumeric hard copy outputs when applicable.

STATION DESIGNATION:
Enter the station designator along with the station call letters and number.

FORMAT 3040 – REAL-TIME DATA FORMATS

This format is used to describe the real-time data format requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST and CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, briefly describe the data formats to be used for transmission of tracking, telemetry, command, and other real-time data to the RA. If supplementary format documentation is required, state the documentation requirement, including title, number, and minimum contents.

FORMAT 3050 – REAL-TIME TRACKING DATA FORMAT CONTROL

This format is used to specify the formats in which real-time tracking data are to be transmitted to the RA. Data formats for existing low-speed character systems and high-speed bit systems are required. Words 1 and 2 of the format are reserved by the SA for a message label and the time word. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, specify the real-time tracking data required and whether high-speed, low-speed, or high- and low-speed transmission is required. State whether raw or smooth data are to be provided. Identify the RA stations where the data are to be transmitted. Concisely state what each bit or character of the format is to be used for. Provide a sketch for each format. If supplementary documentation is used for defining formats required, specifically identify documents and applicable sections/paragraphs.

FORMAT 3051 – REAL-TIME TELEMETRY DATA CONTROL

This is used to describe in general terms the real-time telemetry data formats. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, specify the real-time telemetry data required and identify the RA stations to which the data are transmitted. If supplementary documentation is used for defining the data train characteristics, specifically identify the document and applicable sections/paragraphs.

FORMAT 3052 – REAL-TIME TELEMETRY DATA FORMATS

This is used to list telemetry data requirements and the location of data in the real-time data train. Fill in the form provided. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

SUBITEM:
This number may be a single digit or decimal coded and is a suffix to the item number.

TEST CODE:
Enter the test code for each subitem.

MEAS. NO.:
Enter the measurement number of the test data to be provided in real time.

MEAS. NAME:
Enter the measurement name of the data to be provided in real time.

SAMPLES PER SEC.:
Enter the relayed sampling rate of each measurement.

WORD NUMBER:
Assign a word number for each measurement for the location of data within the data frame.

FRAME NUMBER:
Assign a frame number for each measurement for the location of data within the data train.

REMARKS:
In addition to the instructions in Section 5.2.1, specify overhead type data that will be included in the data train, such as sync words, source code, destination code, and frame count. Identify the location of the overhead data train. Use this space for other clarifying information. If supplementary documentation is used for specifying the data train arrangement, specifically identify the document and applicable section/paragraphs.

FORMAT 3053 – REAL-TIME COMMAND DATA FORMAT CONTROL

This format is used to list all high- and low-speed data formats required for command purposes. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, specify all high-speed and low-speed data formats required for command purposes. For programming purposes, include all command lists that provide the data structures for each command. Describe all mission/test interface formats.

Requirements for command computer programs that may be necessary at remote sites to standardize the command system or to implement a command system for a specific mission or test should be described on Format 3060 – Real-Time Remote Site Data Processing.

FORMAT 3060 – REAL-TIME REMOTE SITE DATA PROCESSING

This format is used to specify the computer programs necessary for remote site data processor operations in support of a mission or test. Included are programs for accepting data for site display, processing, or retransmission of raw or processed data to control centers or other sites. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, specify the programs that comprise system interfaces in the various systems, such as command telemetry, tracking, and composite. If supplemental documentation is required, state the documentation requirements including title, number, and minimum contents.

FORMAT 3070 – REAL-TIME DATA TESTING

This format is used to define the test requirements necessary to ensure capability to transmit and receive real-time data. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, briefly describe the validation testing required to ensure the ability to transmit and receive real-time telemetry, tracking, and command data. If supplementary documentation is required, state the documentation requirements including title, number, and minimum contents.

FORMAT 3071 – REAL-TIME DATA INTERFACES

This format is used for real-time data requirements not covered elsewhere in UDS Formats 3000 through 3099. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, briefly describe the data interfaces that evolve from transmission and processing requirements of real-time data.

FORMAT 3072 - REAL-TIME DATA INTERFACE CRITERIA

This format is used to provide the SA with information needed to determine interface requirements when data generated by the RA instrumentation are to be transmitted and processed by the SA. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

PERIOD REQUIRED:
Enter the periods (quarter and year) during which the requirement must be supported.

DATA TYPE:
Indicate the general type of data: analog or digital.

SOURCE:
List geographical locations of the data source. Give the magnitude of the output impedance of the source and under type indicate whether this output is balanced or single-ended.

TERMINATION:
Indicate information, as in data type above, for the receiving termination.

NOTE	If this data is analog, complete the following entry.

ANALOG DATA:
Indicate the general wave shape (variable-frequency sine wave, variable dc voltage). If this waveform is other than a sine wave, illustrate with drawings as required. State output voltage, voltages, or voltage ranges as applies. Indicate voltages required for receiver operations based on above outputs less transmission losses. State frequency, frequencies, or frequency range of operations as applies. State signal-to-noise ratio required at the receiver.

NOTE	If this data is digital, complete the following entry.

DIGITAL DATA:
State the binary 1 indication (NRZ-6 V). If other than an NRZ voltage level, illustrate with drawings as required. State information for binary zero. Indicate general output data format (8-bit, parallel, serial) and state the frame rate or rates of data for parallel data (for instance, the rate at which parallel words are transmitted). For serial data, the frame rate is equal to the bit rate. Indicate any clock outputs that require transmission or are available for use. If data equipment requires external interrupts, so indicate. Indicate transmission error rate tolerance.

FORMAT 3073 – REAL-TIME DATA DISTRIBUTION

This format is used to list the distribution of real-time data. The requirements have been established elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter the real-time data distribution requirements.

FORMAT 3100 - PHOTOGRAPHIC

This format is used to state general photographic requirements in narrative form. Detailed documentary requirements will be stated on Format 3110 and detailed engineering requirements stated on Format 3120. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REMARKS.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, describe the requirements for photographic coverage, including documentary, engineering, public affairs, and tracking.

FORMAT 3110 - DOCUMENTARY PHOTOGRAPHIC

This format is used to identify detailed documentary photographic requirements and to establish their recommended processing instructions. The number of copies and disposition must be included on Format 4200 or 4233, Data Disposition - Detail -Photographic/Optics. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

LOCATION:
Enter the location at which the desired photographic coverage is required.

CAMERA FORMAT:
Enter the size of film required: 4x5, 50 mm, 35 mm, 16 mm.

FOCAL LENGTH:
Enter the focal length of the lens to be used to obtain the required coverage.

FRAMES PER SECOND:
Enter the desired frame rate for motion picture coverage in frames/second.

FILM TYPE LOAD:
Enter the type of film required and whether black and white or color coverage is required. Include, where applicable, the film load required (for instance, three 400-foot reels or one 100-foot reel).

INTERVAL:
Enter the time interval or function during which coverage is required.

CAMERA:
Enter the requirement for a fixed or tracking camera.

EXPOSURE:
Enter the exposure required. If flame exposure is desired, indicate by entering the temperature of the flame in Kelvin (K).

TIMING:
Usually, for engineering photography only, indicate if timing is required. If a special or specific type of timing is required, it must be outlined; otherwise, the requester will be furnished timing as available at the SA. Enter "Not Required" if applicable.

REMARKS:
In addition to the instructions in Section 5.2.1, include the recommended processing instructions, if applicable.

FORMAT 3120 - ENGINEERING SEQUENTIAL PHOTOGRAPHY

This format is used to identify detailed engineering photographic requirements and to establish their recommended processing instructions. The number of copies and disposition must be included on Format 4200 or 4233, Data Disposition - Detail -Photographic/Optics. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

LOCATION:
Enter the location at which the desired photographic coverage is required.

CAMERA MOUNT:
Enter the type of camera mount required.

CAMERA TYPE:
Enter the type of camera required.

RESOLUTION:
Enter the resolution of the camera.

WAVEBAND:
Enter the waveband of the camera.

FOCAL LENGTH:
Enter the focal length of the lens to be used to obtain the required coverage.

APERTURE:
Enter the size of the aperture the camera uses.

FIELD OF VIEW:
Enter the field of view included in each image.

FRAME RATE:
Enter the desired frame rate for motion picture coverage in frames/second.

INTEGRATION TIME/EXPOSURE:
Enter the integration time per exposure required for each image.

DATA BIT DEPTH:
Enter the required bit depth or N/A if there is no requirement.

TIMING:
Indicate if timing is required. If a special or specific type of timing is required, it must be outlined; otherwise, the requester will be furnished timing as available at the SA. Enter "Not Required" if applicable.

RADIOMETRIC CALIBRATION:
Enter any required radiometric calibration or NONE.

DATA FORMAT:
Enter the format of the image.

REMARKS:
In addition to the instructions in Section 5.2.1, include the recommended processing instructions, if applicable.

FORMAT 3200 - METEOROLOGY

This format is used to establish general meteorological requirements for the program/ mission that cannot be adequately shown on other formats. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, state general requirements for meteorological or climatological data that will be required for a program or mission. This discussion may include the following items.

- the general requirement for the services of the DoD, National Oceanic and Atmospheric Administration (NOAA), and foreign weather services
- the application of climatological data to operational test program problems
- evaluation of data requirements to meet flight problems

- the analysis of accuracy and representation of environmental data required for flight evaluation purposes

FORMAT 3210 - METEOROLOGICAL CONSTRAINTS

This format is used to specify values of meteorological elements that could preclude the successful accomplishment of test objectives or that could jeopardize an unprotected vehicle. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, specify the critical values of meteorological elements, such as cloud cover, surface or upper wind velocities or shears, icing, and sea state, that could preclude successful accomplishment of test objectives.

FORMAT 3220 - METEOROLOGICAL FORECASTS

This format is used to state the requirements for a forecast valid at or near T-0. Detailed forecasts should not be requested for more than 3 days prior to the valid time. The forecast services will encompass meteorological and climatological parameters. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TIME REQUIRED:
State the number of days prior to or after launch day (F-3D, F+1D) and on launch day, the number of hours prior to or after launch (T-10H, T+8H) that the forecast is required.

FORECAST PARAMETERS:
State parameters or weather elements for which a forecast is required (precipitation and/or obstruction to vision, amount, base and top of clouds, horizontal visibility, surface winds, sea and swell, vertical wind shear, jet stream, turbulence, freezing level, contrail level). Use abbreviations listed in instructions for Format 3230. Parameters should be separated into surface and upper air. The range or altitude interval and maximum altitude for upper air parameters should be specified.

VALID TIME:
List here the number of hours a forecast will be required to remain valid (T-4H to T-0).

LOCATION:
Specify the location, geographical area, or flight area for which the forecast is required (impact, launch, BO, reentry, recovery).

PURPOSE AND REMARKS:

State the purpose for which the forecasts will be used. Be specific (to calculate drag, to predict drift on recovery of nose cone). Enter any other remarks necessary to clarify any inputs made.

FORMAT 3230 - METEOROLOGICAL OBSERVATIONS

This format is used to request those meteorological parameters required to analyze data received before, during, or after the test or operation. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

DATA REQUIRED:
Specify those parameters desired and indicate requirements for computed data. Use the following abbreviations:

Temperature (Temp)	Refraction Index (R.I.)
Pressure (Pres)	Density (Dens)
Relative Humidity (R.H.)	Sea State (S.S.)
Wind	Precipitation (Precip)
Visibility (Visb)	Cloud Coverage (C.C.)
Underwater sound velocity profile (SVP)	

State additional data requirements.

SURFACE:
Provide the following surface information.
- Specify the time, in minutes, the data are required (T-120, T-60, T-30, T-0).
- Specify the location or geographical area where the data are required (launch, impact, flight area).
- Specify the altitude of the location.

UPPER AIR:
Provide the following upper air information.
- Specify the time, in minutes, the data are required (T-120, T-60, T-30, T-0).
- Specify the location, geographical area, or flight interval when the data are required (launch, BO, reentry, impact).
- State the intervals or increments of altitude when the data shall be collected and recorded (500 m, 1 km).
- Specify the maximum altitude or limits of the altitudes in km when the data are required at the time listed above (100, 150, 200, 50-100, 100-200).

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

DATA ACCURACY:
Indicate the required reduced data accuracy value (1 Mb, 3 Mb, 5 knots, 2%, 5%).

PURPOSE AND REMARKS:
State the engineering purpose for the data and any remarks necessary to clarify the requirements made in the other entries or not covered elsewhere.

FORMAT 3240 - METEOROLOGICAL INSTRUMENTATION LOCATION DIAGRAM

This format is used if special requirements exist for the location of meteorological instruments. Follow preparation instructions in Section 5.2.1 for the entries in this format. If necessary to clarify requirements, provide diagrams indicating the location of special instrumentation.

FORMAT 3250 - SPACE ENVIRONMENT METEOROLOGY

This format is used to indicate the RA's requirements for space environmental support. The statement of requirements should be specific. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

STATION:
Enter the location where support is required.

PERIOD:
Give the from-to period required.

OBSERVATIONS OR FORECASTS REQUIRED:
State requirements in specific terms. Support available consists of the following.

- Observations (specify real-time or post-analysis) of solar flares, geomagnetic indices, solar radio flux (specify frequency), solar wind velocity, ionospheric electron density (specify location and altitudes), energetic particles (specify type and energy range), ionograms from range stations (specify rate at which 35mm negative should be taken), and ionospheric radio propagation conditions (vertical and oblique incidence sounder observations)
- Forecasts of solar flares (indicate importance class), proton events, geomagnetic indices, 10 cm solar radio flux, ionospheric electron density (specify location), and ionospheric radio propagation conditions (specify circuits, paths, or trunks)

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

PURPOSE AND REMARKS:
State the purpose of the requirement. If real-time observations or "quick-look" reports are required, give the position title and operational telephone number of the recipient.

FORMAT 3300 - RECOVERY

This format is used to enter general information concerning requirements, flight plans, operations, and procedures pertaining to recovery of personnel and equipment. For aircraft type programs, this UDS format may also include landing operations support information and requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter general information concerning requirements necessary to support recovery operations. General requirements, such as recovery areas, salvage and disposition, written reports, handling equipment, drawings, and general communications should be included on this format. Detailed communications requirements, for example, type of transmission format, source, and destinations, must be defined in the communications section of this document.

FORMAT 3310 - RECOVERY - SHIPS AND AIRCRAFT COVERAGE

This format is used to list locations and access times of recovery. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

AREA CODE:
Enter the area code or designation.

QUANTITY AND TYPE OF SHIPS:
List the number and type of ships required for recovery in areas designated in AREA CODE.

SHIP ACCESS TIME (HRS):
Enter the total time (in hours) from notification of the landing point to the time when the ship will arrive at the recovery point and the recovery effort is started.

QUANTITY AND TYPE RESCUE AIRCRAFT:
List the number and type of aircraft needed for adequate recovery coverage in the area designated in the AREA CODE entry.

AIRCRAFT ACCESS TIME (HRS):
Enter the total time (in hours) from notification of the landing point to the time when the aircraft will arrive at the recovery point and the recovery effort is started.

FORMAT 3320 - RECOVERY - ITEMS TO BE RECOVERED

This format is used to specify and describe items that must be recovered, including flight hardware, reentry vehicle, spacecraft, and underwater items. Handling procedures for equipment requiring special fixtures, jigs, and tools should be provided to the recovery agencies in accordance with applicable regulations. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

NOMENCLATURE:
Enter the name or nomenclature of the item to be recovered.

WEIGHT (LBS):
Enter the weight of the item in pounds.

DIMENSIONS (FT):
Enter the overall length, width, and the largest diameter, if applicable.

LIFE FORM/HAZARDS:
If applicable, indicate the type of life forms (human, primate, or spores) contained in the recoverable item. Identify any object that is classified or that is potentially dangerous to recovery personnel, for example, ordnance and hypergolic items, pressurized vessels, and toxic materials.

REMARKS:
In addition to the instructions in Section 5.2.1, enter additional information, sequence of events, and recovery aids that will aid in the identification and recovery of the specified item.

FORMAT 3330 - RECOVERY - SALVAGE AND DISPOSITION

This format is used to identify and describe components that may have to be salvaged and disposed of in case of inadvertent impact on land or in water. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

NOMENCLATURE:
Enter the name or designation of the component to be salvaged or disposed of.

WEIGHT (LBS):
Enter the weight of the component in pounds.

LOCATION:
Enter the location of the component in the vehicle, such as first stage engine section and nose cone.

DESCRIPTION:

Give a brief description of the component, including such items as length, width, and shape. If drawings are available, enter title and number.

REMARKS:
In addition to the instructions in Section 5.2.1, enter the purpose of the salvage action, the disposition of the salvaged component, and any special handling instructions. Identify each object that is classified or that is potentially dangerous to recovery personnel.

FORMAT 3340 - RECOVERY - PLANNED AREAS

This format is used to list requirements for planned areas of recovery. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

AREA CODE:
Enter the recovery area code or designation.

POSITION:
Enter the latitude and longitude of the area.

LANDING AREA SIZE:
Enter the lengths of the major and minor axes of each area in nautical miles.

LAUNCH AZIMUTH:
Enter the launch azimuth for the mission involved.

REVOLUTION NUMBER:
Enter the revolution number.

ITEMS TO BE RECOVERED:
Enter the names of the items of flight hardware to be recovered.

FORMAT 3350 - RECOVERY - CONTINGENCY AREAS

This format is used to list requirements for recovery contingency areas. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

AREA CODE:
Enter the recovery area code or designation.

POSITION:
Enter the latitude and longitude of the area.

LANDING AREA SIZE:
Enter the lengths of the major and minor axes of each area in nautical miles.

LAUNCH AZIMUTH:
Enter the launch azimuth for the mission involved.

REVOLUTION NUMBER:
Enter the revolution number.

ITEMS TO BE RECOVERED:
Enter the names of the items of flight hardware to be recovered.

FORMAT 3360 - RECOVERY - ABORT AREAS

This format is used for listing all recovery areas necessary for aborts. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

AREA CODE:
Enter the recovery area code or designation.

LOCATION OF AREA:
Enter the location of the area designated in the AREA CODE entry.

AREA SIZE:
Enter the lengths of the major and minor axes in nautical miles.

POSITION:
Enter the latitude and longitude of the area.

FORMAT 3400 - OTHER TECHNICAL SUPPORT

This format is used by the RA to specify general support requirements that are not included in the other UDS technical formats. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, define general technical support requirements not previously covered in this document.

FORMAT 3410 - OTHER TECHNICAL SUPPORT - AIRCRAFT

This format is used to list requirements for aircraft. Aircraft needs for airborne instrumentation tests, drop tests, and user-provided equipment should be listed here. This format may also be used to list aircraft recommended to support airborne telemetry, frequency protection, and optics. These data or service requirements must also have been requested in the appropriate UDS format. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

AIRCRAFT SOURCE RA ( ) SA ( ):
State whether the RA or SA will supply the aircraft in question.

FUNCTION/REQUIREMENT:
Enter the function the aircraft will perform such as airborne instrumentation (give type), escort, photo, and administrative. State the aircraft support required (transient services, communications).

EQUIPMENT TO BE INSTALLED IN AIRCRAFT:
Fill in the information for the format in the table provided in Appendix C. Enter the specialized equipment to be installed in the aircraft. Indicate who will perform the installation and maintenance and who will furnish this equipment. Give an estimate of the time needed to install and to remove each item of equipment. For example, a piece of special telemetry equipment furnished, maintained, and installed by XX Company is needed and it takes 20 hours to install and 5 hours to remove.

NUMBER OF AIRCRAFT:
Enter the number of aircraft required per quarter to support the function and purpose.

NUMBER OF FLIGHTS A/C:
Enter the number of flights (per quarter) anticipated per aircraft.

FLIGHT HOURS/TEST:
Enter the maximum flight duration in hours that will be required for an average single test. Flight time should include time flown prior to T-time, estimated hold time, and post-test vehicle or missile time, as applicable. Times should be based on desired aircraft speed.

TOTAL FLYING HRS/QTR:
Enter the total flying hours.

STATION:
Enter the stations, centers, or range station numbers involved.

FLIGHT PATH:
If the flight path encompasses many stations, list the range stations, such as 3-7. If the stations involved vary during the test period, indicate such for each quarter. If the flight path is more involved, enter narrative description in REMARKS.

SPEED RANGE (KTS):
Enter minimum and maximum speeds acceptable in knots.

ALTITUDE:
Enter minimum and maximum altitudes acceptable (1000-foot increments or equivalent metric unit).

REMARKS:
In addition to the instructions in <u>Section 5.2.1</u>, use this entry to clarify or explain any information stated elsewhere. Include the aircraft type and identification number, if known. Indicate whether the SA can or cannot use the aircraft for other missions between tests.

FORMAT 3411 - OTHER TECHNICAL SUPPORT - SEACRAFT

This format is used to list requirements for seacraft. Seacraft needs for ship-borne instrumentation tests, set-out tests, and user-installed equipment should be listed here. This format may also be used to recommend the seacraft to support ship-borne telemetry, radar measurements, and recovery. These data or service requirements must also have been requested in the appropriate UDS format. Follow preparation instructions in <u>Section 5.2.1</u> for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE AND FUNCTION:
Enter the type of ship or boat required and the function it will perform.

SEACRAFT SOURCE RA ( ) SA ( ):
State whether the RA or SA will supply the seacraft in question.

NUMBER OF OPERATIONS:
Enter the number of operations in the space provided for the calendar periods indicated.

TOTAL TIME REQUIRED ON STA:
Enter the estimated total time, in hours, the ship or boat will be required on station for the calendar periods indicated.

OPERATING AREA:
Enter the geographical coordinates of the approximate on-station position desired or the area in which the ship's operations are to be conducted.

BEARING (TRUE):
Enter the true bearing of the ship or boat operation.

SPEED:
Enter the speed requirements of the ship or boat in knots during the support operations.

DESCRIPTION OF OPERATIONS:
Enter a brief description of a typical operation to be supported.

SUPPORT REQUIRED:
Describe the support required. Enter all nonstandard equipment that must be installed and indicate if any of the SAs will be expected to furnish, install, or maintain.

FORMAT 3412 - OTHER TECHNICAL SUPPORT - TARGETS

This format is used to list target requirements. Do not use this format to list requirements for splash. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TARGET CODE DESIGNATION, NAME, AND REFERENCE:
Indicate the target's code designation and common name. Also, give references that will describe the target.

TYPE OF TARGET:
State the type of moving target, indicating its environment (land, sea, air, space, underwater).

SOURCE:
Enter RA or SA to indicate whether the RA or SA will supply the target.

SECURITY CLASSIFICATION:
Enter the highest security classification of the target.

TARGET PERFORMANCE PARAMETERS:
Indicate the magnitude of the various parameters listed. Additional parameters may be added if appropriate.

AIR CONTROL REQUIREMENTS:
Complete the outlined description.

NAME OF EQUIPMENT:
List the support equipment (both target- and non-target-borne) needs for target requirements.

AGENCY RA ( ) SA ( ):
State whether the RA or SA will supply the support equipment in question.

DESCRIPTION OF EQUIPMENT:
Briefly describe important properties of the support equipment to be used.

PURPOSE:
Indicate the purpose of the support equipment.

SUPPORT SERVICES AND SPECIAL REQUIREMENTS:
List support services, such as Automatic Ground Control Landing (AGCL). Operational or similar systems must be described in the event a user would be authorized to provide their own target operations.

FORMAT 3414 - OTHER TECHNICAL SUPPORT - INTERCEPTOR

This format is used to list interceptor requirements. Follow preparation instructions in Section 5.2.1 for the entries in this format.

FORMAT 3420 - SUMMARY OF FREQUENCY PROTECTION

This format is used to present a list of all frequencies that require frequency protection and is not to be considered a request for frequency allocation. Requests for frequency allocation will be submitted according to SA directives. Complete the Summary of Frequency Protection table at the end of Appendix C. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

PURPOSE:
Enter the purpose of the circuit.

FREQUENCY (MHz):
Enter the frequency in MHz or kHz.

REQUIRED PROTECTION:
Enter the desired guard band, such as 500 kHz.

ESTIMATED TIME OF USE:
Provide the estimated time of use of the frequency during the following stages of the test.
- Launch Pre-Op
- Rehearsal
- Launch

SPECIAL MONITORING REQUIREMENTS:
Enter other related reference UDS formats and item numbers that explain special monitoring requirements in detail.

FORMAT 3421 - PROTECTION FROM EMITTING SYSTEMS

This format is used to identify and to list the radiation limits that may be hazardous to RA test articles, vehicles, equipment, or payloads. Provide the radiation levels at the equipment or

container envelope at each facility occupied and during the inter-facility movements. Include maximum permissible levels. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

FREQUENCY:
Enter the frequency in kHz, MHz, gigahertz (GHz), or angstroms.

LOCATION:
Enter any location that requires protection, such as building or area identity or vehicle and area if in movement.

PROTECTION REQUIRED:
Enter maximum permissible levels allowable. Describe the term of reference and the units of measurement.

