BY ORDER OF THE COMMANDER
AIR FORCE SPACE COMMAND

AIR FORCE SPACE COMMAND
INSTRUCTION 10-1204

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Operations

SATELLITE OPERATIONS

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This instruction implements Air Force Policy Directive (AFPD) 13-6, *Space Policy*, AFI 10-1201, *Space Operations* and is consistent with Strategic Command Instruction (SI) 714-2, *Satellite Communications (SATCOM) System Expert (SSE) and Consolidated SSE (C-SSE) Responsibilities*, SI 505-4, *Satellite Disposal Procedures*, SI 534-17, *Combatant Command Satellite Acceptance Procedures*, SI 534-22 and North American Aerospace Defense Command (NORAD) Instruction 10-3, *Mission Integrity, Change Control Management, and Test Control for the Integrated Tactical Warning and Attack Assessment System (ITW/AA)*, and USSTRATCOM Operation Olympic Defender by establishing guidance and procedures for satellite operations and disposal, and complements Air Force Space Command Instruction (AFSPCI) 10-205, *Operational Transition Process*. It applies to Headquarters Air Force Space Command (HQ AFSPC) and all subordinate units utilizing dedicated or shared satellite control assets, except for Royal Air Force (RAF) Telemetry and Command Station (TCS), Oakhanger. This instruction applies to Air National Guard (ANG) and Air Force Reserve Command (AFRC) units with satellite control responsibilities. If there is a conflict between this instruction and unit, contractor or other major command publications, this instruction applies. Ensure that all records created as a result of processes prescribed are maintained in accordance with (IAW) AFMAN33-363, *Management of Records*, and disposed of IAW the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. OPR is HQ AFSPC/A3S, Space Operations Division, 150 Vandenberg St., Ste 1105, Peterson AFB CO 80914-4250. This

publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items

SUMMARY OF CHANGES

AFSPCI 10-1204 is being updated and reissued as directed by AFI 33-360. This document has been substantially revised and must be completely reviewed. Major changes include the removal of Command Leads, the addition of COMAFFOR responsibilities, USSTRATCOM Operation Olympic Defender guidance, and administrative updates. The instruction provides Major Command (MAJCOM) direction on satellite operations, transition of functions and transfer of roles and responsibilities supporting both Combatant Command (CCMD) guidance and service/force provider responsibilities to subordinate units.

1. Introduction. AFSPC is responsible for all aspects of providing space capabilities to support various Department of Defense (DoD), National, and civil agencies and is responsible for organizing, training and equipping the Air Force space forces. Organizational responsibilities defined within this instruction are specifically tailored for AFSPC-conducted satellite operations. IAW Joint Publication 3-14, *Space Operations*, satellite operations are actions conducted to maneuver, configure, operate, and sustain on-orbit assets. Satellite operations are characterized as spacecraft and payload operations. Spacecraft operations include telemetry, tracking, and commanding (TT&C), maneuvering, monitoring state-of-health, and maintenance sub-functions. TT&C is the process of monitoring spacecraft systems, transmitting the status of those systems to the control segment on the ground, and receiving and processing instructions from the control segment. Payload operations include monitoring and commanding of the satellite payload to collect data or provide capability in the operational environment. Satellite operations are executed through a host of satellite operations centers linked to on-orbit assets via dedicated and shared networks. AFSPC's responsibilities include the development, test, integration, launch, checkout, acceptance, control, transition to CCMD, on-orbit support, and disposal. AFSPC/CC provides operations policy and guidance to the HQ AFSPC Directorates/Divisions, Numbered Air Forces (NAF), Component NAF (C-NAF), Centers, and Space Wings (SW) through HQ AFSPC/A3. In this instruction are specific responsibilities for conducting satellite operations. Overall program fielding responsibilities are defined in AFSPCI 10-205.

2. Roles and Responsibilities

2.1. **AFSPC/CC (Commander, Air Force Forces (COMAFFOR) for Space)**

2.1.1. As COMAFFOR, with Operational Control (OPCON) of Air Force Space forces, provide Air Force space capabilities at the timing and tempo directed by the Commander, United States Strategic Command (CDRUSSTRATCOM). Plan, coordinate, integrate, and present Air Force space capabilities to deliver desired effects globally in order to achieve assigned missions throughout the full spectrum of warfare. As required, reposition Air Force space assets to optimize mission performance. Following CDRUSSTRATCOM relinquishment of space assets, dispose of those assets IAW this instruction.

2.1.2. As AFSPC/CC, organize, train, and equip space forces to enable CDRUSSTRATCOM to accomplish its assigned space mission.

