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SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 10-1211

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Operations

SPACE LAUNCH OPERATIONS

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(Maj Gen Roger Burg)

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This instruction implements AFD 10-12, *Space*. This instruction establishes Air Force Space Command (AFSPC) roles and responsibilities relating to space launch and range operations and maintenance, including the launch readiness review process. It applies to all military, government service and applicable contractor personnel whose duties directly relate to the management, operations, maintenance, preparation and conduct of activities required to support the Air Force spacelift mission. Maintain and dispose of records created as a result of prescribed processes in accordance with AFRIMS located at <https://afrims.amc.af.mil>.

SUMMARY OF CHANGES

This instruction incorporates changes to roles, responsibilities, authorities and procedures associated with launch transformation. It summarizes the roles, responsibilities and authorities for Air Force space launch operations and provides instructions to AFSPC to ensure space launch operations meet DoD and National requirements for providing assured access to space. **Recommendation Change of Publication** through channels to AF/A3SS, 1480 Air Force Pentagon, Washington DC 20330-1480.

1. Space Launch Operations.

1.1. **Background:** United States Government space policies identify “assured access to space” as the need to guarantee the availability of critical space capabilities for executing space missions. This key concept supports and implements National Security Strategy, United States Space Transportation Policy, National Military Strategy and Air Force doctrine. Space launch is a key enabler to establish and support a broad range of space capabilities. Space launch includes two complimentary strategies: current routine launch operations and future responsive launch operations. This instruction will apply to

routine launches used to populate satellite constellations, deploy research and development satellites or other test missions on a scheduled basis.

1.2. **Roles:** The AF, as the DoD Executive Agent for Space, executes launch and range operations through AFSPC. AFSPC's spacelift mission is to ensure successful delivery of space systems to support national objectives and provide a decisive advantage to U.S. forces worldwide. HQ AFSPC will provide the necessary policy and guidance to support the spacelift mission. Space and Missile Systems Center (SMC) is the AFSPC organization responsible for acquisition and sustainment of the Expendable Launch Vehicle flight systems and ground systems. SMC performs acquisition management and mission assurance for these systems. The SMC Commander (SMC/CC) is responsible for mission certification through on-orbit satellite checkout of USAF missions and launch vehicle certification for all DoD and National Reconnaissance Office (NRO) missions. For NRO missions, the Director of the NRO (DNRO) is responsible for the mission. The 14 AF/CC is responsible for providing support and tracking during launch and on-orbit checkout.

1.3. **Assets:** Launch and Test Range Systems (LTRS) are DoD national security assets operated by the Air Force to support deployment of space missions and are key enablers for all AF, DoD, NRO and National Aeronautics and Space Administration (NASA) capabilities that employ or depend on space-based or ballistic missile systems. LTRS also support commercial launch on an as available basis when there is excess capacity. LTRS provide the tracking, telemetry, control, communications, flight analysis and other capabilities necessary to safely conduct national security, civil and commercial space launch operations, intercontinental and sea-launched ballistic missile evaluations, and aeronautical and guided weapons tests. Although today space launch is the primary range mission, the infrastructure to support test programs is key to a variety of other ballistic missile and aeronautical flight testing. The Eastern Range and Western Range are part of the DoD's test community, the Major Range and Test Facility Base (MRTFB).

1.4. **Scheduling:** Launch schedule execution will be based on national priorities. AFSPC, through the 14 AF, will establish a launch execution queue based on DoD, Civil and commercial mission priorities.

2. Responsibilities and Authorities.

2.1. General.

2.1.1. **Mission.** The Air Force must maintain a successful, robust, secure and modern spacelift capability to meet warfighter and other national security mission needs. Additionally, all organizations involved with the spacelift mission must strive to meet this basic requirement at an affordable cost. All launch and range operations employ contracted non-DoD agencies. To ensure proper mission conduct and contractor compliance, AF personnel should understand government rights and responsibilities embodied in contracts and their provisions. A general understanding of the contract between the AF and the contractor is of particular importance for commanders and mission personnel. Individuals seeking guidance on contracts should contact the cognizant government contracting office.