ESTIMATED DURATION OF PROTECTION:
Enter the duration of protection during the following stages of the test.
- Pre-Mission
- Mission
- Other

FORMAT 3430 - GEODETIC AND GRAVITATIONAL DATA

This format is used to identify geodetic and gravitational data required for the program or to identify parameter accuracy requirements that exceed current accuracy levels. The geodetic and gravitational parameters for specific launch sites, sensors, and targeted impact points are available to any qualified RA. The SA geodetic project officer or the responsible geodetic agency will distribute the requisite published geodetic data to the RA for each facility or group of facilities identified for use in support of the program in the SC. Data may be provided in another document, such as the range's Geodetic Constants manual. The RA will then analyze the geodetic data to determine its adequacy in connection with program objectives. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

If this format is not completed by the RA, it will signify that the launch site, sensor, and targeted impact point data, as specified by the SA, are adequate to meet program requirements.

FACILITY DESCRIPTION AND LOCATION:
Identify each facility (launcher, sensor, impact point, or support facility) and its location, if known.

HORIZONTAL DATA, VERTICAL DATA, GRAVITY:

List the maximum allowable standard deviation uncertainties (accuracy = 1 sigma) for launch facilities, sensors, target points, and support facilities for which geodetic and gravitational data requirements have been identified.

All entries should be filled in. If the parameter is not required, state it in that entry. If the parameter is required but there is no accuracy statement necessary, so indicate in that entry.

REMARKS AND SPECIAL REQUIREMENTS:
In addition to the instructions in Section 5.2.1, for the entry REMARKS, list any special geodetic and gravitational requirements not provided for above. Enter special instructions, such as data reference points on particular instrumentation, special data card issuance or address, special accuracy statement clarification, or any special requirements related to the data.

FORMAT 3440 - OTHER TECHNICAL SUPPORT - TRAINING

This format is used to describe special training or briefing requirements for RA personnel in support of program, mission, or test operations. Community presentations and education are covered on Format 5313, Services - Public Affairs. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

LOCATION:
Enter the location where the training is to be accomplished.

NUMBER:
Enter the number of personnel to be trained at the location stated under LOCATION.

TYPE/SPECIALTY:
Enter the type of training required. Give training course numbers or specialty codes, if known.

DATE/DURATION:
Define the period of time personnel will be available for the training courses requested.

PURPOSE/REMARKS:
Describe the training required and state any equipment or training aids that may be required. If housing, messing, and other base support services are required for the personnel specified under the NUMBER entry, appropriate information must be entered on Format 5100 - Personnel Assignment Schedules.

FORMAT 3500 - MODELING AND SIMULATION

This format is used by the RA to list general modeling and simulation requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REMARKS.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, briefly list and describe those areas requiring modeling and simulation support.

Provide, as necessary, information of a general nature concerning the types of modeling and simulation tools required and that will aid the SA in supporting the program/mission. Types of modeling and simulation tools include but are not limited to:

- Advanced Distributed Simulation - An environment in which simulations are linked to produce large synthetic environments within which large numbers of subjects can interact in real time.
- Computational Fluid Dynamics - A numerical approach for modeling the dynamics of a fluid flow in and around solid objects.
- Simulators - This is the family of equipment used to represent threat weapon systems in testing and training. A threat simulator has one or more characteristics that, when detected by human senses or man-made sensors, provide the appearance of an actual threat weapon system within a known degree of realism. It is also a human-in-the-loop device that provides the conditions and environment of a system to accurately produce aspects of the system's performance and operation to conduct training and develop tactics.
- Stimulators - A simulation used to provide an external stimulus to a system or subsystem.
- Hardware/Software in the Loop - A hybrid simulation that includes actual system (prototype or production) hardware or software in conjunction with digital models and external stimuli to demonstrate the operations and functions of the hardware/software within an environment simulating actual operating conditions.
- System/Software Integration Laboratory - A facility that supports the integration of system components and software in a laboratory environment for development, experiments, and testing.
- Installed System Test Facilities - Facilities where entire systems or sub-systems get their first workout in the environment in which they will operate.

PURPOSE:
Briefly describe the purpose of the support requirements, relating them to the overall program.

FORMAT 3510 - MODELING AND SIMULATION PLAN

This format is used to list the general modeling and simulation plan requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

LOCATION:
Enter the location where the modeling and simulation are to be accomplished.

NUMBER:

Enter the number of simulations required at the location stated under LOCATION.

TYPE/SPECIALTY:
Enter the type of modeling or simulation required.

FIDELITY:
List the types of inputs and outputs required for the model as well as their accuracy requirements.

VERIFICATION, VALIDATION, AND ACCREDITATION (VV&A):
Describe the method in which VV&A is to be conducted on the models and simulations.

DATE/DURATION:
Define the period of time that the modeling or simulation will be required.

PURPOSE/REMARKS:
Describe any special training and list special equipment that may be required.

FORMAT 3520 - MODELING AND SIMULATION ARCHITECTURE

This format is used to list general modeling and simulation architecture requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REMARKS.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, use this entry to provide information on the interface between different simulations or between simulations and the live portions of the test.

FORMAT 4100 - DATA PROCESSING SPECIFICATIONS

This format is used to list general data processing requirements. Disposition of the data will be listed in the Format 4200 series, Data Disposition. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter the requirements for data computer processing.

FORMAT 4110 - DATA PROCESSING SPECIFICATIONS - DETAIL

This format is used to list general data processing requirements. The disposition of these data will be listed in the Format 4200 series, Data Disposition. Follow preparation instructions

in for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

DATA DESCRIPTION:
Enter the type of data to be processed.

SECURITY CLASSIFICATION:
Enter the security classification of the data.

PROCESSING TIME:
Enter the time (Zulu or flight time) to begin (FROM) and stop (TO) processing.

DATA SAMPLE RATE:
Enter the rate at which the data will be sampled and stored on magnetic tape or disk.

DATA PLOT OR PRINT RATE:
Enter the rate at which the data will be taken from the sampled data, plotter, or printer.

REFERENCE:
Enter the UDS format number and requirement item where the requirement is listed. List the agency designator with the requirement item number portion of the entry.

TYPE PRESENTATION:
Enter the type of presentation of the data (magnetic tape, film plot, hard-copy plot, and printout).

DATA FORMAT - GENERAL INSTRUCTIONS:
Enter all special data formats for general instructions that are needed to further define the specifications of the processed data.

FORMAT 4120 - DATA PROCESSING - OTHER

This format is used to describe derivative or special handling of measurement data not readily or adequately defined on requirement formats. Follow preparation instructions in for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

DATA:
Enter the data for which the special processing is required.

REFERENCE:
Enter the UDS format number and requirement item number where the data collection requirement appears.

TIME INTERVAL:
Enter the time interval between consecutive prints on which data are required.

TIME REQUIRED:
Indicate the number of hours, days, or workdays after the test (T-0) that the data are required.

DATA PRESENTATION AND REMARKS:
Describe the special data processing/presentation required, such as special formats in tabular data, graphical data, and magnetic tapes. For other than standard presentations, a complete description should be furnished. Deviations from normal presentations will require lead time for computer programming and cause longer elapsed time because of special handling.

FORMAT 4130 - DATA COORDINATE SYSTEMS DESCRIPTION

This format is used to describe in detail the data coordinate systems required. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter the rectangular or curvilinear coordinate systems required and give the origin and orientation of the major axes. If origin is defined with respect to an event, give an alternate for use if the designated event does not occur or is not identified in data records.

FORMAT 4200 - DATA DISPOSITION

This format is used to list the general requirements for disposition of test evaluation data that have been established in the document. List the data recipients, cage codes, and codes in the table provided in Appendix C, directions for which are provided below. Provide space for classified mailing information. Include data labeling instructions and courier information, as applicable, in the REMARKS entry.

DATA DISTRIBUTION table:
Provide the required information in the following table cells. Enter information for one organization per row.

Data Recipient Agency/Abbreviated Name:
Enter the recipient organization's name and abbreviated name.

Address:
Provide the recipient organization's commercial address.

Classified Address/Cage Code:
Enter the recipient organization's classified address, including cage code.

TIME REQUIRED:

Enter a description of the length of time between the end of the project and the reception of data by those listed in the table.

FORMAT 4220 - DATA DISPOSITION - REPORTS

This format is used for specifying requirements for the distribution of written/electronic range test data reports. The requirements have been established elsewhere in the document. Follow preparation instructions in for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA TYPE:
For each report, provide the following information.
- TYPE REPORT: Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data are to be processed or reduced in a manner prescribed on previous formats.
- CLASSIFICATION: Enter the classification level of the data product.

REFERENCE:
For each report containing data acquisition requirements, provide the following information.
- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:
Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed in the COPIES entry.

DISTRIBUTION/RECIPIENT:
Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:
Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.
- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.

- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.
- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 4230 - DATA DISPOSITION – DETAIL - METRIC/SIGNATURE

This format is used to specify requirements for the distribution of metric data other than real time. The requirements have been established elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA TYPE:
Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data are to be processed or reduced in a manner prescribed on previous formats. For each item, provide the following information.
- MEDIA TYPE: Enter the media type on which data is to be delivered, e.g., electronic, hard drive, CD, DVD, paper copy, etc.
- CLASSIFICATION: Enter the data product classification.

REFERENCE:
For each report containing data acquisition requirements, provide the following information.
- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:
Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed in the COPIES entry.

DISTRIBUTION/RECIPIENT:
Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:

Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.
- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.
- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.
- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 4231 - DATA DISPOSITION - DETAIL - TELEMETRY

This format is used to specify requirements for the distribution of telemetry data other than real time. The requirements have been established elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA PRODUCT:
Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data are to be processed or reduced in a manner prescribed on previous formats.
- MEDIA TYPE: Enter the media type on which data is to be delivered, e.g., electronic, hard drive, CD, DVD, paper copy, etc.
- CLASSIFICATION: Enter the data product classification.

REFERENCE:
For each report containing data acquisition requirements, provide the following information.
- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:
Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed.

DISTRIBUTION/RECIPIENT:

Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:
Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.
- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.
- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.
- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 4232 - DATA DISPOSITION - DETAIL - VOICE/TV RECORDING

This format is used to specify requirements for the distribution of voice/TV recording data other than real time. The requirements have been established elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA PRODUCT:
Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data are to be processed or reduced in a manner prescribed on previous formats. Enter the following information for each data item.
- MEDIA TYPE: Enter the media type on which data is to be delivered, e.g., electronic, hard drive, CD, DVD, paper copy, etc.
- CLASSIFICATION: Enter the data product classification.

REFERENCE:
For each report containing data acquisition requirements, provide the following information.

- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:
Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed.

DISTRIBUTION/RECIPIENT:
Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:
Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.
- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.
- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.
- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 4233 - DATA DISPOSITION - DETAIL - PHOTOGRAPHIC/OPTICS

This format is used to specify requirements for the distribution of photographic data. The requirements have been established elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA PRODUCT:
Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data

are to be processed or reduced in a manner prescribed on previous formats. Enter the following information for each data item.
- MEDIA TYPE: Enter the media type on which data is to be delivered, e.g., electronic, hard drive, CD, DVD, paper copy, etc.
- CLASSIFICATION: Enter the data product classification.

REFERENCE:
For each report containing data acquisition requirements, provide the following information.
- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:
Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed.

DISTRIBUTION/RECIPIENT:
Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:
Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.
- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.
- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.
- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 4234 - DATA DISPOSITION - DETAIL - METEOROLOGICAL

This format is used to specify requirements for the distribution of meteorological data other than real time. The requirements have been established elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER,

SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA PRODUCT:
Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data are to be processed or reduced in a manner prescribed on previous formats. Enter the following information for each data item.

- MEDIA TYPE: Enter the media type on which data is to be delivered, e.g., electronic, hard drive, CD, DVD, paper copy, etc.
- CLASSIFICATION: Enter the data product classification.

REFERENCE:
For each report containing data acquisition requirements, provide the following information.

- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:
Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed.

DISTRIBUTION/RECIPIENT:
Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:
Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.
- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.
- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.

- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 4235 - DATA DISPOSITION – DETAIL - COMPUTER PROCESSING

This format is used to list the disposition of computer processing data other than real time. The requirements have been established elsewhere in the document. This format may be divided into specific subsections for particular programs. These subsections may be broken down by mission phase (prelaunch, launch, midcourse, orbital and space, terminal, and signature). The organization of this format must be consistent with the data breakout where the requirement was established in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA PRODUCT:
Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data are to be processed or reduced in a manner prescribed on previous formats. Enter the following information for each data item.
- MEDIA TYPE: Enter the media type on which data is to be delivered, e.g., electronic, hard drive, CD, DVD, paper copy, etc.
- CLASSIFICATION: Enter the data product classification.

REFERENCE:
For each report containing data acquisition requirements, provide the following information.
- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:
Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed.

DISTRIBUTION/RECIPIENT:
Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:
Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.

- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.
- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.
- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 4236 - DATA DISPOSITION - DETAIL - MISCELLANEOUS

This format is used to specify requirements for the distribution of miscellaneous data other than real time. The requirements have been established elsewhere in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

Enter the name and/or data item description number for the data product.

DATA PRODUCT:
Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data are to be processed or reduced in a manner prescribed on previous formats. Enter the following information for each data item.
- MEDIA TYPE: Enter the media type on which data is to be delivered, e.g., electronic, hard drive, CD, DVD, paper copy, etc.
- CLASSIFICATION: Enter the data product classification.

REFERENCE:
For each report containing data acquisition requirements, provide the following information.
- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:
Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed.

DISTRIBUTION/RECIPIENT:

Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:
Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.
- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.
- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.
- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 4240 - DATA DISPOSITION - ENVIRONMENTAL

This format is used to list the disposition of environmental data other than real time, the requirements for which have been established elsewhere in the document. This format may be divided into specific subsections, as required, for particular programs. These subsections may be broken down by mission phase (prelaunch, launch, midcourse, orbital and space, terminal, and signature). The organization of this format must be consistent with the data breakout where the requirement was established in the document. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

DATA PRODUCT:
Enter the type of report required, such as quick-look, preliminary, or final. Quick-look or preliminary reports will be presented prior to the final data in either tabular or graphical form. Only that data that will be incorporated at a later time should be included in this category. Final report data constitute the end product required by the range user or other agencies. These data are to be processed or reduced in a manner prescribed on previous formats. Enter the following information for each data item.
- MEDIA TYPE: Enter the media type on which data is to be delivered, e.g., electronic, hard drive, CD, DVD, paper copy, etc.
- CLASSIFICATION: Enter the data product classification.

REFERENCE:

For each report containing data acquisition requirements, provide the following information.

- UDS SECTION NUMBER: Enter the format number of the report.
- ITEM NUMBER: Enter the item number to which the report coincides.

QUANTITY:

Enter the number of original data records required. If more than one original is needed, explain the need under the REMARKS entry. Enter the number of prints needed.

DISTRIBUTION/RECIPIENT:

Enter the organization and code of the office assigned as the central distribution point for the data. This office must be contacted if problems rise in data distribution. Include the name and code of the person originating the request, followed by the agency code in parentheses. Include the abbreviated name of the data recipients.

TIME REQUIRED:

Enter the time in hours (up to 24 hours) and in days as indicated below. This is the time required for receipt of the data by the recipient.

- H - meaning consecutive hours from T-0.
- WD - meaning workdays from T-0; Saturday, Sunday, and holidays are not included in these time periods.
- CD - meaning calendar days from T-0; Saturday, Sunday, and holidays are included in this processing time.
- W/A - meaning when the data are available.
- EOM+___ - (enter number of days) meaning the number of days from mission termination (end of mission) when the data are required.
- SD+___ - (enter number of days) meaning the number of days after the ship on which the data were generated has returned to port.
- AOV - meaning after arrival of vehicle.
- EOS+___ - (enter number of days) meaning the number of days after the end of support.
- E+___ - (enter number of days) meaning the number of days after the event.
- R+___ - (enter number of days) meaning the number of days after receipt of the material.

FORMAT 5000 - BASE FACILITIES/LOGISTICS

This format is used by the RA to request base facilities and logistics support. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

In addition to the instructions in Section 5.2.1, outline the general requirements and RA concept of support required to include the extent of general support facilities and logistics. Also, overall

personnel assignment schedules, transportation types, all types of services, laboratories, maintenance, and any support not covered by UDS Format 5000 series may be listed.

FORMAT 5100 - PERSONNEL ASSIGNMENT SCHEDULES

This format is used to show categorized RA personnel deployment requirements in connection with the program. This information is required to allow planning for housing, messing, medical care, recreation, and other general or base support services for personnel assigned to or meeting at the various locations. Use the form provided for the required information. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

Enter the following information in the table illustrated in Appendix C.

- Organization: List the organization the personnel represent.
- Number: List the number of personnel.
- Location: Identify where these personnel will be located when deployed to the support facility.
- Total: Enter the total personnel deployment for each quarter.

FORMAT 5200 - TRANSPORTATION

This format is used by the RA to specify general transportation requirements. Specific requirements and schedules are contained in the Format 5210, 5220, and 5230 series. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TRIP FREQUENCY/QTR:
Enter the number of trips anticipated per quarter.

LOCATION:
Enter the name or number of the station, base, or center where the personnel and cargo will be transported from and to.

LOAD:
If the load is personnel, enter an "X" in the PERSONNEL entry. If the load is cargo, enter the acronym for short tons (S/T) in the CARGO entry for on land or the acronym for measurement tons (M/T) for ship cargo or pounds in the exponential value of lbs X^{10}.

NUMBER OF PASSENGERS and QTY OF CARGO/QTR:
Enter the number of passengers and quantity (QTY) of cargo to be transported per quarter for the year indicated. If the number or quantity is dependent on the test schedule, enter the value per test and type the notation "per test" after the value entered.

FORMAT 5210 - GROUND TRANSPORTATION

This format is used to list all RA surface transportation requirements for personnel and cargo between (or to) the various stations or sites. Should the RA desire to provide part or all of its own transportation, this notation should be shown as RA provided; in which case, any materials handling or other requirements to be placed on the SA shall be specified. These requirements should cover the period of the program and reflect only those requirements in direct support of the program. Personnel and cargo load will be entered as separate items even if the LOCATION entry is identical. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TRIP FREQUENCY/QTR:
Enter the number of trips anticipated per quarter.

LOCATION:
Enter the name or number of the station, base, or center where the personnel and cargo will be transported from and to.

LOAD:
If the load is personnel, enter an "X" in the PERSONNEL entry. If the load is cargo, enter S/T in the CARGO entry for on land or M/T for ship cargo or pounds in the exponential value of lbs X^{10}.

NUMBER OF PASSENGERS and QTY OF CARGO/QTR:
Enter the number of passengers and quantity of cargo to be transported per quarter for the year indicated. If the number or quantity is dependent on the test schedule, enter the value per test and type the notation "per test" after the value entered.

FORMAT 5220 - AIR TRANSPORTATION

This format is used to list all RA air transportation requirements of personnel and cargo between (or to) the various stations or sites. Should the RA desire to provide part or all of its own transportation, this notation should be shown as RA provided. In such cases, any materials handling or other requirements to be placed on the SA shall be specified. These requirements should cover the period of the program and reflect only those requirements in direct support of the program. Personnel and cargo load will be entered as separate items even if the LOCATION entry is identical. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TRIP FREQUENCY/QTR:
Enter the number of trips anticipated per quarter.

LOCATION:

Enter the name or number of the station, base, or center where the personnel and cargo will be transported from and to.

LOAD:

If the load is personnel, enter an "X" in the PERSONNEL entry. If the load is cargo, enter the exponential value in lbs X^{10} in the CARGO entry.

NUMBER OF PASSENGERS and QTY OF CARGO/QTR:

Enter the number of passengers and quantity of cargo to be transported per quarter for each year indicated. If the number or quantity is dependent on the test schedule, enter the value per test and provide the notation "per test" after the value entered.

FORMAT 5230 - SEA TRANSPORTATION

This format is used to list all RA sea transportation requirements of personnel and cargo between (or to) the various stations or sites. Should the RA desire to provide part or all of its own transportation, this notation should be shown as RA provided. In such cases, any materials handling or other requirements to be placed on the SA shall be specified. These requirements should cover the period of the program and reflect only those requirements in direct support of the program. Personnel and cargo load will be entered as separate items even if the LOCATION entry is identical. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TRIP FREQUENCY/QTR:

Enter the number of trips anticipated per quarter.

LOCATION:

Enter the name or number of the station, base, or center where the personnel and cargo will be transported from and to.

LOAD:

If the load is personnel, enter an "X" in the PERSONNEL entry. If the load is cargo, enter the exponential value in lbs X^{10} in the CARGO entry.

NUMBER OF PASSENGERS and QTY OF CARGO/QTR:

Enter the number of passengers and quantity of cargo to be transported per quarter for each year indicated. If the number or quantity is dependent on the test schedule, enter the value per test and provide the notation "per test" after the value entered.

FORMAT 5300 - SERVICES

This format is used by the RA to list requirements for services not covered elsewhere in the document. This format is used to establish general and specific services. Miscellaneous and other services not covered in succeeding formats should also be identified here. See the Format 5300 series for guidelines regarding specific services. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, define the general services requirements. Specific services requested must include the amounts (number of persons, pounds, tons, gallons, or square feet as applicable) for each requirement item for the period it is required. Specify dates (month and year) for the item or service required. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5310 - SERVICES - ADMINISTRATIVE, PERSONNEL, AND OFFICE

This format is used by the RA to list requirements for administrative, personnel, and office support and services. Services requested on this format are the following.

Personnel services	Equipment
Personnel records	Central mail and files
Orders/transportation request	Postal/mail distribution
Office services	Reproduction
Word processing	Library
Supplies	Office space and furniture

Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required item or service.

RA ( ) SA ( ):
State whether the RA or SA will supply the equipment or service in question.

DATES OF REQUIRED ITEM/SERVICE:
Enter dates (month and year) for the item or service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Enter the amount for each item/service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks that specifically describe the item and amounts shown in previous entries. Should the required service need special instructions, list these instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5311 - SERVICES - FIRE AND RESCUE

This format is used by the RA to list requirements for fire protection and personnel rescue services. Services requested on this format are the following.

Fire protection/fire suppression	Personnel rescue and recovery
Structural crew	Crash crew
Search and rescue crew	Load crew
Personnel protective equipment	Special equipment

Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required item or service.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

DATES OF REQUIRED ITEM/SERVICE:
Enter dates (month and year) for the item or service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Enter the amount for each item/service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks that specifically describe the item and amounts shown in entries above. Should the required service need special instructions, list these instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5312 - SERVICES - MEDICAL

This format is used to describe general medical requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter a description of the general medical requirements to be supported for the various phases of the program/mission, including bio-science, personnel, standby personnel, and facilities/equipment.

FORMAT 5313 - SERVICES - PUBLIC AFFAIRS

This format is used to describe procedures for receiving and disseminating general program/mission information to news media representatives and to other SAs. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter general information concerning public affairs services. Include such areas as oral communications, radio and television, motion picture, news media, and special releases connected with public affairs. Enter the overall schedule of public affairs events to be covered. Specific requirements must be entered on applicable forms to receive support, such as communications, facilities, and photography, and may be referenced here. Included are personnel assignments, news media personnel positions, and other public affairs services as applicable.

FORMAT 5314 - SERVICES - SECURITY AND SAFETY

This format is used by the RA to list requirements for security and safety support services. Services requested on this format are the following.

Security services	Clearances
Access control/facility security/secure work area	Classified storage
Area surveillance/perimeter guards	Escort security
Police and traffic control	Safety services
Safety monitor and control	

Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required item or service.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

DATES OF REQUIRED ITEM/SERVICE:
Enter dates (month and year) for the item or service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Enter the amount for each item/service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

State briefly the need for the service requested and include any clarifying remarks that specifically describe the item and amounts shown in previous entries. Should the required service need special instructions, list these instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5315 - SERVICES - COMMUNITY, EDUCATION, AND FOOD SERVICE

This format is used by the RA to list requirements for community, education, and food services. Services requested on this format are the following.

Recreation	Chapel and chaplain
Bank	Library
Retail facilities	Exchange facilities
Community presentations	Schools (nursery, elementary, high)
Food services	Cafeteria
Restaurant	Mobile food service
Box lunches	

Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required item or service.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

DATES OF REQUIRED ITEM/SERVICE:
Enter dates (month and year) for the item or service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Enter the amount for each item/service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks that specifically describe the item and amounts shown in entries above. Should the required service need special instructions, list these instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5320 - SERVICES - UTILITIES (ELECTRICAL, WATER, AND SANITATION)

This format is used by the RA to list requirements for utilities (electrical, water, and sanitation). Services requested on this format are:

Electric power	Water (potable/non-potable)
Alternating current (ac)	Power converters
Direct current (dc)	Sanitation
Restrooms/portable	Portable power generators
Trash collection	Facility lighting
Portable lighting	Waste disposal
Janitorial services	

Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required item or service.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

DATES OF REQUIRED ITEM/SERVICE:
Enter dates (month and year) for the item or service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Enter the amount for each item/service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks that specifically describe the item and amounts shown in entries above. Should the required service need special instructions, list these instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5321 - SERVICES - HANDLING, STORAGE, AND DISPOSAL

This format is used by the RA to list requirements for handling, storage, and disposal services. Services requested on this format are:

Handling	Storage
Equipment required	Warehousing
Flammable materials	Space requirements
Special materials	Temperature and humidity control
Explosive devices	Refrigeration
Hazardous materials	Disposal
Ordnance	

Use the Services - Handling, Storage, and Disposal table at the end of Appendix C. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required item or service.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

DATES OF REQUIRED ITEM/SERVICE:
Enter dates (month and year) for the item or service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Enter the amount for each item/service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks that specifically describe the item and amounts shown in entries above. Should the required service need special instructions, list these instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required. Provide the information required in the blank form.