2.1.3. Provide space launch warning, strategic missile warning, theater missile warning, nuclear detonation detection, re-entry warning, national and theater missile defense support and assessment capabilities through launch, optimization, configuration, maintenance, and disposal of Air Force forces and assets ICW USSTRATCOM and Commander, Joint Forces Component Command for Space (CDR JFCC Space) as required.

2.1.4. Provide space-based Position, Navigation, and Timing (PNT) capabilities through launch, optimization, configuration, maintenance, and disposal of Air Force forces and assets ICW USSTRATCOM and JFCC Space as required.

2.1.5. Provide Space Situational Awareness (SSA), space surveillance space object identification and characterization capabilities through launch, optimization, configuration, maintenance, and disposal of Air Force forces and assets ICW

USSTRATCOM and JFCC Space. Provide SSA capability through low, medium, geosynchronous, highly elliptical orbits and beyond.

2.1.6. Present forces and assets to conduct protected and unprotected tactical SATCOM and nuclear, survivable and endurable Extremely High Frequency (EHF) operations though launch, optimization, configuration, maintenance, and disposal in support of USSTRATCOM and CDR JFCC Space.

2.1.7. Provide environmental monitoring capabilities through launch, optimization, configuration, maintenance, and disposal ICW USSTRATCOM and JFCC Space as required.

2.1.8. Provide Defensive Space Control capabilities for assigned systems through launch, optimization, configuration, maintenance, and disposal ICW USSTRATCOM and JFCC Space. Support space protection of assigned systems and provide recommendations for space protection.

2.1.9. Provide space-based Intelligence, Surveillance, and Reconnaissance (ISR) capabilities through launch, optimization, configuration, maintenance and disposal ICW USSTRATCOM and JFCC Space.

2.1.10. Develop materiel and non-materiel solutions to identify, collect, and integrate SSA information from non-traditional data sources. Utilize non-traditional sensors data, identify non-traditional sensors that may support operations, and integrate nontraditional sensors as required.

2.1.11. Declare Operational Acceptance (OA) (or delegate this responsibility to HQ AFSPC/A3) IAW AFSPCI 10-205 and AFI 63-101_20-101, *Acquisition and Sustainment Life Cycle Management*.

2.1.12. Provide shared, common use satellite control infrastructure for space-based capabilities. Develop capabilities to meet multiple space mission needs while avoiding the inefficiency of provisioning unique capabilities.

2.1.13. Perform C-SSE duties for Protected SATCOM Responsibilities and SSE duties for Milstar, AEHF, and Enhanced Polar System IAW USSTRATCOM (SI) 714-02, *SATCOM System Expert (SSE) Responsibilities*.

2.2. **Directorate of Intelligence, Surveillance, and Reconnaissance (ISR) (HQ AFSPC/A2):**

2.2.1. Assist with organizing, training, and equipping SWs with Intelligence support for Identification, Characterization, Surveillance, threat warning and prediction, and analysis efforts.

2.2.2. Support SW anomaly investigations. Intelligence assets specifically designed to collect and characterize threat data may add value to anomaly resolution and decrease time to resolution.

2.2.3. For satellites capable of imaging the earth or space using electro-optical, radar, infrared, multi-spectral, hyper spectral, or other imaging systems, work with HQ AFSPC/A5 to determine whether a proper use memorandum is necessary for imaging operations conducted over US territory for calibration, testing, or operational purposes.

2.3. **Directorate of Air, Space, and Cyberspace Operations (HQ AFSPC/A3):**

2.3.1. Develop and provide operations policy, concepts and guidance for satellite Telemetry, Tracking and Commanding (TT&C); operation of the Air Force Satellite Control Network (AFSCN) and dedicated AFSPC satellite operations resources (e.g. integrated early warning and surveillance systems); configuration control, and reporting**.**

2.3.2. Establish training, standardization, and evaluation policy and guidance IAW AFSPC Guidance Memorandum 13-1, *Space Operations Crew Force Management, Training, Standardization and Evaluation*, or the follow on instruction**.**

2.3.3. Ensure standardization across the command for AFSPC conducted satellite operations.

2.3.4. Develop policy and guidance for MAJCOM testing of space systems and primary oversight of MAJCOM Operational Testing (OT) of space systems IAW AFSPCI 99-103, *Capabilities-Based Test and Evaluation of Space and Cyberspace Systems*.

2.3.5. Develop program specific Memorandums of Agreement (MOA) with non-AFSPC system operational management agencies responsible for individual satellite programs.