2.1.2. **Safety.** Safety is paramount in all aspects of launch and range operations and involves following regulatory guidance as well as meeting safety requirements detailed in launch operations directives, instructions, manuals, plans and procedures. All personnel must comply with applica-

ble technical, procedural, safety, security and resource protection requirements, instructions and directives.

2.1.3. **Training.** Mission success requires experience, effective training and evaluation programs, crew force management, proper maintenance practices, technical excellence, and adherence to Operational Safety, Suitability and Effectiveness (OSS&E) standards. Organizations and personnel will comply with all applicable training, evaluation, crew force management, civilian personnel and maintenance instructions, directives, requirements, and supplements.

2.2. **Organizational** (See [Attachment 2](#) for Organizational Structure).

2.2.1. **HQ AFSPC.**

2.2.1.1. Implement DoD, Air Staff and USSTRATCOM launch and range policy and guidance.

2.2.1.2. Establish and oversee the MAJCOM Launch and Orbital Safety Program.

2.2.1.3. Ensure subordinate operational units are organized in accordance with AFI 38-101, Air Force Organization.

2.2.1.4. Advocate for the necessary resources (equipment, manpower, etc.) to meet, sustain and evolve launch capabilities, and to provide support to other external launch customers as required by directive, regulation and Public Law.

2.2.1.5. Provide support to Air Staff on launch and range operations issues.

2.2.1.6. Coordinate activities with other space operations stakeholders, to include DoD agencies, MRTFB ranges, NRO, MAJCOMs, NASA, Department of Transportation, Missile Defense Agency (MDA), Federal Aviation Administration (FAA) and FAA-licensed users (commercial launch agents).

2.2.1.7. Support HQ AF Capabilities Review and Risk Assessment process, as required.

2.2.1.8. Support all Combatant Command (COCOM) and NRO launch mishap investigations IAW AFI 91-204, Safety Investigations and Reports, AFMAN 91-222, Space Safety Investigations and Reports, and HQ AF direction.

2.2.1.8.1. Fund and support investigation for NRO launch vehicle mishaps, with NRO providing support to the Safety Investigation Board (SIB), as required, if funding is statutorily available.

2.2.1.8.2. Support NRO-led investigation for payload pre-launch and payload launch-related mishaps not involving the launch vehicle.

2.2.1.9. Operate and maintain the Launch Services Office (LSO). LSO provides a focal point for launch scheduling and forecasting for all current and potential National Security Space users of AF launch systems, commercial launch systems and NASA launch users services. The LSO provides a focal point for mission modeling and manifest development, review and approval and for launch history tracking, including performance (reliability) and schedule tracking (launch slips).

2.2.2. **Space and Missile Systems Center.**

2.2.2.1. Responsible for the acquisition, readiness, sustainment, modernization and deployment of space launch and satellite systems and services.

2.2.2.2. For USAF launches, the SMC/CC is accountable for launch mission success and certifies launch vehicle (LV) and AF satellite readiness. This includes mission direction and mission authority responsibilities through satellite separation, including any post-separation mission requirement performed by the upper stage.

2.2.2.2.1. SMC/CC delegates Day-of-Launch (DoL) operations to the Mission Director and Spacelift Commander (SLCC).

2.2.2.2.2. At the launch site, SMC/CC's accountability for the satellite vehicle (SV)/LV stack is through the Mission Director for COCOM missions. The SLCC directs operations on behalf of SMC/CC.

2.2.2.3. SMC/CC will appoint, train and certify a Mission Director (MD) for every DoD launch of SMC-acquired launch systems/services. The NRO appoints an MD for NRO missions.

