



**READINESS REVIEW OF SPACE AND
MISSILE SYSTEMS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This supplement defines management responsibilities within the 30th Space Wing (30 SW) in support of programs authorized to use 30 SW resources. The programs include ballistic missile, spacelift, and other special categories. This supplement establishes the basic concept of readiness reviews. It applies to all 30 SW units, organizations, agencies, and offices involved in the planning and operations activities for Western Range (WR) support, needed to execute the mission. Waivers from this supplement will be requested through the 30th Operations Group Commander (30 OG/CC) and coordinated with all base agencies.

AFSPCI 10-1211, 2 December 1997 is supplemented as follows:

3.2.1. (Added) The AFLC, supported by the respective 2 SLS Operations/Maintenance flights and booster/payload processing contractors, will present a launch readiness overview and recommendation to the 30th Space Wing Commander (30 SW/CC) in the LRR one day before launch, adjusted as needed for schedule. This review concludes the prelaunch review cycle and results in readiness statements by Aerospace, BV SPO, BV Contractor, SV SPO, SV Contractor, 30 MDG, 30 LG, 30 SPTG, 30 SW/SE, 30 OG, and the Mission Director to the 30 SW/CC. The 30 SW/CC provides the final authority to proceed with launch. A typical agenda for the review is shown at **Figure 2. (Added)**.

3.3. (Added) Group Readiness Review (GRR). The GRR will be conducted 1 day prior to the LRR. This review will be chaired by the 30 OG/CC and will address all items indicated in **Figure 2. (Added)**. 2 SLS/CC, 30 RANS/CC, 30 WS/CC, 30 OSS/CC, and 76 HF/CC will provide readiness statements. It ensures Group readiness to proceed with launch.

3.4. (Added) Squadron Readiness Review (SRR). The SRR will be conducted 2 days prior to the LRR. This review will be chaired by the 2 SLS/CC, and will address all items indicated in **Figure 2. (Added)**. AFLC, BOC, SOC, and FOC will provide readiness statements. It ensures squadron readiness to proceed with launch.

3.5. (Added) Milestone (Incremental) Readiness Review. Milestone readiness reviews, which serve as incremental review points, are designated to verify systems readiness at a given time and to ensure readiness to proceed with the next major milestone activity.

3.6. (Added) Special Readiness Review. Special Readiness Reviews will be held as required. These non-recurring reviews will assess the readiness to proceed after major systems tests or facility modifications. The LD may specify activities requiring Special Readiness Reviews and designate the responsible agencies to present and chair the reviews.

4.2. (Added) The 2 SLS is responsible for:

4.2.1. (Added) Conducting Milestone (Incremental) Readiness Reviews. At these reviews, each supporting Air Force and contractor office will present the status of their respective systems or activities for review and concurrence to proceed. These reviews also address work which has occurred since the last review and should consider the following: vehicle; AGE, facility status, Range support, transportation, nominal processing schedules, flight component replacements, vehicle configuration, open issues, modification summaries, and applicable procedure status with current revisions. A verbal and signature verification of readiness is required from certain agencies/positions for each review. If, after a milestone review is held, the event under review does not occur as scheduled, periodic update reviews will be conducted as required.

4.2.1.1. (Added) The specific milestone readiness reviews for Titan in the receipt-through-launch sequence are:

	<u>2 SLS OPR</u>
- SRMU Stack Readiness Review (Titan IV)	BOC
- Core Vehicle Erection Readiness Review	BOC
- Booster on Stand Readiness Review (Titan II)	BOC
- Combined Systems Test Readiness Review	BOC
- Payload Fairing Pre-ship Readiness Review	SOC
- Satellite Vehicle Arrival/Pre-mate Readiness Review	SOC
- Payload Fairing Mate Readiness Review	SOC
- Integrated Systems Test Readiness Review	LC
- Facility Readiness Review	FOC

2 SLS OPR

- Squadron Readiness Review LC
- Operations Group Readiness Review LC
- Launch Readiness Review LC

4.2.1.2. (Added) The specific milestone readiness reviews for Atlas in the receipt-through-launch sequence are:

2 SLS OPR

- Booster on Stand (BOS) Erection Readiness Review BOC
- Initial Current Profile and Compatibility (ICPACT) Readiness Review BOC
- Simulated Flight Readiness Review BOC
- Wet Dress Rehearsal Readiness Review LC
- Payload Mate Readiness Review SOC
- Composite Electrical Readiness Review (CERT) LC
- Facility Readiness Review FOC
- Squadron Readiness Review LC
- Operations Group Readiness Review LC
- Launch Readiness Review LC

4.2.1.3. (Added) The specific milestone readiness reviews for AF Delta Missions in the receipt-through-launch sequence are:

	<u>2 SLS OPR</u>
- Pre-Vehicle on Stand Meeting (Pre-VOS)	BOC
- Vehicle Readiness Review	BOC
- Launch Site Readiness Review	FOC
- Flight Readiness Review	LC
- Boeing Launch Readiness Review	LC
- Squadron Readiness Review	LC
- Operations Group Readiness Review	LC
- Launch Readiness Review	LC

4.2.1.4. (Added) Milestone Readiness Review Schedule and Agenda. Readiness reviews shall be scheduled in advance of the milestone event to allow sufficient time for action items to be answered without scheduled impact. The schedule for all reviews shall be coordinated by the Air Force with the contractor and scheduled through the integrated scheduling system. **Figure 3. (Added)** shows a detailed agenda for milestone readiness review. Agenda items may be added or deleted at the discretion of the 2 SLS.

4.2.1.5. (Added) Milestone Readiness Review Chairmanship. Readiness reviews are chaired on behalf of the SMC, Det 9 Commander as shown in paragraphs **4.2.1.1. (Added)**, **4.2.1.2. (Added)**, and **4.2.1.3. (Added)**. Changes to readiness review chairmanship may be requested by the SMC, Det 9 Commander in coordination with the 2 SLS Commander. The chairperson will have the opportunity for opening remarks after with the review will be presented to the LD or a designated representative. At the conclusion of the review, the chairperson will poll each agency for a readiness to proceed. The chairperson will be responsible for providing a single 2 SLS concurrence signature. His/her signature denotes concurrence with the other appropriate AF operations controller and/or responsible AF engineers. A form letter will be prepared and signed by the AF Launch Director to document required signatures and any issues impacting the milestone activity. The letter will be sent to the SMC, Det 9 Commander and the 2 SLS Commander, if he/she is not the AF Launch Director. Figure 4 shows the suggested format for document readiness review results.

4.2.1.6. (Added) Readiness Review Briefing Charts. A copy of any briefing charts supporting each AF/contractor presentation will be delivered to the 2 SLS chairperson 24 hours prior to the review. Briefing charts will address each item on the readiness review agenda. Final charts will be provided at the review.

4.2.2. (Added) Ground Operations Working Groups (GOWG) and Launch Operations Working Groups (LOWG). GOWGs and LOWGs are identical in content and purpose, but the title changes to reflect the mission's current status. A mission's GOWGs begin before the mission reaches the pad and convert to LOWGs when on-pad operations begin. These working groups oversee the booster vehicle (BV) and associated satellite vehicle (SV) programs at the launch base and manage those functions which involve the coordinated activities of the agencies associated with prelaunch test and launch operations activities. The primary goal of the working group is to accomplish the systems flight objectives specified for the booster and satellite vehicles. Membership in the working group varies by program but will include all agencies playing a role in the launch. Membership in Delta working groups is specified in the Launch Operations Responsibility Document (LORD). GOWGs/LOWGs take place on average once every month and start when a mission is close enough to require planning. The working group Executive Chairman (2 SLS Launch Director) supervises launch readiness activities within the 2 SLS.

5.18. (Added) Documentation. A record copy of all receipt-through-launch and Readiness Review documentation will be archived by the mission planner. This documentation will include the presentations, generated action items and their resolutions, and signed readiness statements.