FORMAT 5322 - SERVICES - AIR CONDITIONING AND ENVIRONMENTAL OBSERVATIONS

This format is used by the RA to list requirements for air conditioning and environmental observation services. Services requested on this format (indoor and outdoor) are portable air conditioning, environmental monitoring (recording and sampling), and acoustical monitoring. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required item or service.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

DATES OF REQUIRED ITEM/SERVICE:
Enter dates (month and year) for the item or service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Enter the amount for each item/service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

State briefly the need for the service requested and include any clarifying remarks that specifically describe the item and amounts shown in previous entries. Should the required service need special instructions, list these instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required. Include power requirements, airflow, and capacity, if known.

FORMAT 5330 - SERVICES - PROCUREMENT, SHIPPING, RECEIVING, AND STOCK CONTROL

This format is used by the RA to list requirements for procurement, shipping, receiving, and stock control services. Services requested on this format are:

Procurement	Packing and crating
Requisitions	Loading and trucking (Stevedoring)
Specifications	Stock control
Purchase orders	Invoicing
Work orders	Issue and return
Contract administration	Inventory
Shipping and receiving	

Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required service.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

DATES OF REQUIRED SERVICE:
Enter dates (month and year) for the service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Quantify the service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
Briefly state the need for the service requested and include any clarifying remarks that specifically describe the entries above. Should the required service need special instructions, list these instructions in this entry. Specific items to be procured should be listed on Format 5331.

FORMAT 5331 - SERVICES - LOCAL PURCHASE OF BASE-FUNDED ITEMS

This format is used by the RA to list equipment or supplies to be purchased by the SA. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

NAME/DESIGNATION:
List the equipment or supplies to be obtained by the SA.

MILITARY SPECIFICATION NUMBER:
Enter the number of the military specification that identifies and defines the entry in the NAME/DESIGNATION entry.

FEDERAL STOCK NUMBER:
Enter the appropriate number that identifies the item in the NAME/DESIGNATION entry.

UNITS:
Enter the quantity or amount required.

ESTIMATED COST:
Enter the approximate cost of the item required.

QUANTITY REQUIRED/QTR:
Estimate the quantity or amount of the item in the NAME/DESIGNATION entry required per quarter for each of the 3 years should the program continue for that period. Indicate the CY.

REMARKS:
In addition to the instructions in Section 5.2.1, list those procurement items not covered elsewhere in the document.

FORMAT 5340 - SERVICES - PROPELLANTS, GASES, AND CHEMICALS

This format is used by the RA to list program requirements for propellants, gases, and chemicals. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

ITEM NAME/DESIGNATION:
List the test unit propellants, gases, chemicals, lubricants, hydraulic fluids, preservatives, and petroleum, oil, and lubricant (POL) products required. Do not include items that are covered in the following Format 5300 series.

MILITARY SPECIFICATION NUMBER:
Enter the number of the military specification that identifies and defines the item in the ITEM NAME/DESIGNATION entry.

FEDERAL STOCK NUMBER:

Enter the appropriate number that identifies the item in the ITEM NAME/DESIGNATION entry.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in the ITEM NAME/ DESIGNATION entry.

QUANTITY REQUIRED/QTR:
Estimate the consumption quantity (tons, pounds, gallons) of the material per quarter for 3 years, should the program continue that long. Indicate CY.

REMARKS:
In addition to the instructions in Section 5.2.1, specify purity requirements. List any of the following propellants, gases, and chemicals, or any others required:

Ammonia, Anhydrous (lb)	IRFTNA (lb)	Jet-A (lb)
Aniline (lb)	Propane (lb)	Furfural Alcohol (lb)
Argon (standard cubic foot)	Methanol (gal)	JP-5 (gal)
Carbon Disulfide (lb)	JP-4 (gal)	JP-8 (gal)
Ethylene Oxide (lb)	Freon 12 (lb)	Hexane (gal)
UDETA (lb)		

FORMAT 5341 - SERVICES - FUELS, LUBRICANTS, AND HYDRAULIC FLUIDS

This format is used to list requirements for aircraft, ground vehicles/equipment, and marine fuels. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

ITEM NAME/DESIGNATION:
Enter the types of aircraft, ground vehicles/equipment, and marine fuels required for conducting operations at the SA location, such as aviation and automotive gas and diesel fuel. Do not list fuel requirements for any SA-operated equipment.

MILITARY SPECIFICATION NUMBER:
Enter the number of the military specification that identifies and defines the item in the ITEM NAME/DESIGNATION entry.

FEDERAL STOCK NUMBER:
Enter an appropriate number that identifies the item in the ITEM NAME/DESIGNATION entry.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in the ITEM NAME/ DESIGNATION entry.

QUANTITY REQUIRED/QTR:

Estimate the consumption quantity (tons, pounds, gallons) of the material per quarter for 3 years, should the program continue that long. Indicate CY.

REMARKS:
In addition to the instructions in Section 5.2.1, enter (when applicable) the name of the contractors and contract numbers for which the service/support is required.

FORMAT 5342 - SERVICES - CHEMICAL CLEANING

This format is used by the RA to list all requirements for chemical cleaning. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

COMPONENT/SYSTEM:
Provide the following information.
- Name/Description: Enter the name/description of all components or systems by proper nomenclature; for example, globe valve and hydraulic pump. Give descriptive size and constituent material, such as Teflon, carbon steel, copper and copper alloys, and stainless steel (martensitic, ferritic, austenitic).
- Quantity: Enter the quantity of components and/or systems to be cleaned.
- Specification: Enter the applicable drawing/specification number for the component/ system. Drawings and specifications are to be provided to the SA.

CLEANING REQUIREMENT:
Describe the cleaning requirement or reference the applicable cleaning specification. A list of special tools, if required for specific components, should be included.

SERVICE:
Enter the type of service associated with the use of the component/system, gaseous nitrogen, hydraulic, LOX, and hydrogen peroxide.

REMARKS:
In addition to the instructions in Section 5.2.1, enter (when applicable) the name of the contractors and contract numbers for which the service/support is required. Identify any hazard associated with the cleaning process.

FORMAT 5350 - SERVICES - VEHICLES

This format is used by the RA to list requirements for vehicles and land transportation. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

ITEM NAME/DESIGNATION:

Enter the name of vehicles required with appropriate military nomenclature. Service includes buses and taxis. Enter a comment in REMARKS requesting a driver in addition to the vehicle if necessary. Use Format 5200 series for listing all surface transportation requirements of personnel and cargo.

CAPACITY:
Indicate the capacity in number of passengers and tons.

PURPOSE:
State the purpose for which the vehicle or transportation is required.

PERCENT USED:
Indicate the percentage of use in terms of a 90-day quarter with a 24-hour day (2160 hours).

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

NUMBER REQUIRED/QTR:
Enter the number of vehicles of the same class/type required for each quarter of 3 years, should the program continue that long.

REMARKS - SPECIAL INSTRUCTIONS:
If the requirement is long-term (over 3 years), enter the number of vehicles and duration required in this entry. Indicate CY. Include any clarifying remarks or instructions that may be appropriate. When applicable, enter the name of the contractors and contract numbers for which the service/support is required.

FORMAT 5351 - SERVICES - GROUND HANDLING EQUIPMENT

This format is used by the RA to list requirements for ground handling equipment. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

Use the Services - Ground Handling Equipment table at the end of Appendix C to identify required equipment.

REMARKS - SPECIAL INSTRUCTIONS:
If the requirement is long-term (over 3 years), enter the number of equipment and duration required in this entry. Include any clarifying remarks or instructions that may be appropriate. When applicable, enter the name of the contractors and contract numbers for which the service/ support is required.

FORMAT 5360 - SERVICES - AIRCRAFT

This format is used by the RA to state requirements for support of its aircraft. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ), and REMARKS.

TYPE SERVICE/PURPOSE:
Enter required services and state the need for support not covered elsewhere. Include any modifications to aircraft, equipment to be installed, or special services. Maintenance and calibration requirements for RA equipment should be included.

STAGING AREAS AND DATES:
Enter the staging areas where support will be required and the relevant dates by months or quarters and by calendar year.

AIRCRAFT DESCRIPTION:
Provide the following information for each type of aircraft.
- Type: Enter the type of the aircraft.
- Serial No.: Enter the serial number of the aircraft.
- Fuel: Enter the type of fuel for the aircraft.
- Oil: Enter the type of oil the aircraft requires.
- Lubricant: Enter the lubricants required for maintenance.
- Support Equipment: Enter any support equipment for servicing and moving the aircraft, if required.

FORMAT 5361 - SERVICES - SEACRAFT

This format is used to describe the services required by the RA seacraft while in harbor. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE SEACRAFT:
Enter the specific type or model designation of the seacraft.

HARBOR:
Enter the name of the harbors wherein the seacraft will be serviced.

DURATION:
Enter the total number of days per designated calendar year the seacraft specified in the TYPE SEACRAFT entry will be in the harbor. Provide the information for as many years as can be realistically estimated.

SERVICES:
Identify all services not covered elsewhere in the Format 5300 series that are required for the seacraft while in the harbor. Include requirements for docking facilities, loading and unloading facilities, electrical power, maintenance, and supplies.

FORMAT 5370 - SERVICES - AIR OPERATIONS

This format is used by the RA to list requirements for air operations services not covered elsewhere in the document. The following are services to be requested on this format.

Ground controlled approach services	Flight service	Fueling
Tower operations	Ground support service	Aircraft parking
Scheduling	Fire/crash	Terminal operation
Tactical Air Navigation (TACAN)	Aircraft ground	Aircraft maintenance
Clearance	Handling equipment	Rescue

Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE SERVICE:
Identify the required service.

DATES:
Enter dates (month and year) the service is required.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks. Should the required service need special instructions, list instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5371 - SERVICES - MARINE OPERATIONS

This format is used by the RA to list requirements for marine operations not covered elsewhere in this document. The following are services to be requested on this format.

Harbor services	Inter-atoll boats	VIP boats
Harbor control	Manning	Salvage operations
Channel markers	Scheduling	Maintenance
Moorings	Personnel transfer	Emergency repair
Wharf docks	Underwater demolition	Repair parts
Boat control	Surface craft	Dock services
Tug boat operations	Search and rescue boats	Boat refueling

Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE SERVICE:
Identify the required service.

DATES:
Enter dates (month and year) during which the service is required.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks. Should the required service need special instructions, list instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5380 - SERVICES - PHYSICAL AND LIFE SCIENCE EXPERIMENTS

This format is used by the RA to list requirements for physical or life science experiments. This format covers unique support services not covered in other formats of the UDS handbook for processing and handling experiments. The following are services requested on this format.

- facilities - unique support areas such as user preparation area, X-ray/macrography/ micrography processing area, clinical laboratory, animal holding rooms, baseline data collection area, and decompression chambers.
- tools and equipment - balances (including analytical), cold traps, optical microscopes, scanning or transmission electron microscopes, optical comparators, metallographic equipment, incubators, surgical tools, osmometers, gurneys, sonic cleaner, and glassware.
- supplies and services - chemical supplies/glassware, crucibles, labware, analytical papers, distillation service, pre-sterilized pipettes (disposable), specimen collection supplies, dissecting instruments, Bunsen burners, and gas supply.

Follow preparation instructions in <u>Section 5.2.1</u> for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE ITEM/SERVICE:
Indicate the required item or service.

RA ( ) SA ( ):
State whether the RA or SA will supply the item or service in question.

DATES OF REQUIRED ITEM/SERVICE:
Enter dates (month and year) for the item or service required.

AMOUNTS OF REQUIRED ITEM/SERVICE:
Enter the amount for each item/service required as applicable.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks that specifically describe the item and amounts shown in entries above. Should the required service need special instructions, list instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5400 - LABORATORY

This format is used by the RA to specify general laboratory requirements. Specific analysis requirements are noted on Format 5410. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, define the requirement for laboratory support. Identify general types of tests required.

FORMAT 5410 - LABORATORY - CHEMICAL AND PHYSICAL ANALYSIS

This format is used by the RA to list requirements for chemical and physical analysis. These services encompass areas such as chemical consultant services, instrumentation analysis, wet chemistry, gas analysis, metallurgical services, contamination and surface corrosion studies, and many other specific chemical problems concerned with a mission/program. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

NAME/DESIGNATION:
Indicate the name of the propellant, gas, or chemical for which chemical analysis is required. This entry will not prevent examination of unknowns that may be submitted for analysis at any time.

MILITARY SPECIFICATION NUMBER:
Reference military specifications or other specifications that the item must meet.

DETAILS OF ANALYSIS REQUIRED:
State the chemical and physical analysis required for the item listed. Include specific chemical elements and common or anticipated particles or impurities for which analysis is required. State methods of sampling and analysis if special methods are required.

SAMPLING TIMES:
State when and how often samples and analysis are required and when test results are required.

REMARKS:
In addition to the instructions in Section 5.2.1, enter (when applicable) the name of the contractors and contract numbers for which the service/support is required.

FORMAT 5420 - LABORATORY - SPECIAL ENVIRONMENT

This format is used to describe unique environmental requirements with respect to data storage, quarantine of personnel, handling of samples, equipment, or experiments, or working conditions; for example, requirements for film storage, quarantine of space travelers, handling of lunar or planetary samples, or lighting requirements for work or photography. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, describe the nature of the item requiring a special environment. Give details of required atmosphere, thermal properties, radiation, shielding, lighting intensity, or any other parameter required to define the environment.

FORMAT 5430 - LABORATORY - CALIBRATION

This format is used to plan and to schedule test instrument calibration on a periodic basis. Each missile or vehicle contractor and subcontractor, RA, and organization that requires maintenance and calibration service for its precision electronic or mechanical test instruments will list its instruments on this format. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

PRECISION ELECTRONIC OR MECHANICAL MEASURING EQUIPMENT:
Enter the following information.
- Name/Designation: Identify the precision electronic or mechanical measuring instrument that will be used at the SA location (multimeter, voltage meter, frequency meter).
- Range or Scale and Units: Enter the ranges or scales of each item listed. Indicate the unit of measure, (dcV, acV, A).
- Name of Manufacturer: Enter the name of the manufacturer of the instrument listed.
- Model Number: Enter the model number of the instrument listed.
- Serial Number: Enter the serial number of the instrument listed.

CALIBRATION:
Provide the following information.
- Cycle Months: Enter the desired calibration cycle in months.
- Time (Days): Enter the number of days allowed for the calibration of the instrument listed.
- Indicate whether the instrument listed will require calibration in place. If yes, complete the information required under ACCURACY REQUIRED.

ACCURACY REQUIRED:
Enter the accuracy required if other than the manufacturer's recommended or stated accuracy.

UNITS:

Enter a 3-year forecast of the number of units of the instrument requiring calibration service. The first quarter of the forecast will be the quarter in which the first instruments will be submitted for calibration. Indicate CY.

REMARKS:
In addition to the instructions in Section 5.2.1, enter (when applicable) the name of the contractors and contract numbers for which the service/support is required.

FORMAT 5440 - LABORATORY - TECHNICAL SHOPS AND LABS

This format is used by the RA to list requirements for technical shops and laboratory services. Technical services include electrical, mechanical, optical, photo, chemical, and others. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE SERVICE:
Identify the required service.

DATES:
- Provide the initial date.
- Provide the concluding date.
- Provide an estimated number of days per month service is required.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for the service requested and include any clarifying remarks. Should the required service need special instructions, list instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this service/support is required.

FORMAT 5500 - MAINTENANCE

This format is used by the RA to specify general maintenance requirements (exclusive of equipment requiring calibration). Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter the requirements for shop services such as sheet metal fabrication, carpentry, painting, welding, and machining. Include an estimate of the number of hours for each type of shop service required, if known.

FORMAT 5510 - MAINTENANCE - BUILDINGS AND GROUNDS

This format is used by the RA to list requirements for buildings and grounds maintenance. Services to be requested on this format are building maintenance (carpentry,

plumbing, electrical, air conditioning/heating, painting, and janitorial) and grounds maintenance (labor and equipment). Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE SERVICE:
Identify the required service.

DATES:
Enter dates (month and year) the service is required.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for maintenance requested and include any clarifying remarks. Should the required maintenance need special instructions, list instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this maintenance is required.

FORMAT 5520 - MAINTENANCE - VEHICLES

        This format is used by the RA to list requirements for vehicle maintenance. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE SERVICE:
Identify the required service.

DATES:
Enter dates (month and year) the service is required.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for maintenance requested and include any clarifying remarks. Should the required maintenance need special instructions, list instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this maintenance is required.

FORMAT 5530 - MAINTENANCE - SHOP

        This format is used by the RA to list requirements for maintenance shop services. Examples of services to be requested on this format are machine shop, fabrication, welding, and soldering. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE SERVICE:
Identify the required service.

DATES:
Enter dates (month and year) the service is required.

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:
State briefly the need for maintenance requested and include any clarifying remarks. Should the required maintenance need special instructions, list instructions in this entry. When applicable, enter the name of the contractors and contract numbers for which this maintenance is required.

FORMAT 5600 - FACILITIES

This format is used by the RA to specify the assignment, reassignment, or programming of facilities. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

LOCATION:
Indicate the location (installation, island).

TYPE OF FACILITY:
List facilities, to include such items as the following.

Administrative space	Electrical power	Blockhouses
Hangar	Runway and/or skid strip	Missile static checkout pads
Shops and laboratories	Missile assembly (buildings)	Static engine run pads and
Open storage	Aircraft ramp space	Compass rose
Launch pads	Warehouses	Loading pits or ramps
Guidance buildings		

SITE DESIRED:
Indicate the specific area where the facility is required.

STATUS:
Indicate by checking in the appropriate entry whether the requested facility has already been assigned to the program, whether it is an existing facility, or whether an entirely new facility must be constructed.

SCHEDULE:
Indicate the schedule for facility occupying requirements. Indicate CY.

REMARKS:
In addition to the instructions in Section 5.2.1, enter (when applicable) the name of the contractors and contract numbers for which the service/support is required. In units of 1000 square feet, enter the net usable space required for each type in the applicable CY half-year. Include with the space requirement the estimated number of occupying personnel; for example, 2.5/16.

FORMAT 5610 - FACILITIES - DRAWINGS

This format is used to provide drawings that complement the requirements presented on Format 5600 - Facilities. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, and TEST CODE.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, enter a plot plan showing the desired location of the individual facility requirement for each item listed on Format 5600. Specify how each facility is related to other items. Cross-reference all of the drawings, reports, site plans, letters, and preliminary design criteria that are submitted directly to the SA as a detailed definition and description of the utilities and scope of facilities required.

FORMAT 5620 - FACILITIES - LAUNCHER AND PLATFORM CHARACTERISTICS

This format is used to provide a description of the launcher and platform characteristics. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

TYPE OF LAUNCH PAD/PLATFORM:
Indicate if the item is land-based, ship-based, or plane-based and if the item is stationary or portable.

SIZE OF LAUNCH PAD/PLATFORM:
Enter overall dimensions.

LOCATION OF LAUNCH PAD/PLATFORM:
Enter pertinent launcher location requirements; for example, location with respect to coastline for land-based or underwater platforms.

TYPE OF SIMULATOR:
If a simulated ship, submarine, or other launch platform will be required at the SA location, indicate type. State if the simulator to be used at the SA location is to be furnished by the RA or SA.

DESCRIPTION OF LAUNCH PAD/PLATFORM:
Describe pertinent launch pad or platform characteristics; for example, construction, special instruments, special power requirements, and cooling water.

TYPE OF LAUNCHER:
Enter launcher type (zero length, rail). State whether the RA or SA will supply the launcher.

SIZE OF LAUNCHER:

Enter overall dimensions of the launcher.

LAUNCHER WEIGHT:
Enter the launcher weight.

LAUNCHER AZIMUTH:
Enter the launcher azimuth arc in degrees, desired accuracy of launcher position, and required accuracy of launcher position.

LAUNCHER ELEVATION:
Enter the launcher elevation as referenced to horizontal, the desired accuracy of the launcher position, and the required accuracy of the launcher position.

DESCRIPTION OF LAUNCHER:
Describe pertinent launcher characteristics (construction, special features, maintenance).

DESCRIPTION OF LAUNCH OPERATION:
Describe briefly and in sequence the tasks involved in placing the missile on the launcher and in preparing the missile for launch. Include salvo launch preparation (if any), dry runs, and captive air to air, air to surface tests.

DESCRIPTION OF POSITIONING METHODS AND EQUIPMENT:
Describe the methods and equipment used to position the launcher in azimuth and elevation and for measuring the launcher position.

FORMAT 6000 - OTHER SUPPORT

This format is used by the RA to specify support requirements not covered in other UDS formats. Use the Other Support table at the end of Appendix C to provide the required support. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REMARKS.

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
In addition to the instructions in Section 5.2.1, define the support for requirements not previously stated in the document.

FORMAT 6010 - OTHER SUPPORT REQUIREMENTS FOR SUPPORT AGENCIES

This format is used by the lead range/support agency to list support needs to other SAs to accomplish RA requirements. Follow preparation instructions in Section 5.2.1 for the entries ITEM NO., REQUESTER, SUPPLIER, TEST CODE, and REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ).

REFERENCE UDS FORMAT/ITEM NUMBER:

Enter the UDS format number and requirement item number of each SA requirement in this entry.

REQUIREMENT:
Enter the support requirements categorically (metric data, telemetry recording, communication recording). Specific requirements for the SA must be identified if they consist of only a portion of the total requirement above.

DATA PRIORITY:
Indicate whether the data requirement is M, R, or D.

COMMENTS:
Enter any appropriate comments identifying the requirement by the UDS format/item number for each entry. Enter the SA requirement number if it is levied by the lead range/support agency.

FORMAT - GENERAL

This format is used anywhere in the document where narrative or graphic data cannot be presented on the prescribed numbered format. It may also be used to supplement the prescribed format when additional space is required for expanded data entry.

(UDS FORMAT NO. - TITLE):
Enter the UDS format number and title from the UDS document outline for the appropriate format used.

    ITEM NO.:
    REQUESTER:
    SUPPLIER:
    TEST CODE:
    REQUIREMENT ( ) INFORMATION ( ):

Indicate whether each item number submitted is a requirement for support from the SA or is submitted for informational purposes only. Enter the requirement or information desired.

This page intentionally left blank.