2.2.2.4. Ensure LV and applicable SV meets OSS&E requirements IAW AFI 63-1201.

2.2.2.5. Ensure LV and SV meet all system requirements and capabilities documentation according to System Performance Requirements Document, Operational Requirements Document, Initial Capabilities Document, Capabilities Development Document, Capabilities Production Document, System Interface Specification, and other applicable requirements and specification documents.

2.2.2.6. Define Space Flight Worthiness criteria for compliance from SV and LV System Program Directors (SPDs).

2.2.2.7. Provide Space Wing/Launch Group (SW/LCG) with appropriate information to accomplish reporting IAW AFI 10-206.

2.2.2.8. Provide appropriate delegation and direction from the SPDs to the Launch Group organizations allowing on-site support and surveillance for flight worthiness certification.

2.2.2.9. Determine appropriate responses to launch vehicle or USAF-acquired satellite problems, off-nominal indications or anomalies when flight worthiness of the integrated stack or associated aerospace ground equipment is in question. If required, lead an anomaly resolution team for the launch vehicle and USAF-acquired satellite, and prepare corrective actions in concert with other AFSPC organizations.

2.2.3. Fourteenth Air Force

2.2.3.1. Responsible to HQ AFSPC for command and control and employment of AF space forces to support operational plans and missions for US combatant commanders and air component commanders.

2.2.3.2. Develop Operational Considerations to support Commander, USSTRATCOM requests.

2.2.3.3. Develop Operations Orders and Operations Plans annexes and checklists.

2.2.3.4. Review, implement and supplement launch and range operational and contingency policies and requirements established by DoD, AF and AFSPC directives and instructions.

- 2.2.3.5. Validate operational requirements, conceptual documents and situation report status.
- 2.2.3.6. Monitor subordinate units' range activities and provide assistance on compliance issues when resolution is beyond their scope and/or resources.
- 2.2.3.7. Serves as the executive agent for the Current Launch Schedule Review Board process (Current Launch Schedule constitutes an execute order) and Constellation Sustainment Assessment Team.
- 2.2.3.8. Review Operational Review Board minutes for issues occurring during spacelift generation or recovery.
- 2.2.3.9. Provide resources and participate in SIBs and Accident Investigation Boards (AIBs), as required by the SIB/AIB President.
- 2.2.3.10. Ensure compliance with launch safety risk and casualty criteria and reporting requirements.

2.2.4. **Space Wing.**

- 2.2.4.1. Implement and supplement policies and requirements established by DoD, AF and AFSPC directives and instructions and ensure effective management and quality control of all applicable policies and requirements.
- 2.2.4.2. Supervise subordinate operational activities, ensuring operational effectiveness. Provide assistance on compliance issues to subordinate units when resolution is beyond their scope and/or resources.
- 2.2.4.3. The SW/CC, as SLCC, is accountable for public safety, launch area safety and resource protection for all personnel, systems, government facilities, and equipment throughout all phases of LV processing and launch and range operations (with the exception of Kennedy Space Center as specified with 45 SW/NASA memorandum of agreements).
- 2.2.4.4. Accountable to the SMC/CC for conduct of SMC-managed mission activities at the launch base, and accountable to 14 AF/CC for maintaining qualified/ready personnel, procedures, and government infrastructure for both SMC-managed launches and other launch range customers.
- 2.2.4.5. Accountable to SMC/CC to ensure the LCG properly executes all SPD-delegated flight worthiness and mission processing responsibilities.
- 2.2.4.6. Operate the range as part of the DoD MRTFB by providing government facilities and range services to all authorized users.
- 2.2.4.7. As the SLCC, conduct a Launch Readiness Review (LRR) prior to each launch operation.
- 2.2.4.8. Appoint an interim SIB president IAW AFI 91-204.
- 2.2.4.9. Ensure range readiness for launch operations and verifying the operations are safe to proceed.
- 2.2.4.10. Ensure all necessary operational support is provided to authorized programs as defined by the Universal Documentation System (UDS).

