JOINT OPERATING PROCEDURE
FOR
INTERRANGE SCHEDULING

INTERRANGE OPERATIONS GROUP
RANGE COMMANDERS COUNCIL

WHITE SANDS MISSILE RANGE
KWAJALEIN MISSILE RANGE
YUMA PROVING GROUND

PACIFIC MISSILE TEST CENTER
NAVAL WEAPONS CENTER
ATLANTIC FLEET WEAPONS TRAINING FACILITY
NAVAL AIR TEST CENTER

EASTERN SPACE AND MISSILE CENTER
ARMAMENT DIVISION
WESTERN SPACE AND MISSILE CENTER
AIR FORCE SATELLITE CONTROL FACILITY
AIR FORCE FLIGHT TEST CENTER
AIR FORCE TACTICAL FIGHTER WEAPONS CENTER

DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.
Joint Operating Procedure for Interrange Scheduling

Interrange Operations Group
Range Commanders Council
White Sands Missile Range, NM 88002

Same as block 7

Range Commanders Council
ATTN: STEWS-SA-R
White Sands Missile Range, NM 88002

Same as block 11

DISTRIBUTION STATEMENT A: Approved for Public Release;
Distribution Unlimited.

Program and test planning, scheduling, interrange operations, procedures, priorities, classification, review, revision, termination, superseding procedures.
JOINT OPERATING PROCEDURE 
FOR 
INTERRANGE SCHEDULING 

May 1986 

Prepared by 
INTERRANGE OPERATIONS GROUP 
RANGE COMMANDERS COUNCIL 

Published by 
Secretariat 
Range Commanders Council 
White Sands Missile Range, New Mexico  88002
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 PURPOSE</td>
<td>1</td>
</tr>
<tr>
<td>2.0 GENERAL</td>
<td>1</td>
</tr>
<tr>
<td>3.0 POLICY</td>
<td>2</td>
</tr>
<tr>
<td>4.0 OBJECTIVE</td>
<td>2</td>
</tr>
<tr>
<td>5.0 EXPLANATION OF TERMS</td>
<td>2</td>
</tr>
<tr>
<td>6.0 PROGRAM AND TEST PLANNING AND SCHEDULING PROCEDURES</td>
<td>3</td>
</tr>
<tr>
<td>7.0 INTERRANGE OPERATIONS SCHEDULING PROCEDURES</td>
<td>5</td>
</tr>
<tr>
<td>8.0 INTERRANGE SCHEDULING PRIORITIES</td>
<td>6</td>
</tr>
<tr>
<td>9.0 SCHEDULE CLASSIFICATION</td>
<td>7</td>
</tr>
<tr>
<td>10.0 REVIEW, REVISION, TERMINATION, AND SUPERSEDMG PROCEDURES</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Availability Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dist</td>
</tr>
<tr>
<td>A-1</td>
</tr>
</tbody>
</table>
JOINT OPERATING PROCEDURE
FOR
INTERRANGE SCHEDULING

1.0 PURPOSE

1.1 This document defines policies and procedures necessary to accomplish the orderly interrange scheduling operations support services involving two or more major ranges and test facilities. The policies and procedures described herein will be used by Department of Defense (DOD) major ranges and test facilities engaged in mutual operations support and by all range users requesting support from two or more ranges.

1.2 Participants
   a. Eastern Test Range (ETR)
   b. Kwajalein Missile Range (KMR)
   c. Pacific Missile Test Center (PMTC)
   d. Western Test Range (WTR)
   e. Air Force Flight Test Center (AFFTC)
   f. Air Force Satellite Control Facility (AFSCF)
   g. White Sands Missile Range (WSMR)
   h. System Test Facility, Army Electronic Proving Ground (EPG)
   i. Tactical Fighter Weapons Center (TFWC) Range Complex
   j. Naval Weapons Center (NWC)
   k. Yuma Proving Ground (YPG)
   l. Naval Air Test Center (NATC)
   m. 4950th Test Wing (ARIA)

2.0 GENERAL

Operations are conducted under many programs within the scope of each major range and test facility mission statement. Programs supported vary in magnitude from small one-time operations requiring minimum facilities and resources to large-scale worldwide operations requiring the continuing support of all the DOD major ranges and test facilities. This situation requires a system for scheduling that is flexible enough to accommodate
programs of varying complexity, is responsive to requirements, and does not impose an excessive burden on users. Effective interrange scheduling procedures which provide these desired operational traits are necessary for the orderly allocation and commitment of resources.

3.0 POLICY

Procedures specified in this document will enable appropriate elements of participating major ranges and test facilities to furnish, in accordance with their own individual operating policies, interrange support to DOD and other programs. It is, therefore, DOD policy that all programs, regardless of magnitude, conform to the procedures stated herein, and that participants ensure that operational scheduling on an interrange basis is in accordance with these provisions.