APPPENDIX A

DESIGNATION FOR UDS SUBSCRIBER AGENCIES

Designation for UDS Subscriber Agencies

WSMR	A	White Sands Missile Range, NM
LeRC	B	Lewis Research Center, Cleveland, OH
NWS	C	National Weather Service, Washington, DC
DoD	D	Department of Defense, The Pentagon
45 SW	E	45th Space Wing, Patrick AFB, FL
AFFTC	F	Air Force Flight Test Center, Edwards AFB, CA
GSFC	G	Goddard Space Flight Center, Greenbelt, MD
MSFC	H	Marshall Space Flight Center, AL
LaRC	I	Langley Research Center, Hampton, VA
JPL	J	Jet Propulsion Laboratory, Pasadena, CA
KSC	K	Kennedy Space Center, Cape Canaveral, FL
NAWCWPNS (CL)	L	Naval Air Warfare Center Weapons Division, China Lake, CA
ARC	M	Ames Research Center, Moffett Field, CA
NAWCWPNS (PM)	N	Naval Air Warfare Center Weapons Division, Point Mugu, CA
NAWCWPNS (WS)	O	Naval Air Warfare Center Weapons Division, White Sands Detachment, WSMR, NM
AFDTC	P	Air Force Development Test Center, Eglin AFB, FL
WFF	Q	Wallops Flight Facility, Wallops Island, VA
JSC	T	Johnson Space Center, Houston, TX
SMDC	U	US Army Space and Missile Defense Command, Huntsville, AL
USAKA	V	US Army Kwajalein Atoll, Kwajalein Missile Range
30 SW	W	30th Space Wing, Vandenberg AFB, CA
DFRC	X	Dryden Flight Research Center, Edwards AFB, CA
NASA	Y	National Aeronautics and Space Administration Headquarters, Washington, DC
WSTF	Z	JSC White Sands Test Facility, NM
AFWL	AA	Air Force Weapons Laboratory, Albuquerque, NM
MTD	AB	Materiel Test Directorate, WSMR, NM
UTT	AC	Utah Test and Training Range, Hill AFB, UT
YPG	AD	Yuma Proving Ground, Yuma, AZ
AFWTF	AE	Atlantic Fleet Weapons Training Facility, Roosevelt Roads, Puerto Rico
AWFC	AF	Air Warfare Center, Nellis AFB, NV
NAWCAD (PR)	AG	Naval Air Warfare Center Aircraft Division, Patuxent River, MD
AFOTEC	AH	Air Force Operational Test and Evaluation Center, Kirtland AFB, NM
PMRF	AJ	Pacific Missile Range Facility, Barking Sands, Kauai, HI
50 SW	AS	50th Space Wing, Falcon AFB, CO

APPPENDIX B

UDS DOCUMENT OUTLINE

ADMINISTRATIVE

1000 - Administrative
       1010 - Approval Authority
       1020 - Distribution List
       1030 - Revision Control and Classification
       1031 - Index
       1040 - Security Information
       1041 - Facility Clearance Information
       1042 - Operations Security (OPSEC) and Security
       1050 - Abbreviations/Acronyms
       1051 - Test Code Definition
       1052 - Special Code Definition
       1060 - Key Technical Personnel
       1070 - Technical References

PROGRAM INFORMATION

1100 - Program Description
       1110 - Experiments Description
R   1120 - System Functional Description
R   1130 - Test Description
       1140 - Test Schedule

TEST VEHICLE SYSTEM INFORMATION

1300 - Test Vehicle System Information
       1305 - System Level Test Information/Participants
R   1310 - Test Vehicle System Descriptions
R   1311 - Test Vehicle System Characteristics
R   1320 - Test Vehicle System Ordnance Items Description
R   1330 - Test Vehicle System Flame Plasma Information
R   1340 - Test Vehicle System Reentry Plasma Information

TEST VEHICLE INSTRUMENTATION SYSTEMS

1400 - Test Vehicle Instrumentation
       1405 - Test Vehicle Instrumentation Frequency Summary

TEST VEHICLE METRIC SYSTEMS

R   1410 - Test Vehicle Metric Systems Description
R   1411 - Test Vehicle Metric Transponder Characteristics
R   1412 - Test Vehicle Metric Antenna Systems
R   1415 - Test Vehicle GPS Systems Description
R   1416 - Test Vehicle GPS Antenna Systems

TEST VEHICLE TELEMETRY SYSTEMS

R   1420 - Test Vehicle Telemetry Systems Description
R   1421 - Test Vehicle Telemetry Transmitter Characteristics
R   1422 - Test Vehicle Telemetry Antenna Systems
R   1424 - Test Vehicle Telemetry Analog Description
R   1425 - Test Vehicle Telemetry Digital Format
R   1426 - Test Vehicle Telemetry Data Recorder Characteristics

TEST VEHICLE COMMAND SYSTEMS

R   1430 - Test Vehicle Command System Description
R   1431 - Test Vehicle Command System Characteristics
R   1432 - Test Vehicle Command System Antenna Systems

TEST VEHICLE VOICE COMMUNICATIONS

R   1440 - Test Vehicle Voice Communications Operating Description
R   1441 - Test Vehicle Voice Communications Characteristics
R   1442 - Test Vehicle Voice Communications Antenna Systems

TEST VEHICLE TELEVISION SYSTEMS

R   1460 - Test Vehicle Television/Video Operating Description
R   1461 - Test Vehicle Television/Video Characteristics
R   1462 - Test Vehicle Television Antenna Systems
R   1463 - Test Vehicle Television Format Description

TEST VEHICLE RECOVERY AIDS

R   1470 - Test Vehicle Recovery Aids Description

OTHER SYSTEMS

R   1480 - Other Test Vehicle Systems

CUSTOMER PROVIDED SUPPORT EQUIPMENT

1500 - Customer-Provided Support Equipment

SYSTEM READINESS TESTS

1600 - System Readiness Tests
R   1610 - Readiness Tests Identification
R   1620 - Readiness Tests Sequence

CUSTOMER TEST COUNTDOWN

R   1630 - Customer Test Countdown

TRAJECTORY INFORMATION

1700 - Trajectory Information
R   1710 - Major Mission Events
R   1720 - Space Maneuver
R   1730 - Trajectory Plan Views
R   1731 - Trajectory Profile Views
R   1732 - Launch Trajectory
R   1733 - Orbital and Space Trajectory
R   1734 - Terminal Trajectory

OPERATIONAL SAFETY HAZARDS

1800 - Operational Safety Hazards Issues

TEST REQUIREMENTS/SUPPORT PLANS

2000 - Test Requirements/Support Plans
S   2010 - Support Plan Summary
S   2020 - Support Requirements That Cannot be Met
S   2030 - Engineering Plan
S   2040 - Funding Information
S   2050 - Implementation Schedule
S   2060 - Customer Responsibilities
S   2070 - Flight Safety Operational Concepts
S   2080 - Range-Derived Requirements

METRIC MEASUREMENT AND DATA

2100 - Metric Data
      2110 - Metric Data - Launch
      2111 - Metric Data - Midcourse
      2112 - Metric Data - Orbital and Space
      2113 - Metric Data - Terminal
      2120 - Metric Data - Other
      2130 - Metric Data Network Coverage
      2140 - Metric Data Coverage
      2150 - GPS Data
      2160 - Signature Data

TELEMETRY MEASUREMENT AND DATA

2200 - Telemetry Data
       2210 - Telemetry Recording Interval
       2220 - Telemetry Strip Chart Recording Format
       2221 - Telemetry Event Recording Format
       2230 - Telemetry Decommutation Processing Specifications
       2240 - Telemetry Coverage

COMMAND SYSTEMS

2300 - Command Systems
       2310 - Command Control
       2320 - Command Destruct
       2330 - Command Uplink
       2331 - Command Uplink Recordings
       2332 - Command Uplink Stations Coverage

TIMING

2400 - Timing
       2410 - Timing Signal Detail
       2411 - Pulse Rates
       2412 - Timing Sequencer Requirements
       2413 - Visual Countdown
       2414 - Status Indicators
       2415 - Timing Synchronization

OTHER SYSTEMS

2600 - Other Systems
       2610 - Other Systems - Directed Energy
       2620 - Other Systems - Support Instrumentation
       2630 - Other Systems - Environmental
       2640 - Other Systems - Data
       2650 - Other Systems - Coverage
       2660 - Other Systems - Range Aux Sensors
       2670 - Other Systems - Non-Range Sensors
       2680 - Other Systems - Elements/Other

COMMUNICATIONS

2700 - Communications
       2710 - Air/Ground Voice Communications
       2711 - Air/Ground Voice Coverage
       2712 - Air/Ground Voice Recordings
       2720 - Communications Detail

2730 - Voice Network Transmission
2731 - Secure Voice Network Transmission
2732 - Non-Secure Data Network Transmission
2733 - Secure Data Network Transmission
2734 - Video/Data Network Transmission
2735 - Facsimile Network Transmission
2736 - C-Band/INMARSAT/Mini-M
2740 - Intercommunications Systems
2750 - Voice Terminations
2751 - Secure Voice Terminations
2752 - Point-to-Point Terminations
2753 - Terminations
2754 - Secure Data Terminations
2755 - Video/Data Terminations
2756 - Voice Radio Terminations
2757 - Miscellaneous Terminations
2760 - Communications Recordings
2770 - Telephone
2780 - Other Communications

VIDEO

2800 - Video
2810 - On-Board Video
2811 - On-Board Video Downlink
2812 - On-Board Video Displays
2813 - On-Board Video Recordings
2820 - Launch Pad Video
2821 - Tracking Video Television
2822 - Video Displays
2823 - Video Recordings
2824 - Other Video

REAL-TIME DATA DISPLAY/CONTROL

3000 - Real-time Data Display/Control
3010 - Real-time Flight Control/Support Centers
3011 - Real-time Flight Control Data Acquisition
3020 - Real-time Displays
3021 - Real-time Console Command Panels
3022 - Real-time Console Analog Recorders
3023 - Real-time Console Drawings
S   3024 - Real-time Console Module Description
S   3025 - Real-time - Summary of Console Locations
S   3026 - Real-time - Summary of Console Module Locations
S   3030 - Real-time - Other Group Displays and Control

3040 - Real-time Data Formats
3050 - Real-time Tracking Data Format Control
3051 - Real-time Telemetry Data Format Control
3052 - Real-time Telemetry Data Formats
3053 - Real-time Command Data Format Control
3060 - Real-time Remote Site Data Processing
3070 - Real-time Data Testing
3071 - Real-time Data Interfaces
3072 - Real-time Data Interface Criteria
3073 - Real-time Data Distribution

PHOTOGRAPHY

3100 - Photographic
    3110 - Documentary Photography
    3120 - Engineering Sequential Photography/Optics

METEOROLOGY

3200 - Meteorology
    3210 - Meteorological Constraints
    3220 - Meteorological Forecasts
    3230 - Meteorological Observations
    3240 - Meteorological Instrumentation Location Diagram
    3250 - Space Environment Meteorology

RECOVERY

3300 - Recovery
    3310 - Recovery - Ships and Aircraft Coverage
    3320 - Recovery - Items To Be Recovered
    3330 - Recovery - Salvage and Disposition
    3340 - Recovery - Planned Areas
    3350 - Recovery - Contingency Areas
    3360 - Recovery - Abort Areas

OTHER TECHNICAL SUPPORT

3400 - Other Technical Support
    3410 - Other Technical Support - Aircraft
    3411 - Other Technical Support - Seacraft
    3412 - Other Technical Support - Targets
    3414 - Other Technical Support - Interceptor
    3420 - Summary of Frequency Protection
    3421 - Protection from Emitting Systems
    3430 - Geodetic and Gravitational Data

3440 - Other Technical Support - Training

MODELING AND SIMULATION

3500 - Modeling and Simulation
      3510 - Modeling and Simulation Plan
      3520 - Modeling and Simulation Architecture

DATA PROCESSING

4100 - Data Processing Specifications
      4110 - Data Processing Specifications - Detail
      4120 - Data Processing - Other
      4130 - Data Coordinate Systems Description

DATA DISPOSITION

4200 - Data Disposition
      4220 - Data Disposition - Reports
      4230 - Data Disposition - Detail - Metric/Signature
      4231 - Data Disposition - Detail - Telemetry
      4232 - Data Disposition - Detail - Voice/TV Recording
      4233 - Data Disposition - Detail - Photographic/Optics
      4234 - Data Disposition - Detail - Meteorological
      4235 - Data Disposition - Detail - Computer Processing
      4236 - Data Disposition - Detail - Miscellaneous
      4240 - Data Disposition - Environmental

BASE FACILITIES/LOGISTICS

5000 - Base Facilities/Logistics

PERSONNEL ASSIGNMENT SCHEDULES

5100 - Personnel Assignment Schedules

TRANSPORTATION

5200 - Transportation
      5210 - Ground Transportation
      5220 - Air Transportation
      5230 - Sea Transportation

SERVICES

5300 - Services

5310 - Services - Administrative, Personnel, and Office
5311 - Services - Fire and Rescue
5312 - Services - Medical
5313 - Services - Public Affairs
5314 - Services - Security and Safety
5315 - Services - Community, Education, and Food Service
5320 - Services - Utilities (Electrical, Water, and Sanitation)
5321 - Services - Handling, Storage, and Disposal
5322 - Services - Air Conditioning and Environmental Observations
5330 - Services - Procurement, Shipping, Receiving, and Stock Control
5331 - Services - Local Purchase of Base Funded Items
5340 - Services - Propellants, Gases, and Chemicals
5341 - Services - Fuels, Lubricants, and Hydraulic Fluids
5342 - Services - Chemical Cleaning
5350 - Services - Vehicles
5351 - Services - Ground Handling Equipment
5360 - Services - Aircraft
5361 - Services - Seacraft
5370 - Services - Air Operations
5371 - Services - Marine Operations
5380 - Services - Physical and Life Science Experiments

LABORATORY

5400 - Laboratory
5410 - Laboratory - Chemical and Physical Analysis
5420 - Laboratory - Special Environment
5430 - Laboratory - Calibration
5440 - Laboratory - Technical Shops and Labs

MAINTENANCE

5500 - Maintenance
5510 - Maintenance - Buildings and Grounds
5520 - Maintenance - Vehicles
5530 - Maintenance - Shop

FACILITIES

5600 - Facilities
5610 - Facilities - Drawings
5620 - Facilities - Launcher and Platform Characteristics

OTHER SUPPORT

6000 - Other Support

6010 - Other Support Requirements for Support Agencies

APPPENDIX C

UDS FORMATS

PROGRAM TITLE:
SHORT TITLE:
RESPONSIBLE AGENCIES & KEY PERSONNEL:
- RA/Project Representative:
- Requesting SA/Project Representative:
  - Contractor/Representative:
- Lead SA/Representative:
SCOPE AND PURPOSE:
TREATY COMPLIANCE:

The program has undergone competent review for international treaty compliance:
State status:
Treaty compliant as applicable (   )
Treaty compliant with approved waivers (   )

ENVIRONMENTAL REQUIREMENTS:
PROGRAM IDENTIFICATION INFORMATION:

Official Program Title:	Short Title:
Beginning Date:	DoD Element No.:
First Test Date:	Type of Program:
Completion Date:	DPAS Precedence:
Pgm/Proj No.:	Priority No.:
Contract No.:	Program Status:

ITEM NO.:

PRECEDENCE RATING:
PRIORITY:
INITIATION DATE:
COMPLETION DATE:
SPONSORING AGENCY:
BASIC CONTRACT NO.:
AUTHORITY (REFERENCES):
REMARKS:
APPROVAL

SIGNATURE:	SIGNATURE:
NAME:	NAME:
TITLE:	TITLE:
AGENCY:	AGENCY:
PHONE:	PHONE:

DATE:	DATE:
SIGNATURE:	SIGNATURE:
NAME:	NAME:
TITLE:	TITLE:
AGENCY:	AGENCY:
PHONE:	PHONE:
DATE:	DATE:

1020 - DISTRIBUTION LIST   1020

ORGANIZATION ADDRESS: NUMBER OF COPIES: ------------

1030 - REVISION CONTROL AND CLASSIFICATION   1030
ITEM NO.:

INFORMATION:

UDS SECTION   ITEM   PAGE   CLASS   CHANGE ##   DATE

REMARKS:

1031 - INDEX   1031
Place an X in the ( ) of the section used in the document, (X)

( ) 1000 - Administrative
( ) 1010 - Approval Authority
( ) 1020 - Distribution List
( ) 1030 - Revision Control and
      Classification
( ) 1031 - Index
( ) 1040 - Security Information
( ) 1041 - Facility Clearance Information
( ) 1042 - Operations Security (OPSEC)
      and Security
( ) 1050 - Abbreviations/Acronyms
( ) 1051 - Test Code Definition
( ) 1052 - Special Code Definition
( ) 1060 - Key Technical Personnel
( ) 1070 - Technical References
( ) 1100 - Program Description
( ) 1110 - Experiments Description
( ) 1120 - System Functional Description
( ) 1130 - Test Description
( ) 1140 - Test Schedule
( ) 1300 - Test Vehicle System Information

( ) 1305 - System Level Test
      Information/Participants
( ) 1310 - Test Vehicle System
      Descriptions
( ) 1311 - Test Vehicle System
      Characteristics
( ) 1320 - Test Vehicle System Ordnance
      Items Description
( ) 1330 - Test Vehicle System Flame
      Plasma Information
( ) 1340 - Test Vehicle System Reentry
      Plasma Information
( ) 1400 - Test Vehicle Instrumentation
( ) 1405 - Test Vehicle Instrumentation
      Frequency Summary
( ) 1410 - Test Vehicle Metric Systems
      Description
( ) 1411 - Test Vehicle Metric Transponder
      Characteristics
( ) 1412 - Test Vehicle Metric Antenna
      Systems

( ) 1415 - Test Vehicle GPS Systems Description

( ) 1416 - Test Vehicle GPS Antenna Systems

( ) 1420 - Test Vehicle Telemetry Systems Description

( ) 1421 - Test Vehicle Telemetry Transmitter Characteristics

( ) 1422 - Test Vehicle Telemetry Antenna Systems

( ) 1424 - Test Vehicle Telemetry Analog Description

( ) 1425 - Test Vehicle Telemetry Digital Format

( ) 1426 - Test Vehicle Telemetry Data Recorder Characteristics

( ) 1430 - Test Vehicle Command System Description

( ) 1431 - Test Vehicle Command System Characteristics

( ) 1432 - Test Vehicle Command System Antenna Systems

( ) 1440 - Test Vehicle Voice Communications Operating Description

( ) 1441 - Test Vehicle Voice Communications Characteristics

( ) 1442 - Test Vehicle Voice Communications Antenna Systems

( ) 1460 - Test Vehicle Television/Video Operating Description

( ) 1461 - Test Vehicle Television /Video Characteristics

( ) 1462 - Test Vehicle Television Antenna Systems

( ) 1463 - Test Vehicle Television Format Description

( ) 1470 - Test Vehicle Recovery Aids Description

( ) 1480 - Other Test Vehicle Systems

( ) 1500 - Customer-Provided Support Equipment

( ) 1600 - System Readiness Tests

( ) 1610 - Readiness Tests Identification

( ) 1620 - Readiness Tests Sequence

( ) 1630 - Customer Test Countdown

( ) 1700 - Trajectory Information

( ) 1710 - Major Mission Events

( ) 1720 - Space Maneuver

( ) 1730 - Trajectory Plan Views

( ) 1731 - Trajectory Profile Views

( ) 1732 - Launch Trajectory

( ) 1733 - Orbital and Space Trajectory

( ) 1734 - Terminal Trajectory

( ) 1800 - Operational Safety Hazards Issues

( ) 2000 - Test Requirements/Support Plans

( ) 2010 - Support Plan Summary

( ) 2020 - Support Requirements That Cannot be Met

( ) 2030 - Engineering Plan

( ) 2040 - Funding Information

( ) 2050 - Implementation Schedule

( ) 2060 - Customer Responsibilities

( ) 2070 - Flight Safety Operational Concepts

( ) 2080 - Range-Derived Requirements

( ) 2100 - Metric Data

( ) 2110 - Metric Data - Launch

( ) 2111 - Metric Data - Midcourse

( ) 2112 - Metric Data - Orbital and Space

( ) 2113 - Metric Data - Terminal

( ) 2120 - Metric Data - Other

( ) 2130 - Metric Data Network Coverage

( ) 2140 - Metric Data Coverage

( ) 2150 - GPS Data

( ) 2160 - Signature Data

( ) 2200 - Telemetry Data

( ) 2210 - Telemetry Recording Interval

( ) 2220 - Telemetry Strip Chart Recording Format

( ) 2221 - Telemetry Event Recording Format

( ) 2230 - Telemetry Decommutation Processing Specifications

( ) 2240 - Telemetry Coverage

( ) 2300 - Command Systems

( ) 2310 - Command Control

( ) 2320 - Command Destruct

( ) 2330 - Command Uplink

( ) 2331 - Command Uplink Recordings

( ) 2332 - Command Uplink Stations Coverage
( ) 2400 - Timing
( ) 2410 - Timing Signal Detail
( ) 2411 - Pulse Rates
( ) 2412 - Timing Sequencer Requirements
( ) 2413 - Visual Countdown
( ) 2414 - Status Indicators
( ) 2415 - Timing Synchronization
( ) 2600 - Other Systems
( ) 2610 - Other Systems - Directed Energy
( ) 2620 - Other Systems - Support Instrumentation
( ) 2630 - Other Systems - Environmental
( ) 2640 - Other Systems - Data
( ) 2650 - Other Systems - Coverage
( ) 2660 - Other Systems - Range Aux Sensors
( ) 2670 - Other Systems - Non-Range Sensors
( ) 2680 - Other Systems - Elements/Other
( ) 2700 - Communications
( ) 2710 - Air/Ground Voice Communications
( ) 2711 - Air/Ground Voice Coverage
( ) 2712 - Air/Ground Voice Recordings
( ) 2720 - Communications Detail
( ) 2730 - Voice Network Transmission
( ) 2731 - Secure Voice Network Transmission
( ) 2732 - Non-Secure Data Network Transmission
( ) 2733 - Secure Data Network Transmission
( ) 2734 - Video/Data Network Transmission
( ) 2735 - Facsimile Network Transmission
( ) 2736 - C-Band/INMARSAT/Mini-M
( ) 2740 - Intercommunications Systems
( ) 2750 - Voice Terminations
( ) 2751 - Secure Voice Terminations
( ) 2752 - Point-To-Point Terminations
( ) 2753 -Terminations
( ) 2754 - Secure Data Terminations
( ) 2755 - Video/Data Terminations
( ) 2756 - Voice Radio Terminations

( ) 2757 - Miscellaneous Terminations
( ) 2760 - Communications Recordings
( ) 2770 - Telephone
( ) 2780 - Other Communications
( ) 2800 - Video
( ) 2810 - On-Board Video
( ) 2811 - On-Board Video Downlink
( ) 2812 - On-Board Video Displays
( ) 2813 - On-Board Video Recordings
( ) 2820 - Launch Pad Video
( ) 2821 - Tracking Video Television
( ) 2822 - Video Displays
( ) 2823 - Video Recordings
( ) 2824 - Other Video
( ) 3000 - Real-Time Data Display/Control
( ) 3010 - Real-Time Flight Control/ Support Centers
( ) 3011 - Real-Time Flight Control Data Acquisition
( ) 3020 - Real-Time Displays
( ) 3021 - Real-Time Console Command Panels
( ) 3022 - Real-Time Console Analog Recorders
( ) 3023 - Real-Time Console Drawings
( ) 3024 - Real-Time Console Module Description
( ) 3025 - Real-Time - Summary of Console Locations
( ) 3026 - Real-Time - Summary of Console Module Locations
( ) 3030 - Real-Time - Other Group Displays and Control
( ) 3040 - Real-Time Data Formats
( ) 3050 - Real-Time Tracking Data Format Control
( ) 3051 - Real-Time Telemetry Data Format Control
( ) 3052 - Real-Time Telemetry Data Formats
( ) 3053 - Real-Time Command Data Format Control
( ) 3060 - Real-Time Remote Site Data Processing
( ) 3070 - Real-Time Data Testing
( ) 3071 - Real-Time Data Interfaces

( ) 3072 - Real-Time Data Interface Criteria
( ) 3073 - Real-Time Data Distribution
( ) 3100 - Photographic
( ) 3110 - Documentary Photography
( ) 3120 - Engineering Sequential Photography/Optics
( ) 3200 - Meteorology
( ) 3210 - Meteorological Constraints
( ) 3220 - Meteorological Forecasts
( ) 3230 - Meteorological Observations
( ) 3240 - Meteorological Instrumentation Location Diagram
( ) 3250 - Space Environment Meteorology
( ) 3300 - Recovery
( ) 3310 - Recovery - Ships and Aircraft Coverage
( ) 3320 - Recovery - Items to be Recovered
( ) 3330 - Recovery - Salvage and Disposition
( ) 3340 - Recovery - Planned Areas
( ) 3350 - Recovery - Contingency Areas
( ) 3360 - Recovery - Abort Areas
( ) 3400 - Other Technical Support
( ) 3410 - Other Technical Support - Aircraft
( ) 3411 - Other Technical Support - Seacraft
( ) 3412 - Other Technical Support - Targets
( ) 3414 - Other Technical Support - Interceptor
( ) 3420 - Summary of Frequency Protection
( ) 3421 - Protection from Emitting Systems
( ) 3430 - Geodetic and Gravitational Data
( ) 3440 - Other Technical Support - Training
( ) 3500 - Modeling and Simulation
( ) 3510 - Modeling and Simulation Plan
( ) 3520 - Modeling and Simulation Architecture
( ) 4100 - Data Processing Specifications

( ) 4110 - Data Processing Specifications - Detail
( ) 4120 - Data Processing - Other
( ) 4130 - Data Coordinate Systems Description
( ) 4200 - Data Disposition
( ) 4220 - Data Disposition - Reports
( ) 4230 - Data Disposition - Detail - Metric/Signature
( ) 4231 - Data Disposition - Detail - Telemetry
( ) 4232 - Data Disposition - Detail - Voice/TV Recording
( ) 4233 - Data Disposition - Detail - Photographic/Optics
( ) 4234 - Data Disposition - Detail - Meteorological
( ) 4235 - Data Disposition - Detail - Computer Processing
( ) 4236 - Data Disposition - Detail - Miscellaneous
( ) 4240 - Data Disposition - Environmental
( ) 5000 - Base Facilities/Logistics
( ) 5100 - Personnel Assignment Schedules
( ) 5200 - Transportation
( ) 5210 - Ground Transportation
( ) 5220 - Air Transportation
( ) 5230 - Sea Transportation
( ) 5300 - Services
( ) 5310 - Services - Administrative, Personnel, and Office
( ) 5311 - Services - Fire and Rescue
( ) 5312 - Services - Medical
( ) 5313 - Services - Public Affairs
( ) 5314 - Services - Security and Safety
( ) 5315 - Services - Community, Education and Food Service
( ) 5320 - Services - Utilities (Electrical, Water, and Sanitation)
( ) 5321 - Services - Handling, Storage and Disposal
( ) 5322 - Services - Air Conditioning and Environmental Observations
( ) 5330 - Services - Procurement, Shipping, Receiving, and Stock Control

( ) 5331 - Services - Local Purchase of Base Funded Items
( ) 5340 - Services - Propellants, Gases, and Chemicals
( ) 5341 - Services - Fuels, Lubricants, and Hydraulic Fluids
( ) 5342 - Services - Chemical Cleaning
( ) 5350 - Services - Vehicles
( ) 5351 - Services - Ground Handling Equipment
( ) 5360 - Services - Aircraft
( ) 5361 - Services - Seacraft
( ) 5370 - Services - Air Operations
( ) 5371 - Services - Marine Operations
( ) 5380 - Services - Physical and Life Science Experiments
( ) 5400 - Laboratory
( ) 5410 - Laboratory - Chemical and Physical Analysis