Figure 1. (Added) Typical (Launch, Group, Squadron) Readiness Review Agenda (LRR, GRR, SRR)

AGENDA	
(Launch, Group, Squadron) Readiness Review	
Introduction/Mission Overview (1,2,3)	2 SLS/DOUP
Schedule and Countdown Summary (1,2,3)	2 SLS/DOO
Booster/Launch Facility (1,2,3)	2 SLS/DOO
Satellite Vehicle (1,2,3)	2 SLS/DOO
Launch Crew/Standby Crew Readiness (2,3)	2 SLS/DO
Range Readiness (1,2)	30 RANS
Weather Forecast Briefing (1,2)	30 WS
Range Safety Support (1)	30 SW/SE
Security Support (1)	30 SFS

Communications Support (1)	30 CS
Contingency Response (1)	30 CES
Bioenvironmental (1)	30 AMDS/SGPB
Environmental (1)	30 CES
Public Affairs (1)	30 SW/PA
Summary/Action Items (1,2,3)	2 SLS/DOUP
Readiness Statements (1,2,3)	All
1. LRR agenda item (L-1)	
2. GRR agenda item (L-2)	
3. SRR agenda item (L-3)	

Figure 2. (Added) Typical Milestone Readiness Review Agenda

AGENDA	
(Milestone) Readiness Review	
Opening Remarks	2 SLS, Other*
Integrated Schedule	2 SLS
Security*	2 SLS
Complex/AGE	2 SLS
Range Support Status	2 SLS
Communications Status	DSI
RLCC Readiness/Status	LMA

BV Readiness/Status	LMA
Complete S-MARS, Component Change	
DC&Rs, unverified failures, time-limited items, qualification test status, pedigree status, CAPS history, Core Vehicle Processing Status	
SRMU Processing Status*	
ATC Engine Status	
Delco Guidance System Status	
Hardware Modification	
Engineering Flag and STO Status	
Work Item Status Summary (WISS)	
Preventative Maintenance Procedures (PMP) Status	
PLF Status	LMA, ASC*
Interface Verification Status*	ASC, LMA
SV Readiness/Status	2 SLS, ASC*
Safety	All
Special Interest Items	All
Action Item Review	All
Closing Remarks	2 SLS, Det 9
Readiness Statements	All
* As applicable	

Figure 3. (Added) Typical Milestone Readiness Review Letter

(30 SW Letterhead)

MEMORANDUM FOR 2 SLS/CC

SMC, DET 9/CC

FROM: 2 SLS/XXX

SUBJECT: (Atlas, Delta, Titan) XXX Milestone Readiness Review

1. In accordance with the 2 SLS Spacelift Operation Readiness Plan, the (Milestone) Readiness Review was held on _____.

2. In addition to in-line processing requirements, the following item(s) require resolution before (milestone) can proceed:

3. The following agencies acknowledge readiness to proceed with the (milestone) upon resolution of items note in Paragraph 2.

LMA _____

ASC _____

DSI _____

30 SW/SE _____

Aerospace _____

AFQA _____

2 SLS _____

SMC, DET 9 _____

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Attachment 1 (Added)

GLOSSARY OF REFERENCES, AND SUPPORTING INFORMATION*Abbreviations and Acronyms*

AFLC—Air Force Launch Controller
AFMC—Air Force Material Command
AFSPC—Air Force Space Command
AGE—Aerospace Ground Equipment
ASC—Associated Satellite Contractor
BOC—Booster Operations Controller
BOS—Booster On Stand
BV—Booster Vehicle
CERT—Composite Electrical Readiness Test
CS—Combined Systems Test
FOC—Facility Operations Controller
GOWG—Ground Operations Working Group
GRR—Group Readiness Review
ICPACT—Initial Current Profile and Compatibility Test
LC—Launch Controller
LD—Launch Director
LMA—Lockheed Martin Astronautics
LORD—Launch Operations Requirements Document
LOWG—Launch Operations Working Group
LRR—Launch Readiness Review
MA—Maintenance Section
MARS—Martin Anomaly Reporting System
MFR—Memo for Record
MOA—Memorandum of Agreement
OPR—Officer of Primary Responsibility
PLF—Payload Fairing
SMC—Space & Missile Center
SOC—Satellite Operations Controller
SPO—System Program Office

SRMU—Solid Rocket Motor, Upgrade

SRR—Squadron Readiness Review

STO—Space Tasking Order

SV—Space Vehicle, Satellite Vehicle

VOS—Vehicle On Stand

WG—Working Group

WR—Western Range

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