4.0 OBJECTIVE

The objective of interrange scheduling is to provide timely, efficient, and equitable support to DOD and other National Programs.

5.0 EXPLANATION OF TERMS

5.1 Lead Range (LR): The range or facility to which a program is assigned for planning and/or execution, or the range exercising on-orbit control for satellite programs. The LR will usually be the launch range, will receive operations requirements from the user, and will coordinate by scheduling support requirements for the support ranges/facilities.

5.2 Lead Range Scheduling Office (LRSO): The office within the LR that is responsible for scheduling and coordinating resources of all the ranges in support of interrange programs.

5.3 Support Range (SR): Any other range or facility supplying support to an interrange program based upon requirements stated in appropriate requirement documents.

5.4 Zulu Time (Z): Coordinated Universal Time (UTC).

5.5 Week: The period of time from 0000Z Monday through 2400Z the following Sunday.

5.6 Weekly Schedule: The weekly operations schedule document published on Thursday for the week starting the following Monday.

5.7 Long-Range Forecast: The forecast of launch operations published periodically, listing all known launch operations for the next 18 months.

5.8 Day: The period of time from 0000Z until 2400Z.

5.9 T-Time: The scheduled time of launch expressed in Z. T-time may also be used for any operation which is conducted under a rigid countdown.
5.10 **S-Time**: The time an operation is scheduled to start, expressed in Z.

5.11 **Countdown**: Total number of minutes after the start of the countdown to scheduled T-time.

5.12 **Hold**: A delay in the orderly countdown of an operation caused by the range, range user, weather, priority conflict, range safety, or certain external factors.

5.13 **Test Conductor**: A representative of the range user who is responsible for the technical direction of an operation.

5.14 **Range Count**: The total number of minutes prior to T-time that range instrumentation is committed to support, excluding built-in hold time.

5.15 **Zero Time**: The total number of minutes prior to T-time that range instrumentation is committed to support, including any built-in hold time.

5.16 **Launch Window**: The nominal time limitation within which an operation can be conducted and meet all Range User Program objectives.

5.17 **Launch Period (Range Clearance Period)**: The total period during which an operation can be conducted. The period establishes the earliest and latest launch T-time which a user can safely fire on the Range. This period is the time frame normally provided Air and Sea Space Control Agencies. The launch period will be either equal to or greater than the window.

5.18 **Universal Documentation System (UDS)**: A standard system of documents common to DOD major ranges and test facilities which is used to formally document user agency test program support requirements and support agency capabilities and commitments to support those requirements.

5.19 **NMC**: Not mission capable.

5.20 **FMC**: Fully mission capable.

6.0 **PROGRAM AND TEST PLANNING AND SCHEDULING PROCEDURES**

6.1 **Documentation**

6.1.1 **Program Introduction and Requirements**: The Program Introduction (PI) and Program Requirements Document (PRD) are the official UDS documents by which all support ranges can determine existing/required capabilities for support planning. These planning activities are conducted at initial and intermediate program planning phases and are defined by Levels I and II of the UDS. Program planning for interrange operations will proceed in accordance with the UDS at Levels I and II; i.e., the range user will provide the PI and support planning to all support ranges.
6.1.2 Operations Requirement (OR): The OR is the official UDS document which establishes range user mission requirements for each test or operation. The establishment of ORs, and the supporting agencies responses thereto in the form of Operations Directives (ODs), proceeds at UDS Level III.

6.1.2.1 Orbital Requirements Document (ORD): The ORD is the official user document which establishes requirements for the AFSCF.

6.1.2.2 Operations Requirement Extract (ORE): The ORE is the official UDS document published by the LR which establishes requirements for support ranges. Normally, range user requests for interrange support will not be accepted for scheduling until OREs have been distributed to all support ranges and ODs have been prepared defining support at those ranges.

6.1.3 The Operations Directive (OD): The OD is the official UDS document which identifies local range resources necessary to support the range user's requirements for a particular operations series. All ODs will be prepared from either OREs or ORs, as appropriate.

6.1.4 Use of the ORE. The ORE will be used by the LRSO to schedule all interrange operations with the exception of minor support.

6.2 Operations Numbers: The LRSO will assign a four-digit number to each interrange operation. This number will be used by all agencies to refer to a particular operation.

6.3 Range User ORs

6.3.1 Requests for operations which require the use of range instrumentation on any range/facility will be submitted to the LRSO after the OD has been prepared by the responsible range to ensure that the support is valid.

6.3.2 Each range/facility establishes local deadlines for schedule processing and resource commitment. It is the responsibility of the LR to recognize those deadlines when requesting support. Failure to meet established schedule submission deadlines at local ranges may result in lack of support due to earlier commitments.