( ) 5420 - Laboratory - Special Environment
( ) 5430 - Laboratory - Calibration
( ) 5440 - Laboratory - Technical Shops and Labs
( ) 5500 - Maintenance
( ) 5510 - Maintenance - Buildings and Grounds
( ) 5520 - Maintenance - Vehicles
( ) 5530 - Maintenance - Shop
( ) 5600 - Facilities
( ) 5610 - Facilities - Drawings
( ) 5620 - Facilities - Launcher and Platform Characteristics
( ) 6000 - Other Support
( ) 6010 - Other Support Requirements for Support Agencies

1040 - SECURITY INFORMATION   1040

REQUESTER:

INFORMATION:

DATA PRODUCTS AND HARDWARE SECURITY CLASSIFICATION

Program Mission Elements	Security Classification	Classification Authority	Declassification Date
1. Raw Data			
2. In-test Data (Real-time and On-line)			

3. Post-test Data (Quick-look and Validated)			
4. Frequencies			
5. Documentary and Aerial Photography			

A.   OVERALL PROGRAM:
B.   PRIME CONTRACTOR:
C.   LISTS OF CONTRACTORS, ASSOCIATE CONTRACTORS, AND/OR SUBCONTRACTORS ON TEST PROGRAM:
D.   PRODUCTION, PROCUREMENT SUPPLY INFORMATION:
E.   TITLE OF R&D PROGRAM:
F.   TEST VEHICLE OR MISSILE NAME:
G.   TYPE DESIGNATION:
H.   EXTERNAL CONFIGURATION
    (1)   VIEWED FROM OUTSIDE LAUNCH COMPLEX:
    (2)   VIEWED FROM INSIDE LAUNCH COMPLEX:
I.   PHYSICAL CHARACTERISTICS:
J.   SPEED, ALTITUDE, RANGE:
K.   COUNTERMEASURE INFORMATION:
L.   TEST INITIATION DATE:
M.   TEST COMPLETION DATE:
N.   STATUS AND PROGRESS REPORT:
O.   TEST AND PERFORMANCE INFORMATION:
P.   PROPULSION SYSTEM
    (1)   TYPE:
    (2)   DESCRIPTION:
Q.   GUIDANCE SYSTEM
    (1)   TYPE:
    (2)   DESCRIPTION:
R.   CONTROL SYSTEM
    (1)   TYPE:
    (2)   DESCRIPTION:
S.   WARHEAD
    (1)   TYPE:
    (2)   DESCRIPTION:
T.   NOSE CONE
    (1)   TYPE:
    (2)   DESCRIPTION:

U.   CAPSULE
   (1)   TYPE:
   (2)   DESCRIPTION:
V.   TARGETS
   (1)   TYPE:
   (2)   DESCRIPTION:
W.   OTHER
   (1)   TYPE:
   (2)   DESCRIPTION:
X.   DRAWINGS, SKETCHES, PHOTOGRAPHS, EXTERNAL OR INTERNAL VIEWS, AND
       DESIGN INFORMATION
   (1)   PROPULSION SYSTEMS:
   (2)   CONTROL AND GUIDANCE SYSTEMS:
   (3)   WARHEAD:
   (4)   NOSE CONE:
   (5)   CAPSULE:
   (6)   TARGETS:
   (7)   OTHER:
Y.   OPERATION READINESS DATE:
Z.   COMBAT READINESS DATE:
AA.   INSTRUMENTATION:
BB.   TRAINING EQUIPMENT:
CC.   GROUND SUPPORT EQUIPMENT:
DD.   RAW DATA
EE.   REDUCED DATA:
FF.   TECHNICAL PUBLICATIONS:

Narrative-type Input Entries Below
REQUESTER:
INFORMATION:

SECURITY GUIDES AND DOCUMENTS:

PROGRAM/MISSION ELEMENTS	SECURITY CLASSIFICATION:	CLASSIFICATION AUTHORITY:	DECLASS DATE:

SIGNATURE: _____
NAME:
TITLE:
AGENCY:
DATE:

REMARKS:

1041 - FACILITY CLEARANCE INFORMATION   1041

ITEM NO.:
FACILITY:

ADDRESS:

CAGE CODE:
FACILITY CLEARANCE:
GRANTING AGENCY:
SAFEGUARDING ABILITY:
AUTHORIZED ACCESS TO:

1042–OPERATIONS SECURITY (OPSEC) AND SECURITY   1042

ITEM:
REQUESTER:
INFORMATION:

See the Operations Security (OPSEC) and Security checklist in Appendix D.

1050 - ABBREVIATIONS/ACRONYMS   1050

WORD/ABBREVIATION & DEFINITION   WORD/ABBREVIATION & DEFINITION

ACRYN	Description	ACRYN	Description

1051 - TEST CODE DEFINITION   1051

ITEM NO.:
<u>TEST CODE</u>   <u>TEST CODE DESCRIPTION</u>

1052–SPECIAL TEST CODE DEFINITION   1052

ITEM NO.:

1060 - KEY TECHNICAL PERSONNEL   1060
ITEM NO.:

Alphabetical Order by last name

NAME/TITLE	ADDRESS (With Office Symbols)	PHONE FAX CELL	EMAIL
LAST, First Title		P F C	
LAST, First Title		P F C	
LAST, First		P	

Title		F C	
LAST, First Title		P F C	

1070 - TECHNICAL REFERENCES   1070

ITEM NO.:
INFORMATION:

UDS Sect.	ITEM NO.	TITLE	PUBLISHER/SOURCE	CLASS

1100 - PROGRAM DESCRIPTION   1100

ITEM NO.:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

1110 - EXPERIMENTS DESCRIPTION   1110

ITEM NO.:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

1120 – SYSTEM FUNCTIONAL DESCRIPTION   1120

ITEM NO.:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

SUBSYSTEM/MAJOR COMPONENT:

FUNCTIONAL CHARACTERISTICS:

SYSTEM FUNCTIONAL BLOCK DIAGRAM:

1130 – TEST DESCRIPTION   1130

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LOCATION:
DURATION TIME (HRS):
SUPPORT TIME (HRS):

REMARKS:

1140 - TEST SCHEDULE   1140

ITEM NO.:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TEST OPERATIONS

Test Series	Activity	Range HRs/Test	No. per QTR.
1			
2			
3			

1300 - TEST VEHICLE SYSTEM INFORMATION   1300

ITEM NO.:
REQUESTER:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

1305 - SYSTEM LEVEL TEST INFORMATION/PARTICIPANTS   1305

ITEM NO.:
REQUESTER:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

1310 – TEST VEHICLE SYSTEM DESCRIPTION   1310

ITEM NO.:

REQUESTER:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

1311 – TEST VEHICLE SYSTEM CHARACTERISTICS   1311

ITEM NO.:
INFORMATION:

LAUNCH VEHICLE (NAME)

ITEM NO.:	01	02	03
STAGE-MODULE NOMENCLATURE:			
PHYSICAL DIMENSIONS			
• LENGTH:			
• DIAMETER:			
• WIDTH - MAX:			
WEIGHTS			
• DRY (EMPTY - NO FUEL):			
• PROPELLANT OR FUEL:			
• INERTS			
• OXIDIZER:			
• GASES:			
• MISCELLANEOUS:			
• DESTRUCT MATERIAL:			
• LAUNCH:			
• BO:			
• BURN TIME:			
PROPULSION SYSTEM			
• TYPE ENGINE:			
• MANUFACTURER:			
• DESIGNATION:			
• NUMBER OF ENGINES:			
• SPECIFIC IMPULSE - SP:			
• THRUST - ENG:			
• THRUST - SEC:			
PROPELLANTS AND GASES			
• PROPELLANT OR FUEL:			
• OXIDIZER:			
• GASES:			
• GAS PRESSURE			

(Average):			
PERFORMANCE			
• RANGE (NM):			
• ALTITUDE(FT):			
• VELOCITY (FT/SEC):			

NOTES:

1320 – TEST VEHICLE SYSTEM ORDNANCE ITEMS DESCRIPTION   1320

ITEM NO:	**01**	**02**	**03**
PURPOSE:			
TYPE/QUANTITY:			
STAGE:			
MANUFACTURER'S PART NUMBER:			
LOT NUMBER:			
INSTALLATION:			
LEADS			
LEAD LENGTH:			
• SHIELDED:			
• PRE-INSTALLATION LENGTH:			
• INSTALLATION LENGTH:			
CURRENT AMPS			
• MAXIMUM NO FIRE:			
• MINIMUM FIRE:			
• NORMAL FIRE:			
BRIDGE			
• MATERIAL:			
• OHMS:			
CLASS:			
RF SAFE:			
REMARKS:			

ITEM NO:			
PURPOSE:			
TYPE/QUANTITY:			
STAGE:			
MANUFACTURER'S			

PART NUMBER: LOT NUMBER:			
INSTALLATION:			
LEADS			
LEAD LENGTH:			
• SHIELDED:			
• PRE-INSTALLATION LENGTH:			
• INSTALLATION LENGTH:			
CURRENT AMPS			
• MAXIMUM NO FIRE:			
• MINIMUM FIRE:			
• NORMAL FIRE:			
BRIDGE			
• MATERIAL:			
• OHMS:			
CLASS:			
RF SAFE:			
REMARKS:			

1330 – TEST VEHICLE SYSTEM FLAME PLASMA INFORMATION   1330

ITEM NO.:
REQUESTER:
INFORMATION:

MODEL: ELECTRON DENSITY ( )   COLLISION FREQUENCY ( )

STAGE:

ALTITUDE:

PLANE:
- PITCH ( )
- YAW ( )

EXIT PLANE PARAMETERS

ELECTRON DENSITY (E/CM TO POWER 3)		COLLISION FREQUENCY (EC TO POWER -1)	
Non-TVC:	Experimental:	Non-TVC:	Experimental:
TVC On:	Theoretical:	VC On:	Theoretical:
TVC Off:		VC Off:	

FLAME PLASMA MODEL:

1340 – TEST VEHICLE REENTRY PLASMA INFORMATION   1340

ITEM NO.:
INFORMATION:

1400 – TEST VEHICLE INSTRUMENTATION   1400

ITEM NO.:
INFORMATION:

1405 – TEST VEHICLE INSTRUMENTATION FREQUENCY SUMMARY   1405

ITEM NO.:
INFORMATION:

See the [Instrumentation Frequency Summary](#) table at the end of Appendix C.

1410 – TEST VEHICLE METRIC SYSTEMS DESCRIPTION   1410

ITEM NO.:
INFORMATION:

1411 – TEST VEHICLE METRIC TRANSPONDER CHARACTERISTICS   1411

INFORMATION:

See the [Test Vehicle Metric Transponder Characteristics](#) table at the end of Appendix C.

1412 – TEST VEHICLE METRIC ANTENNA SYSTEMS   1412

ITEM NO.:
INFORMATION:

1415 – TEST VEHICLE GPS SYSTEMS DESCRIPTION   1415

ITEM NO.:

INFORMATION:

1416 – TEST VEHICLE GPS ANTENNA SYSTEM   1416

ITEM NO.:
INFORMATION:

1420– TEST VEHICLE TELEMETRY SYSTEMS DESCRIPTION   1420

ITEM NO.:
INFORMATION:

1421 – TEST VEHICLE TELEMETRY TRANSMITTER CHARACTERISTICS   1421

See the Test Vehicle Telemetry Transmitter Characteristics table at the end of Appendix C.

1422 – TEST VEHICLE TELEMETRY ANTENNA SYSTEMS   1422

ITEM NO.:
INFORMATION:

1424 – TEST VEHICLE TELEMETRY ANALOG DESCRIPTION   1424

ITEM NO.:
INFORMATION:

RCC ( ) NON-RCC ( )

LINK
    NUMBER:
    FREQUENCY:
    MODULATION:

CHANNEL
    NUMBER:
    FREQUENCY (kHz):
    DEVIATION (kHz):
    CONTINUOUS: YES ( ) NO ( )

SEGMENTS AND RATE
    COMMUTATED:
    SUBCOMMUTATED:

SUB-SUBCOMMUTATED:

REMARKS:

1425 – TEST VEHICLE TELEMETRY DIGITAL FORMAT 1425

ITEM NO.:
INFORMATION:

1426 – TEST VEHICLE TELEMETRY DATA RECORDER CHARACTERISTICS 1426

ITEM NO.:
RCC ( ) NON-RCC ( )
GENERAL INFORMATION
    NUMBER:
    TYPE:
    MODEL:
    MANUFACTURER:
    RECORD RATE (IPS):
    RECORDING TIME CAPABILITY:
    PLAYBACK RATE (IPS):
    PLAYBACK LINK:
        CHANNEL:
    TIME OF PLAYBACK:
    SCHEDULED (   ) COMMAND (   )
    LENGTH OF PLAYBACK TIME:
    DESCRIPTION OF PLAYBACK DATA:
TRACK:
CHANNEL:
SCO FREQUENCY:
INFORMATION BANDWIDTH:
FREQUENCY DEVIATION:
TYPE DATA:
REMARKS:

1430 – TEST VEHICLE COMMAND SYSTEM DESCRIPTION 1430

ITEM NO.:
INFORMATION:

1431 – TEST VEHICLE COMMAND SYSTEM CHARACTERISTICS 1431

See the Test Vehicle Command System Characteristics table at the end of Appendix C.

1432 – TEST VEHICLE COMMAND SYSTEM ANTENNA SYSTEMS 1432

ITEM NO.:
INFORMATION:

1440 – TEST VEHICLE VOICE COMMUNICATIONS OPERATING DESCRIPTION 1440

ITEM NO.:
INFORMATION:

1441 – TEST VEHICLE VOICE COMMUNICATIONS CHARACTERISTICS 1441

See the Test Vehicle Voice Communications Characteristics table at the end of Appendix C.

1442 – TEST VEHICLE VOICE COMMUNICATIONS ANTENNA SYSTEMS 1442

ITEM NO.:
INFORMATION:

1460 – TEST VEHICLE TELEVISION/VIDEO OPERATING DESCRIPTION 1460

ITEM NO.:
INFORMATION:

1461 – TEST VEHICLE TELEVISION/VIDEO CHARACTERISTICS 1461

ITEM NO.:

See the Test Vehicle Television/Video Characteristics table at the end of Appendix C.

REMARKS:

1462 – TEST VEHICLE TELEVISION ANTENNA SYSTEMS 1462

ITEM NO.:
INFORMATION:

1463 – TEST VEHICLE TELEVISION FORMAT DESCRIPTION 1463

ITEM NO.:

COMPOSITE WAVEFORM:

SYNC FORMAT INFORMATION
        FUNCTION   VALUE

        LINE FREQUENCY (LPF):
        FRAME RATE (FPS):
        SYNC FREQUENCY (kHz):
        VERTICAL SYNC (MS):
        LINE PERIOD (μS):
        HORIZONTAL SYNC (μS):
        FRONT PORCH (μS):
        BACK PORCH (μS):
        S-WHITE TO BLACK:
        SIGNAL AMPLITUDE (VOLTS):
        SYNC AMPLITUDE (VOLTS):
        dc OFFSET (VOLTS):

SECTION DETAIL - VERTICAL BLANK AND SYNC	SECTION DETAIL - HORIZONTAL BLANK AND SYNC
SECTION DETAIL LINE PERIOD	SECTION DETAIL - OTHER

REMARKS:

1470 – TEST VEHICLE RECOVERY AIDS DESCRIPTION   1470

ITEM NO.:

FLOTATION DURATION:

ELECTRONIC AIDS
    • TYPE:
    • POWER OUT (WATTS):
    • FREQUENCY (MHz):

- MODULATION:
- ACTIVATED:

VISUAL AIDS
- TYPE:
- INTENSITY:
- COLOR:
- ACTIVATION:

REMARKS:

1480 – OTHER TEST VEHICLE SYSTEMS   1480

ITEM NO.:
INFORMATION:

1500 - CUSTOMER PROVIDED SUPPORT EQUIPMENT   1500

ITEM NO.:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

1600 - SYSTEM READINESS TESTS   1600

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

Pre-launch Tests – General:

Sensors:

1610 - READINESS TESTS IDENTIFICATION   1610

ITEM NO.:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TEST NAME	**NUMBER**

1620 - READINESS TESTS SEQUENCE   1620

ITEM NO.:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
TEST:

TEST NAME NUMBER	NOMINAL TIME	DURATION TIME	SUPPORT TIME	MAJOR EVENTS

REMARKS:

1630 - CUSTOMER TEST COUNTDOWN   1630

ITEM NO.:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

Time to Interceptor Launch	Events	Location

1700 – TRAJECTORY INFORMATION   1700

ITEM NO.:
TEST CODE:

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TRAJECTORY CONFIGURATION CONTROL NUMBER:

TRAJECTORY
- MAXIMUM:
- TYPICAL:
- MINIMUM:

RANGE
- MAXIMUM:
- TYPICAL:
- MINIMUM:

ALTITUDE
- MAXIMUM:
- TYPICAL:
- MINIMUM:

QE
- MAXIMUM:
- TYPICAL:
- MINIMUM:

AZIMUTH
- MAXIMUM:
- TYPICAL:
- MINIMUM:

MAXIMUM PERFORMANCE
- MAXIMUM:
- TYPICAL:
- MINIMUM:

TEST DISTRIBUTION
- MAXIMUM:
- TYPICAL:
- MINIMUM:

REMARKS:

1710 - MAJOR MISSION EVENTS

ITEM NO.:

TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

SPHEROID:
- MAJOR AXIS:
- MINOR AXIS:

EVENT NO.   EVENT DESCRIPTION

    (1)
    (2)
    (3)
    (4)
    (5)
    (6)

| EVENT | FLIGHT PATH | | | | | GRND. | | |
	TIME	ANGLE	VEL.	ALT.	RANGE	X	Y	Z

COORDINATE SYSTEM:
REMARKS:

1720 - SPACE MANEUVER   1720

ITEM NO.:
TEST CODE:
EVENT NUMBER:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TRAJECTORY PARAMETERS AT MANEUVER INITIATION
- REVOLUTION NUMBER:
- ELAPSED TIME:
- SIDEREAL TIME:
- GEODETIC LATITUDE:
- LONGITUDE:
- HEIGHT ABOVE OBLATE EARTH:
- RADIAL DISTANCE FROM GEO CENTER:
- INERTIAL VELOCITY MAGNITUDE:

- INERTIAL FLIGHT PATH ANGLE:
- INERTIAL AZIMUTH HEADING ANGLE:

TRAJECTORY PARAMETERS AT MANEUVER CONCLUSION
- REVOLUTION NUMBER:
- ELAPSED TIME:
- SIDEREAL TIME:
- GEODETIC LATITUDE:
- LONGITUDE:
- HEIGHT ABOVE OBLATE EARTH:
- RADIAL DISTANCE FROM GEO CENTER:
- INERTIAL VELOCITY MAGNITUDE:
- INERTIAL FLIGHT PATH ANGLE:
- INERTIAL AZIMUTH HEADING ANGLE:

MANEUVER THRUST PARAMETERS
- INITIAL MASS:
- MASS EXPULSION RATE:
- EFFECTIVE AREA:
- THRUST LEVEL:
- PITCH:
- YAW:
- MANEUVER DURATION:
- FINAL MASS:

REMARKS:

1730 - TRAJECTORY PLAN VIEWS   1730

ITEM NO.:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

1731 - TRAJECTORY PROFILE VIEWS   1731

ITEM NO.:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

1732 - LAUNCH TRAJECTORY   1732

ITEM NO.:

TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LAUNCH AZIMUTH:
FLIGHT AZIMUTH:

PLOTS

VELOCITY	ALTITUDE	
0		RANGE -
		TIME -

1733- ORBITAL AND SPACE TRAJECTORY   1733

ITEM NO.:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

SPACE PATH DIAGRAM - PLANNED TRAJECTORY:

1734 - TERMINAL TRAJECTORY   1734

ITEM NO.:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

FLIGHT AZIMUTH ON REENTRY (DEGREES TRUE NORTH):
IMPACT POINT
  • TARGET NUMBER REFERENCE:
  • LATITUDE:
  • LONGITUDE:
  • TIME:

PLOTS

	ALTITUDE	VELOCITY
RANGE -	0	0
TIME -	0	

1800 - OPERATIONAL SAFETY HAZARDS ISSUES 1800
ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

PROPELLANTS AND OTHER TOXIC OR HAZARDOUS MATERIALS:

RADIATION HAZARDS:

ACOUSTIC HAZARDS:

BLAST PARAMETERS FOR 0.4 AND 0.65 PSI:

PROTECTIVE EQUIPMENT NEEDED:

HUMAN FACTORS ANALYSIS:

2000 - TEST REQUIREMENTS/SUPPORT PLANS 2000

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2010 - SUPPORT PLAN SUMMARY 2010

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LOCATION:

INSTRUMENTATION/REQUIREMENT CATEGORY:

PLAN:

2020 - SUPPORT REQUIREMENTS THAT CANNOT BE MET 2020

UDS FORMAT NUMBER:
ITEM NO.:
REQUESTER:
SUPPLIER:
REVISION NUMBER:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2030- ENGINEERING PLAN 2030

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

REFERENCE PSP FORMAT NUMBER:

REFERENCE PSP ITEM NUMBER:

2040 - FUNDING INFORMATION 2040

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2050 - IMPLEMENTATION SCHEDULE 2050

ITEM NO.:
REQUESTER:
SUPPLIER:

TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

PRD/OR REFERENCE FORMAT/ITEM NUMBER:

STATION DESIGNATION:

DATES:

2060 - CUSTOMER RESPONSIBILITIES 2060

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

PRD/OR FORMAT NUMBER:

PRD/OR ITEM NUMBER:

2070 - FLIGHT SAFETY OPERATIONAL CONCEPTS 2070

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2080 - RANGE-DERIVED REQUIREMENTS 2080

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DERIVED REQUIREMENTS:

2100 - METRIC DATA 2100

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2110 - METRIC DATA - LAUNCH   2110

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA REQUIRED:

MISSION INTERVAL (RANGE, ALTITUDE, TIME):

DATA POINTS/SECOND:

DATA PRIORITY:

DATA ACCURACY:

REAL-TIME RELAY:

REMARKS:

2111 - METRIC DATA - MIDCOURSE   2111

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA REQUIRED:

MISSION INTERVAL (RANGE, ALTITUDE, TIME):

DATA POINTS/SECOND:

DATA PRIORITY:

DATA ACCURACY:

REAL-TIME RELAY:

REMARKS:

2112 - METRIC DATA – ORBITAL AND SPACE 2112

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA REQUIRED:

MISSION INTERVAL (RANGE, ALTITUDE, TIME):

DATA POINTS/SECOND:

DATA PRIORITY:

DATA ACCURACY:

REAL-TIME RELAY:

REMARKS:

2113 - METRIC DATA - TERMINAL 2113

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA REQUIRED:

MISSION INTERVAL (RANGE, ALTITUDE, TIME):

DATA POINTS/SECOND:

DATA PRIORITY:

DATA ACCURACY:

REAL-TIME RELAY:

REMARKS:

2120 - METRIC DATA - OTHER   2120

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA REQUIRED:

MISSION INTERVAL (RANGE, ALTITUDE, TIME):

DATA POINTS/SECOND:

DATA PRIORITY:

DATA ACCURACY:

REAL-TIME RELAY:

REMARKS:

2130 - METRIC DATA NETWORK COVERAGE   2130

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2140 - METRIC DATA COVERAGE   2140

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TEST UNIT/STAGE:				
SUB-ITEM	SYSTEM NAME	RADAR/OPTICS		COVERAGE INTERVAL
		NAME	CODE	

REMARKS:

2150 – GPS DATA   2150

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

MISSION INTERVAL (RANGE, ALTITUDE, TIME):

2160 – SIGNATURE DATA   2160

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA REQUIRED:

MISSION INTERVAL (RANGE, ALTITUDE, TIME):

DATA POINTS/SECOND:

DATA PRIORITY:

DATA ACCURACY:

REAL-TIME RELAY:

REMARKS:

2200 - TELEMETRY DATA   2200

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2210 - TELEMETRY RECORDING INTERVAL   2210

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

See the Telemetry Recording Interval table at the end of Appendix C to provide telemetry and
payload recording information.

NOTES:

2220 - TELEMETRY STRIP CHART RECORDING FORMAT   2220

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TRACE NUMBER:

MEASUREMENT
- NUMBER:
- NAME:

LINK:

CHANNEL:

SEGMENT:

ACCURACY
- DEFLECTION:
- CALIBRATION:

RECORDER IDENTIFICATION AND SPEED:

REMARKS:

2221 – TELEMETRY EVENT RECORDING FORMAT   2221

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

STATION RECORDER NUMBER:

SPEED:

TRACE NUMBER:

MEASUREMENT IDENTIFICATION NUMBER:

EVENT:

LINK (MHz):

TELEMETRY CHANNEL:

BIT NUMBER:

SAMPLE RATE (SPS):
REMARKS:

2230 - TELEMETRY DECOMMUTATION PROCESSING SPECIFICATIONS   2230

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA DESCRIPTION:

DATA SECURITY CLASSIFICATION:

PROCESSING TIME
- FROM:
- TO:

DATA SAMPLE RATE:

DATA COMPRESSION TYPE:

CRT UPDATE RATE:

LINE PRINTER RATE:

DATA PLOT RATE:

DATA FORMAT/GENERAL INSTRUCTIONS:

2240 - TELEMETRY COVERAGE   2240

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

See the Telemetry Coverage table at the end of Appendix C.