2.2.4.11. Responsible to SMC/CC for assessing, through the LCG, all phases of DoD space launch processing and launch execution and participating in critical phases to mitigate risk for mission success.

2.2.4.12. Provide Program Analysts to prepare and coordinate cost estimates, manage the customer Job Order Numbers (JON), and serve as primary customer point of contact for cost and funding information and the resolution of any questioned charges.

2.2.4.13. Approve mission flight rules.

2.3. **Positions** (See Attachment 3 for Day of Launch Execution Chart).

2.3.1. **Spacelift Commander (SLCC):** The SW/CC serves as the SLCC, exercising launch decision authority for DoL activities or delegates the SLCC function to a trained and certified SLCC. For all operations, the SLCC ensures the safety of the public and protection of resources. Additionally, the SLCC: issues the final “clear to launch” and exercises waiver authority for mandatory launch safety requirements.

2.3.2. **Mission Director (MD):**

2.3.2.1. Accountable to SMC/CC for mission “Go/No-Go” decision and passes that notification to the SLCC.

2.3.2.2. Monitors SV and LV processing and ensure SV and LV System Program Offices meet space flight worthiness criteria.

2.3.2.3. Participate in the Flight Readiness Review, presenting it to the SMC/CC.

2.3.2.4. Participate in LRR process and support launch countdown operations.

2.3.2.5. Ensure all LV and SV anomalies affecting flight worthiness are successfully mitigated/resolved. Lead DoL LV and SV teams through countdown, launch and satellite separation.

2.3.2.6. Ensure a thorough Post-Flight Review is conducted for every mission after launch to assess the performance of the launch vehicle, satellite and ground systems.

2.3.2.7. For DoD missions, the MD will successfully complete the SMC MD training program and be certified by the SMC/CC as Mission Support IAW AFSPCI 10-1202 and SMC guidance.

2.3.3. **Operations Director (OD):**

2.3.3.1. The OG/CC or his/her designated representative who is trained and certified in the OD position, serves as OD in DoL activities.

2.3.3.2. Report range readiness to the SLCC and ensure all range resources are capable and ready to support range operations.

2.3.3.3. Oversee countdown and advise SLCC on range operational issues.

2.3.4. **Air Force Launch Director (AFLD):**

2.3.4.1. The appropriate SLS/CC normally serves as AFLD for program DoL activities or delegates the AFLD function to a trained and certified AFLD.

2.3.4.2. Lead the squadron launch team and advise the MD and SLCC during the launch countdown.

2.3.4.3. Provide senior-level guidance to the Air Force launch team.

2.3.4.4. Coordinate status and actions with Range Operations Commander (ROC).

2.3.4.5. (Delta II) Collect “Go/No-Go” responses from the Air Force Launch Crew Commander and both the SV and LV site managers before passing “Go/No-Go” recommendation to the MD.

2.3.4.6. (Delta II) Exercise launch vehicle and satellite system waiver authority on behalf of the launch agency as delegated by the MD.

3. Interfacing Publications. This instruction interfaces with AFPD 10-12, Space; AFPD 63-12/AFI 63-1201, Assurance of Operational Safety, Suitability, and Effectiveness (OSS&E); AFPD 63-15, USAF Space Flight Worthiness Certification; and AFI 12-108, Maintenance Management of Space Systems.