6.3.3 The following information will be included by the range user in the request.

6.3.3.1 Applicable OD.
6.3.3.2 Applicable ORE(s).
6.3.3.3 Deletions and/or additions to the OD or ORE.
6.3.3.4 Range count.
6.3.3.5 T-time or S-time.
6.3.3.6 Remarks as appropriate to select special alternative requirements or configurations specified in the OD and ORE(s).

6.3.3.7 Launch window.

6.3.3.8 Items of support considered mandatory for successful operation completion.

6.4 Adding Requirements to a Scheduled Operation: When an operation is scheduled, only those support items appearing in the OD/ORE will be committed for support. Additions of instrumentation or facilities after the scheduling process is completed must be requested through the LRSO. The LRSO will contact the appropriate range(s) to determine the availability of the added equipment.

6.5 Rescheduling Action Following a Scrub: Operations will not normally be rescheduled immediately following a scrub. Requests for rescheduling will be submitted to the LRSO for consideration with other operations and resources which may be in conflict.

6.5.1 Special Considerations Governing Rescheduling Action.

6.5.1.1 Airspace and sea space availability and lead times required for issuance of notification (NOTAMS, LONOTES, Notices to Mariners, etc.).

6.5.1.2 Conflicts with other tests on support ranges.

6.5.1.3 Ship and aircraft limitations and commitments.

6.5.1.4 Other operations priorities.

6.6 Cancellations/Scrubs: The LRSO will be notified immediately of any cancellations/scrubs so that maximum time is available for redeployment and/or reassignment of forces and equipment and to ensure maximum efficient utilization of range time and resources.

7.0 INTERRANGE OPERATIONS SCHEDULING PROCEDURES

7.1 LR and SR Responsibilities: The LRSO, upon receipt of the range user's request for scheduling, will coordinate interrange requirements with SRs. The SRs will review their respective range schedules and confirm to the LRSO their ability to provide support.

7.2 Added Requirements: If it is necessary to add to a scheduled operation minor requirements that are not specified in the OR or OD, the LRSO will contact the SR scheduling office for coordination and acceptance.

7.3 Sequence of Actions: The following events represent the normal chronological sequence of actions accomplished in the interrange scheduling of operations.
7.3.1 The OR/ORD is prepared by the range user and submitted to the LR.

7.3.2 The ORE is distributed by the LR to SRs.

7.3.3 The OD is prepared, published, and distributed by each participating range.

7.3.4 The user submits a long-range operations forecast to the LRSO with information copies to SRs.

7.3.5 The user submits a request for support to the LRSO.

7.3.6 The LRSO contacts all SR scheduling offices after receipt of the range user's request and coordinates all interrange support requirements.

7.3.7 The LRSO confirms final schedule times by priority electrical message to all SRs involved.

7.3.8 The SR scheduling offices acknowledge receipt of the LRSO's transmission.

7.4 Status Reporting

7.4.1 Unscheduled Maintenance: Reporting the status of SR instrumentation for scheduled operations is the responsibility of the SR scheduling offices. Instrumentation committed for scheduled interrange operations will be assumed to be fully mission capable (FMC) unless the LRSO is advised otherwise. When instrumentation is not mission capable (NMC), the fact will be reported immediately to the LRSO by voice followed wherever practical by electrical message containing the following information.

7.4.1.1 Instrumentation name.

7.4.1.2 Type of malfunction.

7.4.1.3 Scheduled operations affected by NMC condition.

7.4.1.4 Estimated date and time (Z) system will become FMC.

7.4.2 Downtime: The LRSO will be advised of any scheduled downtime of major SR instrumentation for maintenance or modification which will affect scheduled or forecast operations.

8.0 INTERRANGE SCHEDULING PRIORITIES

Local scheduling offices will schedule the use of their operations support resources based on priorities which give equitable consideration to all DOD components. Use of existing military department priority and precedence rating systems is encouraged, but such systems must provide equal consideration to all DOD users. While priorities and precedence ratings are
a primary condition, schedules shall also accommodate specific time restrictions (e.g., launch windows, schedule milestones) and preclude undue delays to lower priority projects. Scheduling conflicts which cannot be resolved at the facility or service headquarters level will be referred to the Director, Defense Test and Evaluation (DOTE).

9.0 SCHEDULE CLASSIFICATION

Operations schedules, forecasts, and historical schedule records will be classified according to content and program security guides.

9.1 Unclassified reference to classified operations may be made by using the combination of operation number, time, and date only.

10.0 REVIEW, REVISION, TERMINATION, AND SUPERSEDING PROCEDURES

This Joint Operating Procedure (JOP), which supersedes JOP, same subject, Jun 83, will be reviewed biannually. Revisions and/or termination may be processed at any time upon mutual agreement between the participants to this JOP. Termination by one party requires 30 days' written notice to the other parties.
END

DTIC

8-86