REMARKS:

2300 – COMMAND SYSTEMS   2300

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA ACCURACY:

DATA PRIORITY:

2310 – COMMAND CONTROL   2310

ITEM NO.:
REQUESTER:

SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

COMMAND FUNCTION:

TIME:

FUNCTION CODE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

2320 - COMMAND DESTRUCT   2320

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2330 - COMMAND UPLINK   2330

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2331 - COMMAND UPLINK RECORDINGS   2331

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2332 - COMMAND UPLINK STATIONS COVERAGE   2332

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

Test Unit Stage	Freq	Modulation	Data Type	Coverage Interval

REMARKS:

2400 – TIMING   2400

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TIMING SIGNAL:

REMARKS:

2410– TIMING SIGNAL DETAIL   2410
ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TIMING SIGNAL:
LOCATION OF END INSTRUMENT:
- Station:
- Building Number:
- Room Number:
- Rack Number:
- Ambient Temperature:
- Space Available:
SIGNAL REQUIRED:
WHEN REQUIRED:
END EQUIPMENT:
TIME CORRELATION:
ENVIRONMENT:
FREQUENCY RESPONSE:

REMARKS:

2411 – PULSE RATES   2411

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TIMING SIGNAL:
LOCATION OF END EQUIPMENT:
RATES REQUIRED:
REMARKS:

2412 – TIMING SEQUENCER REQUIREMENTS   2412

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

EVENTS
- Automatic Function Control Circuits:
- Automatic Hold Fire Control Circuits:

SIGNAL SEQUENCE
- Start From T-0:
- Stop From T-0:

ELECTRICAL CHARACTERISTICS
Contacts
  - o Quantity:
  - o Condition:
- Volts:
- Amps:
  - o dc or ac Frequency:

REMARKS:

2413 - VISUAL COUNTDOWN   2413

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

INFORMATION TO BE DISPLAYED:

OPERATION PERIOD
   FROM (   ) MIN (   ) SEC   TO (   ) MIN (   ) SEC   TOTAL (   ) MIN (   ) SEC

INDICATORS
- Quantity:
- Mounting:

LOCATION OF VISUAL INDICATORS:

REMARKS:

2414 - STATUS INDICATORS   2414

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

INFORMATION TO BE DISPLAYED:

OPERATION PERIOD
   FROM (   ) MIN (   ) SEC   TO (   ) MIN (   ) SEC   TOTAL (   ) MIN (   ) SEC

INDICATORS
- Quantity:
- Mounting:

LOCATION OF VISUAL INDICATORS:

REMARKS:

2415 - TIMING SYNCHRONIZATION   2415

ITEM NO.:

REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

EVENTS:

SIGNAL SEQUENCE:

ELECTRICAL CHARACTERISTICS:

REMARKS:

2600 - OTHER SYSTEMS   2600

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2610 - OTHER SYSTEMS - DIRECTED ENERGY   2610

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

REMARKS:

2620 - OTHER SYSTEMS - SUPPORT INSTRUMENTATION   2620

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

RA ( ) SA ( )

NAME/TYPE:

MANUFACTURER:

LOCATION:

PURPOSE/REMARKS:

2630 - OTHER SYSTEMS - ENVIRONMENTAL   2630
ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2640 - OTHER SYSTEMS - DATA   2640
ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2650 - OTHER SYSTEMS - COVERAGE   2650

ITEM NO.
REQUESTER
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TIME (GET) OR TIME PERIOD:

GEOGRAPHICAL LOCATION OR RECOMMENDED SITE:

COVERAGE
- Frequency:
- Number:

REMARKS:

2660 - OTHER SYSTEMS –RANGE AUXILIARY SENSORS   2660

TEST EVENT:

ITEM NO: (Sensor Name)
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

ORGANIZATION:
SENSOR:
ROLE:
SUPPORT REQUIREMENTS
TEST REQUIRING RANGE SUPPORT:
•
•
•
•
•
•
DATA TRANSMISSION SUPPORT:
METRIC:
TELEMETRY:
POINTING DATA REQUIRED:
TIMING:
COMMUNICATIONS SUPPORT:
TELEPHONES:
VOICE NETWORK TRANSMISSION (See 2730 Matrix):
1.
2.
3.
VIDEO/PHOTOGRAPHY:
SIGNATURE DATA:

REAL-TIME DATA DISPLAYS/CONTROL:
CONSOLES REQUIRED:
METEOROLOGY:
FREQUENCY PROTECTION:
LOGISTICS SUPPORT:
PERSONNEL ASSIGNMENT:
TRANSPORTATION:
SERVICES:
ADMINISTRATIVE/OFFICE SPACE:
SECURITY/SAFETY:
UTILITIES:
STORAGE/DISPOSAL:
AIR CONDITIONING:
FUELS/LUBRICANTS/GASES:
GROUND HANDLING EQUIPMENT:
MAINTENANCE:
COMMUNICATIONS CIRCUITS/FREQUENCIES/CALL SIGNS
MISSION LOCATION/SUPPORT TIME (COUNT TIME)

MISSION COORDINATOR/STATION LOCATION			
PRIORITY			
RANGE POC			
ORGANIZATIONAL POINTS OF CONTACT:			
NAME/TITLE	ADDRESS	PHONE/PAGER	E-MAIL
UDS/TEST PLAN REFERENCES			
NOTES			

2670 - OTHER SYSTEMS – NON-RANGE AUXILIARY SENSORS   2670

ITEM NO.:   (Sensor Name)

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

Non-Range Auxiliary Sensors		
ORGANIZATION:		
SENSOR:		
ROLE:		
SUPPORT REQUIREMENTS		
TEST REQUIRING RANGE SUPPORT:		
Day/Time	Event/Activity	Range Support Required
DATA TRANSMISSION SUPPORT:		
• METRIC:		
• TELEMETRY:		

Non-Range Auxiliary Sensors
• POINTING DATA REQUIRED:
TIMING:
COMMUNICATIONS SUPPORT:
• TELEPHONES:
• VOICE NETWORK TRANSMISSION (See 2730 Matrix):
VIDEO/PHOTOGRAPHY:
SIGNATURE DATA:
REAL-TIME DATA DISPLAYS/CONTROL:
• CONSOLES REQUIRED:
METEOROLOGY:
FREQUENCY PROTECTION:
LOGISTICS SUPPORT:
• PERSONNEL ASSIGNMENT:
• TRANSPORTATION:
• SERVICES:
• ADMINISTRATIVE/OFFICE SPACE:
• SECURITY:
• UTILITIES:
• STORAGE/DISPOSAL:
• AIR CONDITIONING:
• FUELS/LUBRICANTS/GASES:
• GROUND HANDLING EQUIPMENT:
MAINTENANCE:
FACILITIES:
COMMUNICATIONS CIRCUITS/FREQUENCIES/CALL SIGNS
MISSION LOCATION/SUPPORT TIME (COUNT TIME)
MISSION COORDINATOR/STATION LOCATION
PRIORITY
RANGE POC

ORGANIZATIONAL POINTS OF CONTACT:			
NAME/TITLE	ADDRESS	PHONE/PAGER	E-MAIL

Non-Range Auxiliary Sensors			
UDS/TEST PLAN REFERENCES			
NOTES			

2680 – OTHER SYSTEMS-ELEMENTS/OTHER   2680

ITEM NO:
REQUESTER:
SUPPLIER
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

ORGANIZATION:
SENSOR:
ROLE:
SUPPORT REQUIREMENTS
TEST REQUIRING RANGE SUPPORT:
DATA TRANSMISSION SUPPORT
TIMING:
COMMUNICATIONS SUPPORT
TELEPHONES:
VOICE NETWORK TRANSMISSION:
LOGISTICS SUPPORT
PERSONNEL ASSIGNMENT:
SERVICES
ADMINISTRATIVE/OFFICE SPACE:
SECURITY:
UTILITIES:
STORAGE/DISPOSAL:
GROUND HANDLING EQUIPMENT:
FACILITIES:
COMMUNICATIONS CIRCUITS/FREQUENCIES/CALL SIGNS
MISSION LOCATION/SUPPORT TIME (COUNT TIME)

MISSION COORDINATOR/STATION LOCATION		
Name	Phone	Email

PRIORITY

PMRF POC		
Name	Phone	Email

ORGANIZATIONAL POINTS OF CONTACT:			
Name	Address	Phone	Email

2700 - GROUND COMMUNICATIONS   2700

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2710 - AIR/GROUND VOICE COMMUNICATIONS   2710

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2711 - AIR/GROUND VOICE COVERAGE   2711

ITEM NO.:
REQUESTER:

SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

SYSTEM:

TIME (GET) OR TIME PERIOD:

RECOMMENDED SITE OR LOCATION:

REMARKS:

2712 - AIR/GROUND VOICE RECORDINGS   2712
ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

				AUDIO/VIDEO RECORDINGS					
SUBITEM	TEST CODE	STATION OR LOCATION	RECORDING REQ.	START	STOP	AUD/ VIS	TAPE SPEED	REEL SIZE	TIME CORL

REMARKS:

2720 - COMMUNICATIONS DETAIL   2720

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

USE: ADMINISTRATIVE ( ) OPERATIONAL ( ):
TYPE OF SERVICE:
QUANTITY:

LOCATION OF OPERATING TERMINALS

SUBITEM	CIRCUIT NAME/TYPE	LOCATION	BLDG/ROOM	CIRCUIT NO.	NOTE NO.

2730 - VOICE NETWORK TRANSMISSION   2730

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

Location and Station	Call Sign	Location	Net 1	Net 2																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

2731 – SECURE VOICE NETWORK TRANSMISSION   2731

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

Mission Communication Circuits RF (F) and IC (I) Position	RF/IC Person	Call Sign	1	2	3	4	5	6	7	8	9	10	11	12	13

2732 – NON-SECURE DATA NETWORK TRANSMISSION   2732

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LOCATION

	CIRCUITS

COMMUNICATIONS CIRCUITS													
ORGANIZATION	1	2	3	4	5	6	7	8	9	10	11	12	13

REMARKS:

2733 – SECURE DATA NETWORK TRANSMISSION   2733

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

This chart provided for information only.

LOCATION

COMMUNICATIONS CIRCUITS	CIRCUITS							
ORGANIZATION	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**

REMARKS:

2734 – VIDEO/DATA NETWORK TRANSMISSION   2734

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT DESCRIPTION													TOTAL CKTS
SUB-ITEM	STATION												
	FROM	TO											

REMARKS:

2735 – FACSIMILE NETWORK TRANSMISSION   2735

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT DESCRIPTION													TOTAL CKTS.
SUB-ITEM	STATION												
	FROM	TO											

REMARKS:

2736 –C-BAND/INMARSAT/MINI-M   2735

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT DESCRIPTION													TOTAL CKTS
SUB-ITEM	STATION												
	FROM	TO											

REMARKS:

2740 - INTERCOMMUNICATIONS SYSTEMS 2740

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

NET TITLE OR NUMBER														
SUB-ITEM	TYPE INST	STATION OR LOCATION	A											
			B											

REMARKS:

2750 - VOICE TERMINATIONS 2750

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT TITLE:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION

				LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	**TEST CODE**	**NOTE**	**CAP**	**TERMINATION LOCATIONS**

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	**TEST CODE**	**NOTE**	**CAP**	**TERMINATION LOCATIONS**

NOTES:

2751 - SECURE VOICE TERMINATIONS   2751

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT TITLE:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

2752 - POINT-TO-POINT TERMINATIONS   2752

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT TITLE:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

2753 - TERMINATIONS   2753

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT TITLE:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

2754 - SECURE DATA TERMINATIONS   2754

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
CIRCUIT TITLE:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION

				LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	**TEST CODE**	**NOTE**	**CAP**	**TERMINATION LOCATIONS**

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	**TEST CODE**	**NOTE**	**CAP**	**TERMINATION LOCATIONS**

NOTES:

2755 - VIDEO/DATA TERMINATIONS   2755

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT TITLE:

RESPONSIBLE AGENCY:

SUBITEM	**TEST CODE**	**NOTE**	**CAP**	**TERMINATION**

				LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	**TEST CODE**	**NOTE**	**CAP**	**TERMINATION LOCATIONS**

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	**TEST CODE**	**NOTE**	**CAP**	**TERMINATION LOCATIONS**

NOTES:

2756 - VOICE RADIO TERMINATIONS   2756

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT TITLE:

RESPONSIBLE AGENCY:

SUBITEM	**TEST CODE**	**NOTE**	**CAP**	**TERMINATION**

				LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

2757 - MISCELLANEOUS TERMINATIONS   2757

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CIRCUIT TITLE:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

RESPONSIBLE AGENCY:

SUBITEM	TEST CODE	NOTE	CAP	TERMINATION LOCATIONS

NOTES:

2760 - COMMUNICATIONS RECORDINGS   2760

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

SUB ITEM	TEST CODE	STATION OR LOCATION	RECORDING REQ.	START	STOP	AUD/ VID	TAPE SPEED	REEL SIZE	TIME CORL

REMARKS:

2770 – TELEPHONE   2770

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LOCATION

COMMUNICATIONS INSTRUMENTS								
ORGANIZATION		**1**	**2**	**3**	**4**	**5**	**6**	**7**
GOVERNMENT								
CONTRACTORS								
SENSORS								

NOTES:

2780 - OTHER COMMUNICATIONS   2780

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

2800 – VIDEO   2800

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

2810 – ON-BOARD VIDEO   2810

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

2811 – ON-BOARD VIDEO DOWNLINK   2811

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

2812 – ON-BOARD VIDEO DISPLAYS   2812

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

2813 – ON-BOARD VIDEO RECORDINGS   2813

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

2820- LAUNCH PAD VIDEO 2820

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

2821 - TRACKING VIDEO TELEVISION 2821

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

2822 - VIDEO DISPLAYS   2822

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

FROM/TO	DISPLAY LOCATION/LOCATIONS						
							COMMENTS

2823 - VIDEO RECORDINGS   2823

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

2824 - OTHER VIDEO 2824

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE EQUIPMENT:

SUBJECT TO BE VIEWED:

LOCATION:

PERIOD:

REMARKS:

3000 – REAL-TIME DATA DISPLAY/CONTROL 3000

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3010 - REAL-TIME FLIGHT CONTROL/SUPPORT CENTERS 3010

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3011 - REAL-TIME FLIGHT CONTROL DATA ACQUISITION 3011

ITEM NO.:
REQUESTER:
SUPPLIER:

TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3020 - REAL-TIME DISPLAYS 3020

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

PERIOD REQUIRED:
FROM ( ) QTR ( ) CY TO ( ) QTR ( ) CY

INFORMATION TO BE DISPLAYED:

PERIOD OF OPERATION:
FROM ( ) MIN ( ) SEC TO ( ) MIN ( ) SEC TOTAL ( ) MIN ( ) SEC

INDICATORS
- Quantity:
- Type:

LOCATION OF VISUAL INDICATORS
- Building Number:
- Room Number:

REMARKS:

3021 – REAL-TIME CONSOLE COMMAND PANELS 3021

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

SUMMARY
LOCATION

COMMUNICATIONS INSTRUMENTS										
ORGANIZATION	**1**	**2**	**3**	**4**	**5**	**6**	**7**			

3022 - REAL-TIME CONSOLE ANALOG RECORDERS 3022

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

MEASUREMENT
- NUMBER:
- NAME:

LINK:

SOURCE:

PEN NUMBER:

REMARKS:

3023 - REAL-TIME CONSOLE DRAWINGS 3023

ITEM NO.:
REQUESTER:
SUPPLIER:

TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3024 - REAL-TIME CONSOLE MODULE DESCRIPTION 3024

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

STATION DESIGNATION:

3025 - REAL-TIME - SUMMARY OF CONSOLE LOCATIONS 3025

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
REMARKS:

3026 - REAL-TIME - SUMMARY OF CONSOLE MODULE LOCATIONS 3026

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

CONSOLE/STATION DESIGNATION:
MODULE:

REMARKS:

3030 - REAL-TIME - OTHER GROUP DISPLAYS AND CONTROL 3030

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

STATION DESIGNATION:

3040 - REAL-TIME DATA FORMATS   3040

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3050 - REAL-TIME TRACKING DATA FORMAT CONTROL   3050

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3051 - REAL-TIME TELEMETRY DATA FORMAT CONTROL   3051

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3052 - REAL-TIME TELEMETRY DATA FORMATS   3052

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

See Chart

SUB ITEM	TEST CODE	MEAS. NO.	MEAS. NAME	SAMPLES PER SEC.	WORD NUMBER	FRAME NUMBER

REMARKS:

3053 - REAL-TIME COMMAND DATA FORMAT CONTROL   3053

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3060 - REAL-TIME REMOTE SITE DATA PROCESSING   3060

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3070 - REAL-TIME DATA TESTING   3070

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3071 - REAL-TIME DATA INTERFACES   3071
ITEM NO.:
REQUESTER:
SUPPLIER:

TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3072 - REAL-TIME DATA INTERFACE CRITERIA   3072

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

PERIOD REQUIRED
FROM (   ) QTR. (   ) CY   TO (   ) QTR (   ) CY

DATA TYPE:

SOURCE
- LOCATION:
- IMPEDANCE:
    o MAGNITUDE:
    o TYPE:

TERMINATION
- LOCATION:
- IMPEDANCE:
    o MAGNITUDE:
    o TYPE:

ANALOG DATA
- WAVEFORM:
- OUTPUT VOLTAGE:
- RECEIVE VOLTAGE:
- FREQUENCY/FREQUENCY RANGE:
- SIGNAL TO NOISE RATIO:

DIGITAL DATA
- BINARY 1:
- BINARY 0:
- OUTPUT FORMAT:
- FRAME RATE:
- CLOCK:
- ERROR RATE:

3073 - REAL-TIME DATA DISTRIBUTION   3073

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3100 –PHOTOGRAPHIC/OPTICS GENERAL   3100

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

REMARKS:

3110 – DOCUMENTARY PHOTOGRAPHY   3110

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LOCATION:
CAMERA FORMAT:
FOCAL LENGTH:
FRAMES PER SECOND:
FILM TYPE LOAD:
INTERVAL:
CAMERA:
EXPOSURE:
TIMING:

REMARKS:

3120 - ENGINEERING SEQUENTIAL PHOTOGRAPHY/OPTICS   3120

ITEM NO.:
REQUESTER:
SUPPLIER:

TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

ITEM	EXAMPLES	REQUIREMENT
LOCATION:	LLA, BUILDING NUMBER, LAUNCH PAD	
CAMERA MOUNT:	STATIC, TRACKING, VTM	
CAMERA TYPE:	DIGITAL, FILM	
RESOLUTION:	640X480, 1600X1200	
WAVEBAND:	VISIBLE, 3-5 MICRONS	
FOCAL LENGTH:	80 MM, 40 INCH	
APERTURE:	6 INCH, 14 INCH	
FIELD OF VIEW:	30 DEGREES, 1 DEGREE, 0.12 DEGREES	
FRAME RATE:	30 FPS, 1000 FPS	
INTEGRATION TIME/EXPOSURE:	1 ms, 100 ms	
DATA BIT DEPTH:	8 BIT, 14 BIT, N/A	
TIMING:	IRIG-A, IRIG-B	
RADIOMETRIC CALIBRATION:	STARS, NIMA, NONE	
DATA FORMAT:	MPEG-2, AVI, RAW, MXF	

REMARKS:

3200 - METEOROLOGY   3200

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3210 - METEOROLOGICAL CONSTRAINTS   3210

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3220 - METEOROLOGICAL FORECASTS   3220

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TIME REQUIRED:

FORECAST PARAMETERS:

VALID TIME:

LOCATION:

PURPOSE AND REMARKS:

3230 - METEOROLOGICAL OBSERVATIONS   3230
ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA REQUIRED:

SURFACE
- TIME (MINS):
- LOCATION:
- ALTITUDE:

UPPER AIR
- TIME:
- LOCATION:
- INTERVAL:
- ALTITUDE:

DATA PRIORITY:

DATA ACCURACY:

PURPOSE AND REMARKS:

3240 - METEOROLOGICAL INSTRUMENTATION LOCATION DIAGRAM   3240.
ITEM NO.:

REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3250 - SPACE ENVIRONMENT METEOROLOGY   3250

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

STATION:
PERIOD
- FROM:
- TO:

OBSERVATIONS OR FORECASTS REQUIRED:

DATA PRIORITY:

PURPOSE AND REMARKS:

3300 - RECOVERY   3300

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3310 - RECOVERY - SHIPS AND AIRCRAFT COVERAGE   3310

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

AREA CODE:

QUANTITY AND TYPE OF SHIPS:

SHIP ACCESS TIME (HRS):

QUANTITY AND TYPE RESCUE AIRCRAFT:

AIRCRAFT ACCESS TIME (HRS):

REMARKS:

3320 - RECOVERY - ITEMS TO BE RECOVERED   3320

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

NOMENCLATURE:

WEIGHT (LBS):

DIMENSIONS (FT)
- LENGTH:
- WIDTH:
- DIAMETER:

LIFE FORM/HAZARDS:

REMARKS:

3330 - RECOVERY - SALVAGE AND DISPOSITION   3330

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

NOMENCLATURE:

WEIGHT (LBS):

LOCATION:

DESCRIPTION:

REMARKS:

3340 - RECOVERY - PLANNED AREAS   3340

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

AREA CODE:

POSITION
- LATITUDE:
- LONGITUDE:

LANDING AREA SIZE
- MAJOR:
- MINOR:

LAUNCH AZIMUTH:

REVOLUTION NUMBER:

ITEMS TO BE RECOVERED:

REMARKS:

3350 - RECOVERY - CONTINGENCY AREAS   3350

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

AREA CODE:

POSITION
- LATITUDE:
- LONGITUDE:

LANDING AREA SIZE

- MAJOR:
- MINOR:

LAUNCH AZIMUTH:

REVOLUTION NUMBER:

ITEMS TO BE RECOVERED:

REMARKS:

3360 - RECOVERY - ABORT AREAS   3360

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

AREA CODE:

LOCATION OF AREA:

AREA SIZE
- MAJOR:
- MINOR:

POSITION
- LATITUDE:
- LONGITUDE:

REMARKS:

3400 - OTHER TECHNICAL SUPPORT   3400

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3410 - OTHER TECHNICAL SUPPORT - AIRCRAFT   3410
ITEM NO.:

REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

AIRCRAFT SOURCE RA ( ) SA ( )

FUNCTION/REQUIREMENT:

EQUIPMENT TO BE INSTALLED IN AIRCRAFT:

ITEM	CY				CY			
	1	2	3	4	1	2	3	4

NUMBER OF AIRCRAFT:

NUMBER OF FLIGHTS A/C:

FLIGHT HOURS/TEST:

TOTAL FLYING HRS/QTR:

STATION:

FLIGHT PATH:

SPEED RANGE (KTS):

ALTITUDE:

REMARKS:

3411 - OTHER TECHNICAL SUPPORT - SEACRAFT   3411

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE AND FUNCTION:
SEACRAFT SOURCE RA ( ) SA ( )

	CALENDAR YEAR:				CALENDAR YEAR:			
	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
NUMBER OF OPERATIONS								
TOTAL TIME REQUIRED ON STA								

OPERATING AREA:

BEARING (TRUE):

SPEED:

DESCRIPTION OF OPERATIONS:

SUPPORT REQUIRED:

3412 - OTHER TECHNICAL SUPPORT - TARGETS   3412

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TARGET CODE DESIGNATION, NAME, AND REFERENCE:
TYPE OF TARGET:
SOURCE:
SECURITY CLASSIFICATION:
TARGET PERFORMANCE PARAMETERS
  • SPEED:
  • ALTITUDE:
  • FUEL ON BOARD:
  • ENDURANCE:
  • TIME ON STATION:
  • SIZE:
  • REFLECTIVE SURFACE:
  • TYPE OF BEACON:

AIR CONTROL REQUIREMENTS
  • INTERCEPT

- o 0 (BRG):
- o N.M. FROM:
- • CONTROL LIMITATIONS OR EXPECTED TOLERANCES
  - o RANGE (MAX/MIN):
  - o ALT (MAX/MIN):
  - o BRG (MAX/MIN):
- • AIRCRAFT STAGED AT:
- • AIR CONTROLLER BRIEFING REQUIRED YES ( ) NO ( )
- • BY PILOTS:
  - o USAF ( )
  - o USN ( )
  - o USA ( )
  - o CONTRACTOR ( )
  - o FOREIGN ( )
- • REQUIRED OR SUGGESTED LOCATION FOR CONTROL:

NAME OF EQUIPMENT:
AGENCY RA ( ) SA ( )
DESCRIPTION OF EQUIPMENT:
PURPOSE:
SUPPORT SERVICES AND SPECIAL REQUIREMENTS:

3414 - OTHER TECHNICAL SUPPORT – INTERCEPTOR   3414

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

3420 - SUMMARY OF FREQUENCY PROTECTION   3420

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

Use the Summary of Frequency Protection table at the end of Appendix C to provide this information.