CARROL H. CHANDLER, Lt Gen, USAF
DCS, Space & Information Operations, Plans & Requirements

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 10-12, *Space*, 1 February 1996

AFPD 63-12, *Assurance of Operational Safety, Suitability, and Effectiveness (OSS&E)*, 1 February 2000

Abbreviations and Acronyms

A3—Director of Air, Space and Information Operations

AF—Air Force

AFB—Air Force Base

AFI—Air Force Instruction

AFLD—Air Force Launch Director

AFSPC—Air Force Space Command

AIB—Accident Investigation Board

CC—Commander

COCOM—Combatant Command

DoL—Day of Launch

FAA—Federal Aviation Administration

IAW—In Accordance With

LRR—Launch Readiness Review

LSO—Launch Services Office

LTRS—Launch and Test Range Systems

LV—Launch Vehicle

MD—Mission Director

MRTFB—Major Range and Test Facility Base

NASA—National Aeronautics and Space Administration

NRO—National Reconnaissance Office

OD—Operations Director

OSS&E—Operational Safety, Suitability, and Effectiveness

ROC—Range Operations Commander

SIB—Safety Investigation Board

SLCC—Spacelift Commander

SMC—Space and Missile Systems Center

SPD—System Program Director

SV—Satellite Vehicle

SW—Space Wing

USAF—United States Air Force

USSTRATCOM—United States Strategic Command

Terms

Acceptance—Government acceptance of the results of a contractor-executed test procedure or task and acceptance of close-out/disposition of all anomalies or out-of-family/out-of-spec data associated with that procedure or task. Acceptance will be performed by one, or a combination of the following agencies: SPO, SLS, and RMS (depending on the subject). The Aerospace Corporation will provide a technical recommendation on acceptance or rejection to the Air Force. Acceptance takes on two forms: One is an acceptance of items/processes/procedures as required by the contract; the other is technical acceptance that the contractor's actions have adequately resolved any anomalies/non-conformances and satisfies Flight/Task Certification Matrix requirements.

Air Force Spacelift Operations—The USAF insight/oversight/assessment of contractor personnel performing launch and range operations.

Annual—When used as a requirement, the term “annual” refers to a 12-month interval.

Anomaly—An unexpected or unplanned condition that does not meet provided system performance parameters and which cannot be corrected by organizational maintenance resources in accordance with validated procedures. After analysis, an “out-of-family” condition could be declared an anomaly.

Anomaly Resolution—The process to resolve an anomaly. An anomaly resolution team will be formed to resolve/disposition all system anomalies. This team may consist of AFSPC, contractors, and any other personnel needed to resolve the anomaly.

Approval—Approval signifies AFSPC approval/acceptance/coordination IAW AFSPC instructions and Memorandum of Agreements.

Combatant Command (COCOM)—Nontransferable authority established by Title 10, United States Code, Section 164, exercised only by commanders of unified or specified combatant commands. COCOM (command authority) is the authority of a Combatant Commander to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command.

Combat Mission Ready (CMR)—HQ AFSPC/XO- designated personnel who have completed Enlisted or Officer Space Prerequisite Training, Space or Missile Initial Qualification Training (if available), and Unit Qualification Training, and have been successfully evaluated and certified by a certifying official. CMR personnel are responsible for completing a unit's real-time operational mission and should not be confused with those providing mission critical support functions. Examples of CMR crew positions are those with individuals who command satellites, accept custody of missile sorties, control space launch countdown processing, and physically control warning and surveillance systems.

Contract Administration/Surveillance—Active surveillance of contractor performance to ensure compliance with various contract or statement of work requirements. Examples include safety, quality assurance, security, property management, and base support. Surveillance tasks may be performed by the contracting office or delegated to another government office, which has resident expertise and/or is co-located with contractor operations.

Contract Management—Active management of the contract and/or contractor by the contracting officer for the purpose of ensuring satisfactory delivery of end items meeting USAF requirements. This includes such activities as contract negotiation and business clearance, as delegated by SMC.

Current Launch Schedule Review Board (CLSRB)—Provides a semi-annual review of all launch activity at the 30th and 45th Space Wings. It approves the Space Launch Manifest (3 year), and the Current Launch Schedule (18 months).