3421 - PROTECTION FROM EMITTING SYSTEMS   3421

ITEM NO.:
REQUESTER:

SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

FREQUENCY:					
LOCATION:					
PROTECTION REQUIRED:					
ESTIMATED DURATION OF PROTECTION					
• PRE-MISSION:					
• MISSION:					
• OTHER:					

3430 - GEODETIC AND GRAVITATIONAL DATA   3430

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

FACILITY DESCRIPTION AND LOCATION:

HORIZONTAL DATA
- GEODETIC LATITUDE (SEC):
- GEODETIC LONGITUDE (SEC):
- GEODETIC HEIGHT (METERS):
- REFERENCE DATUM:

VERTICAL DATA
- ELEVATION (METERS):
- REFERENCE DATUM:

GRAVITY - ABS GRAV (MGALS):

REMARKS AND SPECIAL REQUIREMENTS:

3440 - OTHER TECHNICAL SUPPORT - TRAINING   3440

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LOCATION:

NUMBER:

TYPE/SPECIALTY:

DATE/DURATION
- ARRIVE:
- DEPART:

PURPOSE/REMARKS:

3500 - MODELING AND SIMULATION   3500

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

PURPOSE:

REMARKS:

3510 - MODELING AND SIMULATION PLAN   3510

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LOCATION:

NUMBER:

TYPE/SPECIALTY:

FIDELITY:

VERIFICATION, VALIDATION, AND ACCREDITATION (VV&A):

DATE/DURATION:

PURPOSE/REMARKS:

3520 - MODELING AND SIMULATION ARCHITECTURE 3520

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

REMARKS:

4100 - DATA PROCESSING SPECIFICATIONS 4100

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

4110 - DATA PROCESSING SPECIFICATIONS - DETAIL 4110

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
DATA DESCRIPTION:

SECURITY CLASSIFICATION:

PROCESSING TIME
- FROM:
- TO:

DATA SAMPLE RATE:

DATA PLOT OR PRINT RATE:

REFERENCE
- UDS SECTION NUMBER:

- ITEM NUMBER:

TYPE PRESENTATION:

DATA FORMAT - GENERAL INSTRUCTIONS:

4120 - DATA PROCESSING - OTHER   4120

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA:

REFERENCE
- UDS SECTION NUMBER:
- ITEM NUMBER:

TIME INTERVAL:

TIME REQUIRED:

DATA PRESENTATION AND REMARKS:

4130 - DATA COORDINATE SYSTEMS DESCRIPTION   4130

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

4200 - DATA DISPOSITION   4200

Data Disposition		
Data Recipient Agency/ Abbreviated Name	Address	Classified Address/Cage Code
	Example Given	

LM MS2	Lockheed Martin Corporation – Maritime Systems & Sensors 300 M Street, SE Suite 700, CPK3-700 Attn: John Laster Washington, DC 20003-3442	Lockheed Martin Corporation – Maritime Systems & Sensors 300 M Street, SE Suite 700 Washington, DC 20003 Cage Code: 1P032

TIME REQUIRED:
REMARKS:

4220 - DATA DISPOSITION – REPORTS   4220

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA TYPE:
- TYPE REPORT:
- CLASSIFICATION:

REFERENCE:
- UDS SECTION NUMBER:
- ITEM NUMBER:

QUANTITY:
- COPIES:

DISTRIBUTION/RECIPIENT:

TIME REQUIRED:

REMARKS:

4230 - DATA DISPOSITION - DETAIL – METRIC/SIGNATURE   4230

ITEM NO.:
REQUESTER:
SUPPLIER:

TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA TYPE:
- MEDIA TYPE
- CLASSIFICATION:

REFERENCE:
- UDS SECTION NUMBER:
- ITEM NUMBER:

QUANTITY:
- COPIES:

DISTRIBUTION/RECIPIENT:

TIME REQUIRED:

REMARKS:

4231 - DATA DISPOSITION - DETAIL – TELEMETRY   4231

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA PRODUCT:
- MEDIA TYPE
- CLASSIFICATION:

REFERENCE:
- UDS SECTION NUMBER:
- ITEM NUMBER:

QUANTITY:

DISTRIBUTION/RECIPIENT:

TIME REQUIRED:

REMARKS:

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA PRODUCT
- MEDIA TYPE:
- CLASSIFICATION:

REFERENCE:
- UDS SECTION NUMBER:
- ITEM NUMBER:

QUANTITY:

DISTRIBUTION/RECIPIENT:

TIME REQUIRED:

REMARKS:

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA PRODUCT
- MEDIA TYPE
- CLASSIFICATION:

REFERENCE:
- UDS SECTION NUMBER:
- ITEM NUMBER:

QUANTITY:
DISTRIBUTION/RECIPIENT:

TIME REQUIRED:

REMARKS:

4234 - DATA DISPOSITION - DETAIL – METEOROLOGICAL   4234

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA PRODUCT:
  • MEDIA TYPE:
  • CLASSIFICATION:

REFERENCE:
  • UDS SECTION NUMBER:
  • ITEM NUMBER:

QUANTITY:

DISTRIBUTION/RECIPIENT:

TIME REQUIRED:

REMARKS:

4235- DATA DISPOSITION - DETAIL - COMPUTER PROCESSING   4235

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA PRODUCT:
  • MEDIA TYPE:
  • CLASSIFICATION:

REFERENCE:
  • UDS SECTION NUMBER:
  • ITEM NUMBER:

QUANTITY:

DISTRIBUTION/RECIPIENT:
TIME REQUIRED:

REMARKS:

4236 - DATA DISPOSITION - DETAIL - MISCELLANEOUS   4236

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA PRODUCT:
- MEDIA TYPE:
- CLASSIFICATION:

REFERENCE:
- UDS SECTION NUMBER:
- ITEM NUMBER:

QUANTITY:

DISTRIBUTION/RECIPIENT:

TIME REQUIRED:

REMARKS:

4240 - DATA DISPOSITION - ENVIRONMENTAL   4240

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

DATA PRODUCT:
- MEDIA TYPE:
- CLASSIFICATION:

REFERENCE:
- UDS SECTION NUMBER:
- ITEM NUMBER:

QUANTITY:

DISTRIBUTION/RECIPIENT:

TIME REQUIRED:

REMARKS:

5000 - BASE FACILITIES/LOGISTICS   5000

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

5100 - PERSONNEL ASSIGNMENT SCHEDULES   5100

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

The anticipated number of support personnel assignments is identified below:

Organization	Number/QTY	LOCATION					
TOTAL							

REMARKS:

5200 - TRANSPORTATION   5200

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

	CALENDAR YEAR:				CALENDAR YEAR:			
	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
TRIP FREQUENCY/QTR								

LOCATION
  • FROM:
  • TO:

LOAD
  • PERSONNEL:
  • CARGO:

NUMBER OF PASSENGERS:

QTY OF CARGO/QTR:

REMARKS:

5210 - GROUND TRANSPORTATION   5210

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

	CALENDAR YEAR:				CALENDAR YEAR:			
	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
TRIP FREQUENCY/QTR								

LOCATION
  • FROM:
  • TO:

LOAD
- PERSONNEL:
- CARGO:

NUMBER OF PASSENGERS:

QTY OF CARGO/QTR:

REMARKS:

5220 - AIR TRANSPORTATION   5220

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

	CALENDAR YEAR:				CALENDAR YEAR:			
	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
TRIP FREQUENCY/QTR								

LOCATION
- FROM:
- TO:

LOAD
- PERSONNEL:
- CARGO:

NUMBER OF PASSENGERS:

QTY OF CARGO/QTR:

REMARKS:

5230 – SEA TRANSPORTATION   5230

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
SPECIAL CODE:

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

	CALENDAR YEAR:				CALENDAR YEAR:			
	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
TRIP FREQUENCY/QTR								

LOCATION
- FROM:
- TO:

LOAD
- PERSONNEL:
- CARGO:

NUMBER OF PASSENGERS:

QTY OF CARGO/QTR:

REMARKS:

5300 - SERVICES   5300

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

5310 - SERVICES - ADMINISTRATIVE, PERSONNEL, AND OFFICE   5310

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:
RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5311 - SERVICES - FIRE AND RESCUE   5311

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:

RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5312 - SERVICES - MEDICAL   5312

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

5313 - SERVICES - PUBLIC AFFAIRS   5313

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

All inquiries and all public releases of information should be directed to:

Agency
External Affairs
Street Address
City, State, Zip

_____ (Name of POC)

Phone: (XXX) XXX-XXXX (Commercial)
FAX: (XXX) XXX-XXXX (Commercial)

E-mail address: _____._____@_____._____

5314 - SERVICES – SECURITY AND SAFETY   5314

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:

RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5315 - SERVICES - COMMUNITY, EDUCATION, AND FOOD SERVICE   5315

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:

RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5320 - SERVICES - UTILITIES (ELECTRICAL, WATER, AND SANITATION)   5320

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:

RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS /SPECIAL INSTRUCTIONS:

5321 - SERVICES - HANDLING, STORAGE, AND DISPOSAL   5321

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:

RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

See the [Services - Handling, Storage, and Disposal](#) table at the end of Appendix C.

REMARKS:

5322 - SERVICES - AIR CONDITIONING AND ENVIRONMENTAL OBSERVATIONS 5322

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:

RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5330 - SERVICES - PROCUREMENT, SHIPPING, RECEIVING, AND STOCK CONTROL 5330

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:

RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5331 - SERVICES - LOCAL PURCHASE OF BASE-FUNDED ITEMS   5331

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

NAME/DESIGNATION:

MILITARY SPECIFICATION NUMBER:

FEDERAL STOCK NUMBER:

UNITS:

ESTIMATED COST:

QUANTITY REQUIRED/QTR

CALENDAR YEAR												
QUARTER	1	2	3	4	1	2	3	4	1	2	3	4

REMARKS:

5340 - SERVICES - PROPELLANTS, GASES, AND CHEMICALS   5340

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

ITEM NAME/DESIGNATION:
MILITARY SPECIFICATION NUMBER:
FEDERAL STOCK NUMBER:
RA ( ) SA ( )

C-104

QUANTITY REQUIRED/QTR

CALENDAR YEAR												
QUARTER	1	2	3	4	1	2	3	4	1	2	3	4

REMARKS:

5341 - SERVICES – FUELS, LUBRICANTS, AND HYDRAULIC FLUIDS   5341

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

ITEM NAME/DESIGNATION:

MILITARY SPECIFICATION NUMBER:

FEDERAL STOCK NUMBER:

RA ( ) SA ( )

QUANTITY REQUIRED/QTR

CALENDAR YEAR												
QUARTER	1	2	3	4	1	2	3	4	1	2	3	4

REMARKS:

5342 - SERVICES – CHEMICAL CLEANING   5342

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

COMPONENT/SYSTEM
- NAME/DESCRIPTION:
- QUANTITY:
- SPECIFICATION:

CLEANING REQUIREMENT:

SERVICE:

REMARKS:

5350 - SERVICES – VEHICLES   5350
ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

ITEM NAME/DESIGNATION:

CAPACITY:

PURPOSE:

PERCENT USED:

RA ( ) SA ( )

NUMBER REQUIRED/QTR

CALENDAR YEAR												
QUARTER	1	2	3	4	1	2	3	4	1	2	3	4

REMARKS - SPECIAL INSTRUCTIONS:

5351 - GROUND HANDLING EQUIPMENT   5351

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

See the Services - Ground Handling Equipment table at the end of Appendix C.

REMARKS - SPECIAL INSTRUCTIONS:

5360 - SERVICES - AIRCRAFT   5360

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE SERVICE/PURPOSE:

STAGING AREAS AND DATES:

AIRCRAFT DESCRIPTION
- TYPE:
- SERIAL NO:
- FUEL:
- OIL:
- LUBRICANT:
- SUPPORT EQUIPMENT:

REMARKS:

5361 - SERVICES - SEACRAFT   5361

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE SEACRAFT:

HARBOR:

DURATION
- DAYS:
- CY:

SERVICES:

5370 - SERVICES - AIR OPERATIONS   5370

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE SERVICE:

DATES
- FROM:
- TO:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5371 - SERVICES - MARINE OPERATIONS   5371

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE SERVICE:

DATES
- FROM:
- TO:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5380 - SERVICES - PHYSICAL AND LIFE SCIENCE EXPERIMENTS   5380

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE ITEM/SERVICE:

RA ( ) SA ( )

DATES OF REQUIRED ITEM/SERVICE
- FROM:
- TO:

AMOUNTS OF REQUIRED ITEM/SERVICE:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5400 - LABORATORY   5400

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

5410 - LABORATORY- CHEMICAL AND PHYSICAL ANALYSIS   5410

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

NAME/DESIGNATION:

MILITARY SPECIFICATION NUMBER:

DETAILS OF ANALYSIS REQUIRED:

SAMPLING TIMES:

REMARKS:

5420 – LABORATORY - SPECIAL ENVIRONMENT   5420

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:

REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

5430 – LABORATORY – CALIBRATION   5430

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

PRECISION ELECTRONIC OR MECHANICAL MEASURING EQUIPMENT
- NAME/DESIGNATION:
- RANGE OR SCALE AND UNITS:
- NAME OF MANUFACTURER:
- MODEL NUMBER:
- SERIAL NUMBER:

CALIBRATION
- CYCLE MONTHS:
- TIME (DAYS):
- IN PLACE: YES( ) NO( )

ACCURACY REQUIRED:

UNITS:

CALENDAR YEAR												
QUARTER	1	2	3	4	1	2	3	4	1	2	3	4

REMARKS:

5440 – LABORATORY - TECHNICAL SHOPS AND LABS   5440

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE SERVICE:

DATES
- FROM:
- TO:
- NUMBER OF DAYS PER MONTH:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5500 - MAINTENANCE   5500

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

5510 - MAINTENANCE - BUILDINGS AND GROUNDS   5510

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE SERVICE:

DATES:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5520 - MAINTENANCE – VEHICLES   5520

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE SERVICE:

DATES:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5530 - MAINTENANCE – SHOP   5530

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE SERVICE:

DATES:

PURPOSE AND REMARKS/SPECIAL INSTRUCTIONS:

5600 - FACILITIES   5600

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

LOCATION:
TYPE OF FACILITY:
SITE DESIRED:

STATUS
- ASSIGNED: ( )   EXISTING: ( )   NEW: ( )

SCHEDULE

CALENDAR YEAR												
QUARTER	1	2	3	4	1	2	3	4	1	2	3	4

REMARKS:

5610 - FACILITIES - DRAWINGS   5610

ITEM NO.:
REQUESTER:

SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

5620 - FACILITIES - LAUNCHER AND PLATFORM CHARACTERISTICS   5620

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

TYPE OF LAUNCH PAD/PLATFORM:

SIZE OF LAUNCH PAD/PLATFORM:

LOCATION OF LAUNCH PAD/PLATFORM:

TYPE OF SIMULATOR: RA ( ) SA ( )

DESCRIPTION OF LAUNCH PAD/PLATFORM:

TYPE OF LAUNCHER: RA ( ) SA ( )

SIZE OF LAUNCHER:

LAUNCHER WEIGHT:

LAUNCHER AZIMUTH:
- ATTITUDE:
- POSITION ACCURACY DESIRED:
- POSITION ACCURACY REQUIRED:

LAUNCHER ELEVATION:
- ATTITUDE:
- POSITION ACCURACY DESIRED:
- POSITION ACCURACY REQUIRED:

DESCRIPTION OF LAUNCHER:

DESCRIPTION OF LAUNCH OPERATIONS:

DESCRIPTION OF POSITIONING METHODS AND EQUIPMENT:

6000 – OTHER SUPPORT   6000

ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):
See the Other Support table at the end of Appendix C.

REMARKS:

6010– OTHER SUPPORT - REQUIREMENTS FOR SUPPORT AGENCIES   6010
ITEM NO.:
REQUESTER:
SUPPLIER:
TEST CODE:
REQUIREMENT ( ) INFORMATION ( ) RESPONSE ( ):

REFERENCE UDS SECTION/ITEM NUMBER	REQUIREMENT	DATA PRIORITY

COMMENTS:

Format 1405 - Instrumentation Frequency Summary										
FREQUENCY (MHz)		EMISSION CHARACTERISTICS				PURPOSE	GUARD BAND (MHz)	TIME	LOCATION	REMARKS
Transmit Downlink/ Transponder	Receive Uplink/ Interrogate	Type	Bandwidth	Power	Data Rate					

Format 1411 - Test Vehicle Metric Transponder Characteristics			
ITEM NO.:	01	02	03
CHARACTERISTIC			
GENERAL INFORMATION			
MODEL:			
MANUFACTURER:			
TYPE:			
INTERROGATION CODE:			
DOUBLE PULSE SPACING:	μs	μs	μs
TRIPLE PULSE SPACING:			
MESSAGE TYPE:			
• PULSE WIDTH (μs):	μs	μs	μs
• PULSE FREQUENCY (PPS):			
• MESSAGES PER SECOND:			
• RECYCLE TIME (μs):			
• MESSAGE NUMBER:			
• PULSE DIGITS:			

Format 1411 - Test Vehicle Metric Transponder Characteristics			
ITEM NO.:	**01**	**02**	**03**
CHARACTERISTIC			
• LENGTH (µs):			
• SPACING TO NEXT MESSAGE CODE FORM:	µs	µs	µs
DOPPLER FEATURE:			
COMMAND CONTROL CODE CAPABILITIES			
• NUMBER OF COMMAND CHANNELS AVAILABLE:			
• TYPE OF MODULATION:			
REMARKS:			
TRANSMITTER CHARACTERISTICS			
FIXED TUNED TO (MHz):	MHz	MHz	MHz
• BANDWIDTH AT 3 dB:	MHz	MHz	MHz
• BANDWIDTH AT 60 dB:			
EMISSION:			
FREQUENCY STABILITY:	MHz	MHz	MHz
TRANSMITTER POWER-AVERAGE (WATTS):	pps	pps	pps
TRANSMITTER PEAK POWER (WATTS):			
MAXIMUM PRF (PPS)			
PULSE WIDTHS AT 3 dB POINTS (µs)	µs	µs	µs
FIXED DELAY SETTINGS (µs)	µs	µs	µs
MAXIMUM DELAY VARIATION WITH SIGNAL:	µs from ( ) to ( ) dBm	µs from ( ) to ( ) dBm	µs from ( ) to ( ) dBm
RECOVERY TIME:	50 µs	50 µs	
INTERROGATION LOCKOUT:	Yes ( ) No ( )	Yes ( ) No ( )	Yes ( ) No ( )
MINIMUM FREQUENCY SEPARATION:	5		

Format 1411 - Test Vehicle Metric Transponder Characteristics			
ITEM NO.:	**01**	**02**	**03**
CHARACTERISTIC			
(MHz)			
NOMINAL WARM-UP TIME: (MINUTES)			
SPECTRUM ANALYSIS REPORT NUMBER:			
PLOT OF ANTENNA INPUT POWER VS. TRANSMITTER FREQUENCY	Submitted: Available:	Submitted: Available	
RF LOSSES BETWEEN TRANSMITTER TERM. & ANTENNA TERM.	( ) dB Measured at ( ) MHz	( ) dB Measured at ( ) MHz	( ) dB Measured at ( ) MHz
REMARKS:			
RECEIVER CHARACTERISTICS			
FIXED TUNED TO (MHz):	MHz	MHz	MHz
BANDWIDTH AT 3 dB (MHz)	MHz	MHz	MHz
INTERMEDIATE FREQUENCY (MHz):	MHz	MHz	MHz
LOCAL OSCILLATOR FREQUENCY (MHz):	( ) Above ( ) Below Interrogation Freq.	( ) Above ( ) Below Interrogation Freq.	
FREQUENCY STABILITY	µs	µs	µs
PULSE WIDTHS AT 3 dB POINTS (µs)			
RECEIVER SENSITIVITY	( ) At ( ) MHz	( ) At ( ) MHz	
• MAXIMUM:	(dBm) At ( ) MHz	(dBm) At ( ) MHz	(dBm) At ( ) MHz
• MINIMUM:	( ) At ( ) MHz	( ) At ( ) MHz	( ) At ( ) MHz
• NOMINAL:			
SELECTIVITY (OVERALL):	3 dB ( ) MHz 20 dB ( ) MHz 60 dB ( ) MHz	3 dB ( ) MHz 20 dB ( ) MHz 60 dB ( ) MHz	3 dB ( ) MHz 20 dB ( ) MHz 60 dB ( ) MHz
TYPE AGC:			

Format 1411 - Test Vehicle Metric Transponder Characteristics			
ITEM NO.:	**01**	**02**	**03**
CHARACTERISTIC			
AGC TIME CONSTANT (µs):			
RECOVERY TIME AT 3 dB POINTS (µs):			
NOMINAL WARM-UP TIME (MINUTES):			
SPECTRUM ANALYSIS REPORT NUMBER: ( ) DATE: ( )			
RF LOSSES BETWEEN RECEIVER TERM. & ANTENNA TERM.	dB	dB	dB
REMARKS:			
ANTENNA CHARACTERISTICS			
LOCATION: C-Band Antennas located on ACM	Station: ( ) PHI (°) Station: ( ) PHI (°) Station: ( ) PHI (°) Station: ( ) PHI (°)	Station: ( ) PHI (°) Station: ( ) PHI (°) Station: ( ) PHI (°) Station: ( ) PHI (°)	Station: ( ) PHI (°) Station: ( ) PHI (°) Station: ( ) PHI (°) Station: ( ) PHI (°)
MODEL:			
TYPE:			
MANUFACTURER:			
FREQUENCY RANGE FIXED TUNED TO (MHz):			
PREDOMINATE POLARIZATION			
MAXIMUM GAIN IN dB WITH RESPECT TO ISOTROPIC (dB)	dBi	dBi	dBi
MINIMUM RECEIVER POWER LEVEL AT TERMINATION OF RECEIVING ANTENNA (REQUIRED TO PROVIDE THRESHOLD SIGNAL FOR DESIRED DATA QUALITY AT RECEIVER (WATTS):			

Format 1411 - Test Vehicle Metric Transponder Characteristics			
ITEM NO.:	**01**	**02**	**03**
CHARACTERISTIC			
POWER DELIVERED TO ANTENNA TERM.:	Avg. ( ) Watts Peak ( ) Watts	Avg. ( ) Watts Peak ( ) Watts	Avg. ( ) Watts Peak ( ) Watts
ANTENNA PATTERN:			
ANTENNA PURPOSE:	Rec ( ) Trans ( ) Both ( )	Rec ( ) Trans ( ) Both ( )	Rec ( ) Trans ( ) Both ( )
REMARKS:			

Format 1421 - Test Vehicle Telemetry Transmitter Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC	**Link 1**	**Link 2**	**Link 3**
GENERAL INFORMATION			
RF FREQUENCY (MHz):			
BANDWIDTH (MHz) at 3 dB:			
BANDWIDTH (MHz) at 60 dB:			
DEVIATION (MHz):			
TYPE MODULATION:			
TRANSMITTER CHARACTERISTICS			
LOCATION:			
TYPE:			
MODEL:			
MANUFACTURER:			
LINK FREQUENCY (MHz):			
TYPE OF MODULATION:			
BANDWIDTH (MHz) at 3 dB:			
BANDWIDTH (MHz) at 60 dB:			

Format 1421 - Test Vehicle Telemetry Transmitter Characteristics			
ITEM NO:	01	02	03
CHARACTERISTIC	Link 1	Link 2	Link 3
IS THE ASSIGNED FREQUENCY MEASURABLE IN THE MODULATED LINK RF SPECTRUM	Yes ( ) No( )	Yes ( ) No( )	Yes ( ) No( )
MEASURABLE CHARACTERISTIC (MHz)	Frequency ( )	Frequency ( )	Frequency ( )
INDICATE THE FIXED DIFFERENCE FROM ASSIGNED (kHz)	Frequency ( )	Frequency ( )	Frequency ( )
MINIMUM DEVIATION (kHz):			
MAXIMUM DEVIATION (kHz):			
FREQUENCY STABILITY (kHz):			
RF LOSSES BETWEEN TRANSMITTER AND ANTENNA TERMINATIONS	(approx. dB including dB power division), Measured at ( ) MHz	(approx. dB including no power division), Measured at ( ) MHz	(approx. dB including dB power division), Measured at ( ) MHz
PCM FILTERING BEFORE TRANSMISSION	Yes ( ) No( )	Yes ( ) No( )	Yes ( ) No( )
SPECTRUM ANALYSIS REPORT NUMBER: HAS BEEN ( ) WILL BE ( ) PROVIDED ON (DATE)	TO: ON:	TO: ON:	TO: ON:
REMARKS:			
ANTENNA SYSTEM CHARACTERISTICS			
LOCATION OF ANTENNA OR ARRAY ELEMENTS:			
STATION	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
STATION	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
STATION	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
STATION	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
(PHI is the Azimuth of the Antenna as Defined in the RCC Vehicle Antenna Coordinate			