Data Review—Government review of all data, resulting from completion of a contractor-executed test procedure or task, required for government acceptance of that test procedure or task. Data from contractor-run tests and procedures will be reviewed by SPO, SLS, Aerospace, and/or AFQA according to the Flight Certification Matrix. This data review is to ensure the test/procedure produced the desired results, to identify any anomaly/non-conformances, and to develop trend data.

Flight Readiness—SW-led responsibility to orchestrate and conduct pre-launch countdown activities IAW approved procedures to prepare the integrated launch vehicle and satellite for flight. These activities include such processes as conducting final satellite power-up and testing, launch vehicle propellant loading and final propulsion, electrical and hydraulic system checks and tests, and verification that necessary range assets and facilities are mission capable.

Flight Readiness Review—Provides SMC/CC with hardware and software mission status for the launch vehicle, the satellite, and/or critical ground systems, as well as associated interfaces. Required for all missions where the SMC/CC is responsible for the certification of the mission, launch vehicle, satellite or critical ground system, and FRR is presented to the SMC/CC or a designated representative. The briefing takes place following SV and LV integration.

Flight/Section Supervision—Flight Supervision is composed of a flight commander and/or a flight superintendent/OIC and NCOICs with sufficient background and knowledge required to manage sections under their authority in support of the mission.

Flight Worthiness—SMC-led process to ensure the design meets the requirements, the hardware is built in accordance with that design, and the processes and procedures used in the factory and at the launch base meet the requirements. Additionally, launch base processing is completed in accordance with the approved procedures, and that any anomalous conditions are resolved.

Independent Readiness Reviews—A review to assess the readiness status of any or all aspects of mission or launch readiness elements directed by the Commander, AFSPC.

Independent Validation and Verification (IV&V)—An independent technical review performed by an organization that is technically, managerially, and financially independent of the development organization.

Insight—The government gaining an understanding of the contractor's progress to meet their contract's requirements through watchful observation.

Job Order Number (JON)—A unique number assigned to an account that a contractor and the government uses to charge program-related expenses (including labor and materials).

Launch Failure—Satellite did not achieve orbit.

Launch Mishap—Any AF launch-related incident which results in damage to government or non-government property, illness or injury to or the death of government or non-government personnel, or failure of a USAF-managed launch system to deliver a satellite to its intended orbit. This includes but is not limited to catastrophic destruction of the launch vehicle, failures involving the upper stage delivery system, or an anomaly or degradation of a component or components resulting in mission failure.

Launch Processing—Launch base performance of engineering, operations, and maintenance tasks associated with flight hardware/software and support equipment (SE) (i.e., AGE, RP, and RPIE) to employ the integrated spacelift vehicle consisting of the launch vehicle, upper stage, and satellite.

Launch Processing Management—Functions performed by the Space Wing and associated SMC representative to manage contractor launch processing actions in accordance with the contract and appropriate delegations.

Launch Readiness Review (LRR)—The LRR is a structured review organized by the AFSPC launch wing and presented to the launch wing commander. The LRR provides a final pre-launch readiness assessment.

Launch Response Team (LRT)—Team chaired by AFSPC/CV and formed prior to launch for all COCOM and NRO launches. LRT will not be formed for FAA-licensed launches. Team informs HQ AFSPC directorates of upcoming COCOM and NRO launches and responds in case of a launch mishap. Majority of team activities reside around press releases and accident board personnel/resource requirements.

Launch Service—A capability provided by a contractor to place a space system into orbit. Launch services include the launch vehicle hardware and the processing necessary to launch the satellite into orbit.

Launch/Test Operations—The execution of operations focused on efficient and coordinated employment of all launch assets/processes to enable the safe and timely launch of payloads and test vehicles.

Launch Verification Matrix—The EELV SPO tool that describes for each mission a prioritized set of tasks, processes, and resources required to meet SMC flight worthiness criteria.

Mission Assurance—Accomplished through the contractor's demonstration of their production, operation, maintenance, and problem resolution processes with government personnel performing surveillance to ensure these processes result in an acceptable level of mission risk to the government.