Format 1421 - Test Vehicle Telemetry Transmitter Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC	**Link 1**	**Link 2**	**Link 3**
System.			
TYPE:			
MODEL:			
MANUFACTURER:			
FREQUENCY RANGE (MHz):			
PREDOMINANT POLARIZATION TYPE	Circ ( ) Ellip ( ) Linear ( )	Circ ( ) Ellip ( ) Linear ( )	Circ ( ) Ellip ( ) Linear ( )
PREDOMINANT SENSE & DIRECTION			
MAXIMUM POWER GAIN (dBi):			
MINIMUM POWER GAIN (dBi):	dBi	dBi	dBi
LOCATION, IN VEHICLE BODY COORDINATES, OF PIERCING POINT FORMATS:			
INITIAL ORIENTATION OF P'Y	Down ( ) Up ( ) N ( ) E ( ) S ( ) W ( ) Other ( )	Down ( ) Up ( ) N ( ) E ( ) S ( ) W ( ) Other ( )	Down ( ) Up ( ) N ( ) E ( ) S ( ) W ( ) Other ( )
INITIAL ORIENTATION OF P'R:			
INITIAL ORIENTATION OF P'P:			
FORM OF ANTENNA PATTERN DATA:	Mag tape plus matrix plot ( ) Punched tape plus matrix plot ( ) Other( )	Mag tape plus matrix plot ( ) Punched tape plus matrix plot ( ) Other( )	Mag tape plus matrix plot ( ) Punched tape plus matrix plot ( ) Other( )
SUBMITTED	To:	To:	TO:
WILL BE AVAILABLE (DATE):			
PATTERN PARAMETERS MEASURED:			
MAIN LOBE BEAM WIDTH IN DEGREES AT 3 dB POINTS			
EFFECTIVE RADIATED POWER (WATTS) (using zero dBi transmitting antenna gain):			

C-121

Format 1421 - Test Vehicle Telemetry Transmitter Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC	**Link 1**	**Link 2**	**Link 3**
SPECTRUM RESPONSE REPORT AVAILABILITY (IF AVAILABLE PROVIDE 5 COPIES)	Available ( ) Not Available ( )	Available ( ) Not Available ( )	Available ( ) Not Available ( )
ANTENNA CONTROLLABILITY:			
REMARKS:			
LINK FREQUENCY (MHz):			
PCM DATA			
IDENTIFY SERIAL BIT RATE:	Mbps	Mbps	Mbps
INDICATE SERIAL WAVE TRAIN	2 Level ( ) more than 2 Level ( )	2 Level ( ) more than 2 Level ( )	2 Level ( ) more than 2 Level ( )
IF MORE THAN 2 LEVELS, SHOW NUMBER OF LEVELS, WHAT EACH LEVEL REPRESENTS, AND AMPLITUDE OF EACH LEVEL IN PERCENTAGE OF TOTAL			
AMPLITUDE SPREAD	Levels I.D. % ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	Levels I.D. % ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	Levels I.D. % ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
MODULATION DIRECTLY ON	RF Carrier ( ) Subcarrier ( )	RF Carrier ( ) Subcarrier ( )	RF Carrier ( ) Subcarrier ( )
SERIAL BINARY "ONE" CAUSES THE RF CARRIER OR SUBCARRIER TO:	Increase ( ) Decrease ( ) in Frequency	Increase ( ) Decrease ( ) in Frequency	Increase ( ) Decrease ( ) in Frequency
SERIAL WAVE TRAIN	Return to Zero ( ) NRZ ( ) Split Phase ( ) Other ( )	Return to Zero ( ) NRZ ( ) Split Phase ( ) Other ( )	Return to Zero ( ) NRZ ( ) Split Phase ( ) Other ( )
• DESCRIBE:			

Format 1421 - Test Vehicle Telemetry Transmitter Characteristics			
ITEM NO:	01	02	03
CHARACTERISTIC	Link 1	Link 2	Link 3
WORDS PER MAJOR FRAME:			
MINOR FRAMES PER MAJOR FRAME:			
WORDS PER MINOR FRAME:			
BITS PER WORD:			
SYLLABLES PER WORD:			
BITS PER SYLLABLES:			
CHANNEL ASSIGNMENT:			
MAJOR FRAME SYNC PATTERN:			
MINOR FRAME SYNC PATTERN:			
WORD SYNC PATTERN:			
GIVE SYNC PATTERN OF ANY OTHER WORD THAT DIFFERS FROM THE WORD SYNC PATTERN ABOVE:			
FORMAT:	Short Cycles ( ) Premature Recycles ( )	Short Cycles ( ) Premature Recycles ( )	Short Cycles ( ) Premature Recycles ( )
BINARY "ONES" AND "ZEROS" CONSTANT WIDTH	Yes ( ) No ( )	Yes ( ) No ( )	Yes ( ) No ( )
BINARY COUNT FOR 100 PERCENT DATA LEVEL:			
BINARY COUNT FOR ZERO PERCENT DATA LEVEL:			
SIGNIFICANT BIT COUNT OCCURS FIRST( ) LAST( ) IN BIT STREAM	First ( ) Last ( ) in Bit Stream	First ( ) Last ( ) in Bit Stream	First ( ) Last ( ) in Bit Stream
REMARKS			

C-123

Format 1431 - Test Vehicle Command System Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:	**Link 1**	**Link 2**	**Link 3**
GENERAL INFORMATION			
TRANSMISSION OF COMMAND FUNCTIONS:	On-Off ( ) Continuous ( ) Digital ( )	On-Off ( ) Continuous ( ) Digital ( )	On-Off ( ) Continuous ( ) Digital ( )
NUMBER OF ON-OFF CHANNELS TO BE TRANSMITTED:			
MODULATION CHARACTERISTICS:			
REAL-TIME MONITORING OR TRANSMISSION COMMAND FUNCTION REQUIREMENTS	Yes ( ) No ( )	Yes ( ) No ( )	Yes ( ) No ( )
A FLIGHT CONTROL CONSOLE USED:	Will be ( ) Will not be ( )	Will be ( ) Will not be ( )	Will be ( ) Will not be ( )
DURATION OF FLIGHT DURING WHICH COMMAND IS REQUIRED:	End of powered flight		
DOES COMMAND RECEIVER HAVE REMOTE TURN-OFF CAPABILITY	On Pad: Yes ( ) No ( ) In Flight: Yes ( ) No ( )	On Pad: Yes ( ) No ( ) In Flight: Yes ( ) No ( )	On Pad: Yes ( ) No ( ) In Flight: Yes ( ) No ( )
DATA CHARACTERISTICS			
INFORMATION RATE:			
CODE BIT RATE:			
SUBCARRIER:			
SYNCHRONIZATION:			
VERIFICATION LINK			
SAMPLE RATE (SPS):			
NUMBER BIT MAP (BITS):			
VERIFICATION LINK			
SAMPLE RATE (SPS):			
NUMBER BIT MAP (BITS):			
COMMAND FORMAT			
TONE/CHANNEL:			

Format 1431 - Test Vehicle Command System Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:	**Link 1**	**Link 2**	**Link 3**
FREQUENCY:			
TONE/CHANNEL:			
FREQUENCY:			
TONE/CHANNEL:			
FREQUENCY:			
TONE/CHANNEL:			
FREQUENCY:			
TONE SEQUENCE:			
FUNCTION:			
TONE SEQUENCE:			
FUNCTION:			
TONE SEQUENCE:			
FUNCTION:			
TONE SEQUENCE:			
FUNCTION:			
REMARKS:			
RECEIVER CHARACTERISTICS			
TYPE:			
MODEL:			
MANUFACTURER:			
NUMBER INSTALLED:			
FREQUENCY RANGE:	From: ( ) MHz To: ( ) MHz	From: ( ) MHz To: ( ) MHz	From: ( ) MHz To: ( ) MHz
	Tunable ( ) Fixed Tuned ( ) MHz	Tunable ( ) Fixed Tuned ( ) MHz	Tunable ( ) Fixed Tuned ( ) MHz
INTERMEDIATE FREQUENCY	1ST ( ) 2ND ( ) MHz	1ST ( ) 2ND ( ) MHz	1ST ( ) 2ND ( ) MHz
LOCAL OSCILLATOR FREQUENCY	MHz	MHz	MHz

Format 1431 - Test Vehicle Command System Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:	**Link 1**	**Link 2**	**Link 3**
ABOVE ( ) BELOW ( ) COMMAND TRANSMITTER FREQUENCY: MHz			
METHOD OF FREQUENCY CONTROL:	1ST OSC ( ) 2ND OSC ( )	1ST OSC ( ) 2ND OSC ( )	1ST OSC ( ) 2ND OSC ( )
FREQUENCY STABILITY:	± ( ) Percent of ( )	± ( ) Percent of ( )	± ( ) Percent of ( )
RECEIVER SENSITIVITY:			
• MAXIMUM:	( ) dBm At ( ) MHz	( ) dBm At ( ) MHz	( ) dBm At ( ) MHz
• MINIMUM:	( ) dBm At ( ) MHz	( ) dBm At ( ) MHz	( ) dBm At ( ) MHz
• NOMINAL:	( ) dBm At ( ) MHz	( ) dBm At ( ) MHz	( ) dBm At ( ) MHz
SELECTIVITY (OVERALL):			
• 3 dB:	MHz	MHz	MHz
• 20 dB:	MHz	MHz	MHz
• 60 dB:	MHz	MHz	MHz
BANDWIDTH (FOR A GIVEN OPTIMUM SIGNAL)			
• 6 dB:	kHz	kHz	kHz
• 40 dB:	kHz	kHz	kHz
• 60 dB:	kHz	kHz	kHz
DEVIATION REQUIRED:	± kHz ( ) Per Channel ( ) Composite ( ) Maximum ( ) Minimum ( ) Compression ( ) No Compression ( ) Set of RCC Tone ( ) Other (Specify)	± kHz ( ) Per Channel ( ) Composite ( ) Maximum ( ) Minimum ( ) Compression ( ) No Compression ( ) Set of RCC Tone ( ) Other (Specify)	± kHz ( ) Per Channel ( ) Composite ( ) Maximum ( ) Minimum ( ) Compression ( ) No Compression ( ) Set of RCC Tone ( ) Other (Specify)
CAPTURE RATIO:			

Format 1431 - Test Vehicle Command System Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:	**Link 1**	**Link 2**	**Link 3**
SPURIOUS RESPONSE REJECTION:	( ) dB	( ) dB	( ) dB
SIGNAL PULSE NOISE-TO-NOISE RATIO PLOT:	Has Been ( ) Will be Available ( ) On Date ( )	Has Been ( ) Will be Available ( ) On Date ( )	Has Been ( ) Will be Available ( ) On Date ( )
A SPECTRUM ANALYSIS REPORT NUMBER:	Has Not ( ) Has Been ( ) Will Be ( ) Provided to On Date ( )	Has Not ( ) Has Been ( ) Will Be ( ) Provided to On Date ( )	Has Not ( ) Has Been ( ) Will Be ( ) Provided to On Date ( )
RF LOSSES BETWEEN RECEIVER AND ANTENNA TERMINATIONS:	( ) dB Measured at ( ) MHz	( ) dB Measured at ( ) MHz	( ) dB Measured at ( ) MHz
OPERATING FREQUENCY:	MHz	MHz	MHz
REMARKS:			
ANTENNA CHARACTERISTICS			
LOCATION:			
(PHI IS THE AZIMUTH OF THE ANTENNA AS DEFINED IN THE VEHICLE ANTENNA COORDINATE SYSTEM.)	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
MODEL:			
TYPE:			
MANUFACTURER:			
FREQUENCY RANGE:	From: ( ) MHz To: ( )MHz	From: ( ) MHz To: ( )MHz	From: ( ) MHz To: ( )MHz
	Tunable ( ) Fixed Tuned ( ) MHz	Tunable ( ) Fixed Tuned ( ) MHz	Tunable ( ) Fixed Tuned ( ) MHz
PREDOMINANT POLARIZATION (REFERENCE RCC DOCUMENT NUMBER	Theta ( ) Phi ( ) Circular Sense: LH ( ) RH ( )	Theta ( ) Phi ( ) Circular Sense: LH ( )	Theta ( ) Phi ( ) Circular Sense: LH ( )

Format 1431 - Test Vehicle Command System Characteristics			
ITEM NO:	01	02	03
CHARACTERISTIC:	Link 1	Link 2	Link 3
253)	Other ( )	RH ( ) Other ( )	RH ( ) Other ( )
MAXIMUM GAIN IN dB WITH RESPECT TO ISOTROPIC:	dB	dB	dB
MINIMUM RECEIVER POWER LEVEL AT TERMINATION OF RECEIVING ANTENNA REQUIRED TO PROVIDE THRESHOLD SIGNAL FOR DESIRED PATH QUALITY AT RECEIVER:	dB	dB	dB
FORM OF ANTENNA PATTERN SUBMITTED:	Magnetic Tape ( ) Paper Tape ( ) Tabulated( ) Plot ( )	Magnetic Tape ( ) Paper Tape ( ) Tabulated( ) Plot ( )	Magnetic Tape ( ) Paper Tape ( ) Tabulated( ) Plot ( )
• SUBMITTED TO:			
• DATE SUBMITTED:			
MAXIMUM NULL WITH RESPECT TO ISOTROPIC:			
LOSS IN TRANSMISSION LINES:	dB	dB	dB
ANTENNA DIPLEXER LOSS:	dB	dB	dB
VERIFICATION SYSTEM			
IN-FLIGHT TELEMETERED DATA WILL BE USED TO TRANSMIT COMMAND SIGNAL VERIFICATION FROM VEHICLE:	Yes ( ) No ( )	Yes ( ) No ( )	Yes ( ) No ( )
LINK:			
FREQUENCY:	( ) MHz	( ) MHz	( ) MHz
FORMAT TRANSMITTED:	Word ( ) Map ( ) Abbreviated Word ( ) Other ( )	Word ( ) Map ( ) Abbreviated Word ( ) Other ( )	Word ( ) Map ( ) Abbreviated Word ( ) Other ( )

Format 1431 - Test Vehicle Command System Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:	**Link 1**	**Link 2**	**Link 3**
REMARKS:			

Format 1441 - Test Vehicle Voice Communications Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:			
TRANSMITTER CHARACTERISTICS			
MODEL:			
MANUFACTURER:			
FREQUENCY BAND (MHz):			
OPERATION FREQUENCY:			
MODULATION TYPE:			
PEAK POWER:			
AVERAGE POWER:			
ENCRYPTION CAPABILITY:			
RECEIVER CHARACTERISTICS			
MODEL:			
FREQUENCY BAND (MHz):			
OPERATION FREQUENCY:			
MODULATION TYPE:			
ANTENNA CHARACTERISTICS			
TYPE:			
LOCATION:			
MAIN LOBE GAIN:			
IST SIDELOBE GAIN:			

Format 1441 - Test Vehicle Voice Communications Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:			
REMARKS:			

Format 1461 - Test Vehicle Television/Video Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:			
VIDEO CHARACTERISTICS			
VIDEO BANDWIDTH:			
GRAY SCALE:			
ASPECT RATIO:			
S/N RATIO:			
SIGNAL FORMAT:			
LINES/FRAMES • Vertical Blanking (µs): • Horizontal Blanking (µs): • Horizontal Sync in µs of dc level black-to-white signal: • Vertical Sync in µs of dc level black-to-white signal: • Frame rate (Frames/sec): • Vertical Resolution (Lines):	Camera Signal Coupled to Premod Processor ac ( ) dc ( )	Camera Signal Coupled to Premod Processor ac ( ) dc ( )	Camera Signal Coupled to Premod Processor ac ( ) dc ( )
TRANSMITTER CHARACTERISTICS			

Format 1461 - Test Vehicle Television/Video Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:			
TYPE:			
MODEL:			
MANUFACTURER:			
FREQUENCY RANGE (MHz):			
OPERATING FREQUENCY:			
TYPE MODULATION:			
BANDWIDTH (kHz) AT • 3dB: • 20dB: • 60dB:			
MAXIMUM DEVIATION (kHz):			
FREQUENCY STABILITY ± ( ) PERCENT OF ( ) kHz			
TRANSMITTER POWER (Watts)	Average: Peak:	Average: Peak:	Average: Peak:
SPECTRUM ANALYSIS REPORT NUMBER:	Has been ( ) Will be ( ) Provided to: On date:	Has been ( ) Will be ( ) Provided to: On date:	Has been ( ) Will be ( ) Provided to: On date:
MODULATION CRITERIA:			
RF LOSSES BETWEEN TRANSMITTER AND ANTENNA TERMINATIONS:	( ) Measured at ( ) MHz	( ) Measured at ( ) MHz	( ) Measured at ( ) MHz
ANTENNA CHARACTERISTICS			
LOCATION OF ANTENNA OR ARRAY ELEMENTS:			

Format 1461 - Test Vehicle Television/Video Characteristics			
ITEM NO:	**01**	**02**	**03**
CHARACTERISTIC:			
STATION	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
STATION	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
STATION	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
STATION	Station: ( ) PHI (°)	Station: ( ) PHI (°)	Station: ( ) PHI (°)
(PHI is the Azimuth of the Antenna as Defined in the RCC Vehicle Antenna Coordinate System.)			
TYPE:			
MODEL:			
MANUFACTURER:			
FREQUENCY RANGE (MHz):	( ) to ( ) Tunable ( ) Fixed ( )	( ) to ( ) Tunable ( ) Fixed ( )	( ) to ( ) Tunable ( ) Fixed ( )
PREDOMINANT POLARIZATION (REFERENCE RCC DOCUMENT 253):	Theta ( ) Phi ( ) Circular Sense LH ( ) RH ( ) Other ( )	Theta ( ) Phi ( ) Circular Sense LH ( ) RH ( ) Other ( )	Theta ( ) Phi ( ) Circular Sense LH ( ) RH ( ) Other ( )
MAXIMUM GAIN WITH RESPECT TO ISOTROPIC:	( ) dB	( ) dB	( ) dB
RF POWER PER LINK INTO ANTENNA SYSTEM TERMINATION (WATTS)	Average: Peak:	Average: Peak:	Average: Peak:
FORM OF ANTENNA PATTERN SUBMITTED	Mag Tape ( ) Tabulation ( ) Paper Tape ( ) Plot ( ) Submitted to: Date submitted:	Mag Tape ( ) Tabulation ( ) Paper Tape ( ) Plot ( ) Submitted to: Date submitted:	Mag Tape ( ) Tabulation ( ) Paper Tape ( ) Plot ( ) Submitted to: Date submitted:

Format 2210 - Telemetry Recording Interval				
ITEM NO.:	01	02	03	04
MEASURED EVENT • NUMBER: ( ) • NAME: ( )				
LINK (MHz) TYPE:				
RECORDING INTERVAL (TIME, POSITION, OR FLIGHT PHASE):				
MEASURE RATE (RPS/BPS):				
REQUIRED IN REAL TIME:				
RECORDINGS • CD-ROM:				
• TAPE:				
• OSCILLOGRAPH:				
CONSOLE PRESENTATION:				
DATA PRIORITY:				
DATA ACCURACY:				
REMARKS:				
Payload Recording Interval				
ITEM NO.:	05	06	07	08
MEASURED EVENT • NUMBER: ( ) • NAME: ( )				
LINK (MHz) TYPE:				
RECORDING INTERVAL (TIME, POSITION, OR FLIGHT PHASE):				
MEASURE RATE (RPS/BPS):				
REQUIRED IN REAL TIME:				
RECORDINGS				

Format 2210 - Telemetry Recording Interval				
ITEM NO.:	01	02	03	04
• CD-ROM:				
• TAPE:				
• OSCILLOGRAPH:				
CONSOLE PRESENTATION:				
DATA PRIORITY:				
DATA ACCURACY:				
REMARKS:				

Format 2240 - Telemetry Coverage					
SUBITEM	TEST UNIT/STAGE	FREQUENCY	LINK	COVERAGE INTERVAL	STATION/LOCATION
REPEAT AS NECESSARY FOR EACH FREQUENCY/LINK					

Format 3420 - Summary of Frequency Protection						
PURPOSE	FREQUENCY (MHz)	REQUIRED PROTECTION (MHz)	ESTIMATED TIME OF USE			SPECIAL MONITORING REQUIREMENTS
			Launch Pre-Op	Rehearsal	Launch	

C-134

Format 3420 - Summary of Frequency Protection						
PURPOSE	FREQUENCY (MHz)	REQUIRED PROTECTION (MHz)	ESTIMATED TIME OF USE			SPECIAL MONITORING REQUIREMENTS
			Launch Pre-Op	Rehearsal	Launch	

Format 5321 - Services - Handling, Storage, and Disposal									
	Description	Storage Requirement	Container	Lifting/Move Method	Length (in)	Width (in)	Height (in)	Weight (lbs)	SQ FT	Cube FT
1									
2									
3									
4									
5									
6									
7									

	Description	Storage Requirement	Container	Lifting/Move Method	Length (in)	Width (in)	Height (in)	Weight (lbs)	SQ FT	Cube FT
				Format 5321 - Services - Handling, Storage, and Disposal						
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										

ITEM NO.	REQ	SUP	ITEM NAME/ DESIGNATION	NO. RQD.	CAPACITY	QTR/CY RQD	% USE *	RA/ SA	REMARKS
			Format 5351 - Services - Ground Handling Equipment						
01									
02									
03									
04									
05									
06									
07									

ITEM NO.:	ITEM NAME/ DESIGNATION:	NO. RQD.:	CAPACITY:	QTR REQ:	% USE	RA/ SA:	REMARKS:
			Format 6000 - Other Support				
01							
02							
03							

This page intentionally left blank.

APPPENDIX D

OPERATIONS SECURITY (OPSEC) AND SECURITY CHECKLIST

OPERATIONS SECURITY (OPSEC)
SECURITY PLANNING AND ANALYSIS CHECKLIST

PART I. ( ) PROGRAM IDENTIFICATION

( ) Program name/number	( ) Organization (include address)
( ) Program manager (include phone # and address)	( ) Program security POC (include phone # and address)

( ) Program description or mission (describe when, where, what, and how)

PART II. ( ) OPSEC CONCERNS

		Yes	No	N/A
( )	1. Does the program or mission have a current threat assessment? If "Yes", provide a copy or tell us who has the assessment. If "No", is such an assessment planned or under way? Or, has a decision been made that an assessment is not required?			
( )	2. Has an OPSEC plan and PPP been developed for this program? If "Yes," please provide copies. Have any countermeasures been developed or implemented against the critical information? If "Yes", identify the countermeasures. Have any risks been accepted that cannot be protected by countermeasures? If "Yes", identify the risks.			
( )	3. Have you considered tactical deception as a countermeasure? If "Yes", explain in Section VIII.			
( )	4. Are US Government critical technologies involved with your program? Have export control limitations been identified? If "Yes", please describe in Section VIII.			
( )	5. Will project personnel need a program-specific OPSEC briefing?			

OPERATIONS SECURITY (OPSEC)
SECURITY PLANNING AND ANALYSIS CHECKLIST

( )	6. Does your program involve any special activities, access to special information, or anything related for which we should be concerned or of which we should be made aware? If "Yes", explain in the REMARKS section and provide us whatever documentation is required to support our people being able to participate in your program or mission.			
( )	7. Will the Public Affairs office of your organization release information to the news media about your program? If "No", what do you want our Public Affairs office to release?			
( )	8. Are there any security countermeasures integrated into this program that may affect our operations?			
PART III. ( ) COMSEC/EMSEC CONCERNS				
		YES	NO	N/A
( )	1. Will secure communications be required for voice, optical, telemetry, metric, microwave, or radio frequencies? If "Yes", explain in the REMARKS section.			
( )	3. Do you require a secure fax/SIPRNet capability?			
( )	4. Has your EIA manager conducted an assessment of your program? If "Yes", please provide us the results.			
( )	5. Will you require the use or storage of COMSEC equipment or material? If "Yes", describe in the REMARKS section and describe how the COMSEC equipment or material will be transferred and handled.			
PART IV. ( ) COMPUTER SECURITY CONCERNS				
		YES	NO	N/A
	1. Will you be bringing your own computer systems to process program data? If "Yes", answer the following. Will your computers process classified or sensitive unclassified information? Will your computers network with any of our computer systems? Are your systems accredited? By whom? Please provide a copy. Will your computers network with any of your own systems on or off the range? Where will this system or systems be located? Do you have any ancillary equipment you expect to install or use, such as antennas, oscilloscopes, test equipment with recording capability, etc.?			
( )	2. Will any of our computer systems process data or information you have classified or designated sensitive unclassified?			
( )	3. Will our computer systems be required to connect with other systems?			

OPERATIONS SECURITY (OPSEC)
SECURITY PLANNING AND ANALYSIS CHECKLIST

PART V. (   ) INDUSTRIAL SECURITY CONCERNS

		YES	NO	N/A
( )	1. Will the program process or require access to classified information? If "Yes", explain in the REMARKS section and provide your authority for classification (classification guide).			
( )	2. Are you a cleared facility under the NISP?			
( )	3. Will the contractor or commercial organization have cleared employees taking up residence on the facility? If "Yes", for how long, when, and where? Who is the government interface and organization?			
( )	4. Have visit requests been submitted?			
( )	5. Will you require contract security guards?			
( )	6. What classified storage requirements do you have?			
( )	7. Will you require guard services? Will you hire such guards locally or bring your own?			
( )	8. Will you require unescorted entry into any restricted or controlled areas?			

PART VI. (   ) MISCELLANEOUS CONCERNS

		YES	NO	N/A
( )	1. Will your company or mission involve the handling of company-proprietary information? If "Yes", describe the extent/limitations and if any foreign disclosure limitations are in effect.			
( )	2. Are foreign nationals (non-US citizens) involved with this program?			

(   ) **NOTE:** Assistance in answering this checklist can be obtained from: _____.

PART VII. (   ) RANGE SPECIFIC REQUIREMENTS

		YES	NO	N/A
( )	1.			
( )	2.			
( )	3.			

PART VIII. (   ) REMARKS