Mission Failure—For any reason the satellite does not achieve the specified final orbit in the mission specific Interface Control Document (ICD) or is not able to reach an operational status.

Maintenance Functions—Launch base transport, assembly, checkout, preparation, corrective maintenance, and preventative maintenance inspections of spacelift vehicles, payloads, space launch complexes, support equipment (SE); and real property (RP) that support launch activities. Includes MEPs and REs performing surveillance of contractor launch processing activities to assess risk and suitability of contractor-performed actions.

Major Range and Test Facility Base (MRTFB)—A national asset that is manned, operated, and maintained primarily for DoD test and evaluation support missions. The ER and WR primary MRTFB mission is spacelift.

Operation Plans (OPLAN)/Operation Order (OPORD)—A plan or a series of connected operations to be carried out simultaneously. It is usually based upon stated assumptions and is in the form of directives employed by higher authority to permit subordinate commanders to prepare supporting plans and orders. The designation “plan” is usually used instead of “order” preparing for operations well in advance. An operation plan may be put into effect at a prescribed time, or on a signal, and then becomes an operation order.

Operational Safety, Suitability and Effectiveness (OSS&E)—Process for establishing and preserving the safety, suitability, and effectiveness of Air Force systems and end-items over the entire operational life by preserving technical integrity via prudent use of disciplined engineering practices, assurance of proper operations and maintenance, effective supply systems, and field utilization and maintenance trends feedback to systems program offices.

Oversight—Maintaining watchful care or supervision over projects, processes, information, systems, and/or services.

Public Safety—Safety involving risks to the general public of the United States or foreign countries and/or their property.

Range Operations—Any procedure that requires the use of Range resources. The execution of operations focused on efficient and coordinated employment of all range assets and processes to enable the safe and timely launch of payloads and test vehicles.

Range Users Coordination Board (RUCB)—An operational committee sponsored by HQ AFSPC to provide a continuing working forum between AFSPC, SMC, spacelift range users, and industry to exchange information on business, technical and operational practices related to the Eastern and Western Ranges at Patrick and Vandenberg AFBs. The RUCB supports the Commercial Space Industry Leaders (CSIL) conference established by AFSPC/CC. The RUCB is established to share ideas, plans and concerns for the Eastern and Western Ranges. It will serve as a clearing house for key industry, civil and military leaders to discuss business, technical and operational practices related to the Eastern and Western Ranges, and forward participant's issues, comments, and concerns to the CSIL conference for presentation or responses in other more appropriate forums.

Real Property (RP)—Land, buildings, structures, utilities, improvements and appurtenances thereto. Includes equipment attached to, and made part of, buildings and structures but not movable equipment. Primarily consisting of facilities and other non-equipment support system infrastructure.

Space Launch Operations—Actions conducted by USAF and/or contractor personnel at the launch base to command and control spacelift systems (i.e., launch countdown, integrated system test, etc.).

Spacelift—The ability to project power by transporting people and materiel to and/or through space, to include test launches and sub-orbital missions. This includes the deployment, sustainment, and augmentation of satellite constellations by delivering space systems to the required orbit.

Spacelift Operations—Actions conducted by contractor personnel at the launch base to control and execute spacelift systems (i.e. launch countdown, countdown simulations, integrated systems verifications, dress rehearsals, etc.).

Universal Documentation System (UDS)—The UDS provides a common language and format for stating program, mission, and test requirements and supporting documentation.

Verify—To review, inspect, test, check, measure, audit or otherwise confirm that products, processes, or documents conform to specified requirements. Verification may be performed after work completion, e.g., safety wiring.

Attachment 2

ORGANIZATIONAL STRUCTURE

Figure A2.1. Organizational Structure.

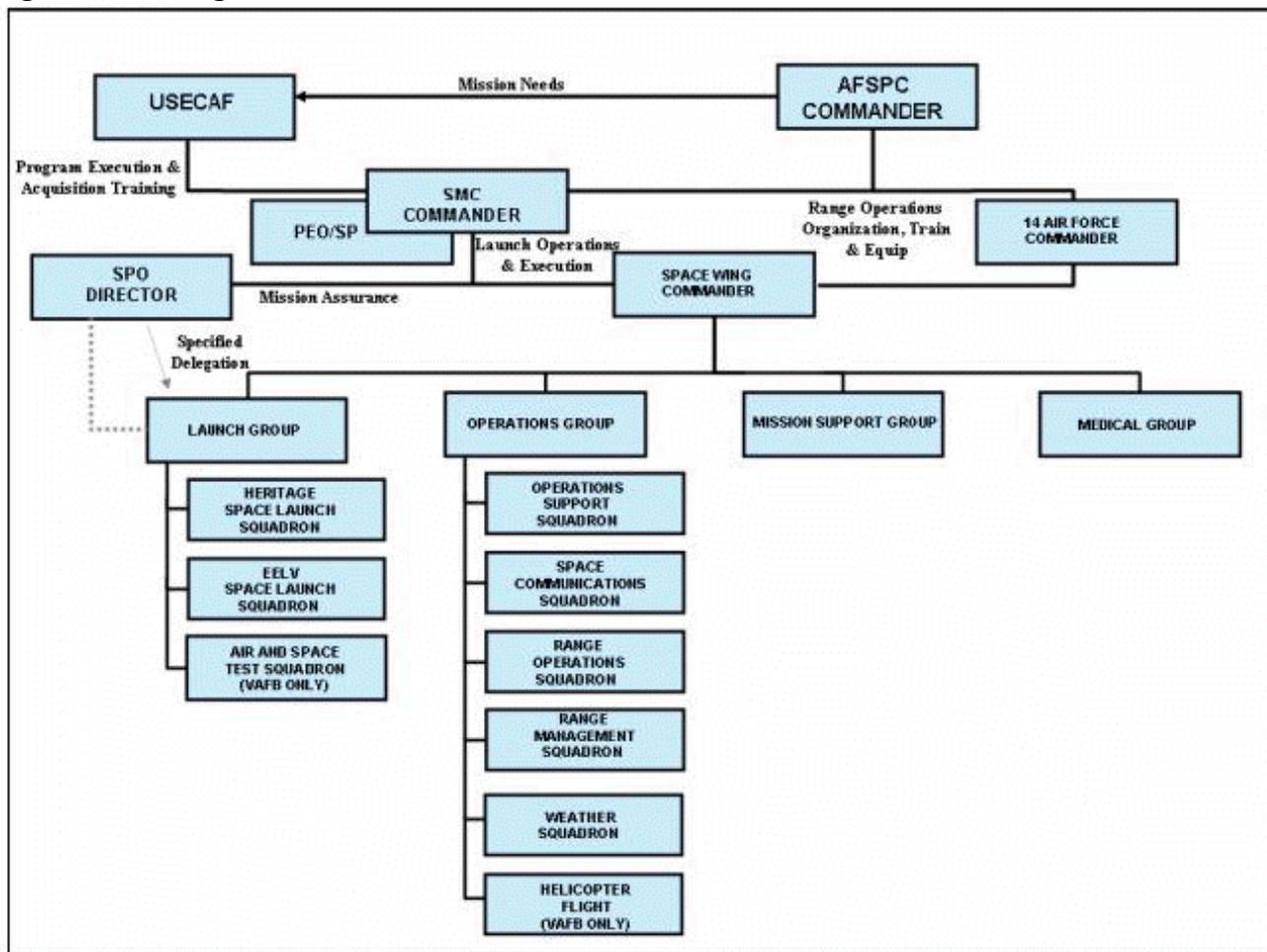


Figure A2.2. Day of Launch Execution.