2.3.6. Declare OA, per delegation from AFSPC/CC, IAW AFSPCI 10-205 and AFI 63-101_20-101.

2.3.7. Prepare and send notification to USSTRATCOM of a new operational satellite available for CCMD COCOM acceptance. If this is the first satellite of a new constellation, the notification will be from AFSPC/CC vice HQ AFSPC/A3, see **Attachments 2** & **Attachment 4**. Notification can be delegated to HQ AFSPC/A3 for unique satellites meeting COCOM urgent needs. In the case of ITW/AA contributing systems, notification is to be made to the NORAD/ USSTRATCOM Operations Approval Board.

2.3.8. Prepare and send notification to appropriate organizations when ownership is relinquished from AFSPC to another organization.

2.3.9. Manage newly delivered systems from the beginning of operations (i.e. Trial Period entry or Operational Acceptance) through end of system life.

2.3.10. ICW HQ AFSPC Staff and based on defined criteria and status, recommend Initial Operational Capability or Full Operational Capability to AFSPC/CC/CV.

2.3.11. Forward 14 AF, Air Forces Strategic (AFSTRAT), recommendations to COMAFFOR on launch, optimization, configuration, maintenance, and disposal of AFSPC satellites.

2.3.12. Ensure appropriate number of crews are properly trained and evaluated IAW AFSPCGM 13-1 and ensure appropriate training devices are Simulation Certified IAW AFSPCI 36-2205, *Operation and Management of Space Training Devices*.

2.3.13. Conduct or support Operations Review Boards (ORB) as required or related to Lead MAJCOM responsibilities.

2.3.14. Manage funding and identify funding requirements through system life and Program Objective Memorandum (POM) cycles to HQ AFSPC/A8/9.

2.3.15. When required, develop a satellite or payload early use plan in concert with the System Program Office and the SW.

2.4. **Directorate of Logistics, Installations, and Mission Support (HQ AFSPC/A4/7):**

2.4.1. Determine product support requirements necessary to sustain a satellite system. HQ AFSPC/A4/7 is responsible for facilities, security, and logistics requirements in conjunction with new and modified systems.

2.5. **Directorate of Requirements (HQ AFSPC/A5):**

2.5.1. Develop capability-based, operationally responsive requirements from user-defined needs for space systems.

2.5.2. Support Air Force Operational Test and Evaluation Center (AFOTEC) and MAJCOM-conducted Operational Test and Evaluation (OT&E) as required for newly launched satellite or system checkout. HQ AFSPC/A5 will request compliance assessment from HQ AFSPC/JA regarding international treaties, environmental laws and other relevant statutes and regulations on proposed systems to identify liability and other legal issues so they can be addressed in a timely fashion. The assessment should be updated whenever potentially significant changes are made to the system.

2.5.3. Ensure future satellite designs include a disposal capability pursuant to the operational regime and disposal requirements outlined in **paragraph 4.7** These requirements will be provided to the pertinent acquisition agency. Proposed systems and modifications must comply with environmental impact analysis process requirements, including evaluation of proposed disposal alternatives.

2.5.4. Develop Initial Operational Capability (IOC) and Full Operational Capability (FOC) criteria for newly delivered USAF space mission systems and ensure systems meet the IOC/FOC evaluation criteria as defined in the systems Operational Requirements Document (ORD), Capability Development Document (CDD) and/or Capability Production Document (CPD). Individual satellite vehicles do not require IOC declarations as they are part of a new program or system and as reflected in the IOC plan (e.g., Program "X" IOC consists of ground segment, manning, training, two satellites on-orbit, etc.).

2.5.4.1. Ensure completion of all applicable satellite bus, payload, ground segment, and user equipment testing, inspections and/or analyses to evaluate requirements satisfaction and identify/document deficiencies.

2.5.4.2. Ensure technical orders/procedures have been verified and are ready for operational use.

2.5.4.3. Logistics. Ensure logistical support required to sustain the newly delivered space system is in place.

2.5.5. Coordinate with Air Force Life Cycle Management Center (AFLCMC), Space and Missiles Systems Center (SMC), HQ AFSPC Staff, and 14 AF/CC to ensure availability of adequate resources for SWs prior to IOC (including test systems, ground simulators, training, hardware, and personnel).

2.5.6. Lead and facilitate newly delivered AFSPC space-based capabilities until Trial Period entry or Operational Acceptance decision, after which responsibility is transferred to HQ AFSPC/A3 IAW AFSPCI 10-205.

2.5.7. Coordinate with HQ AFSPC/A2 for satellites capable of imaging the earth or space objects using electro-optical, radar, infrared, multi-spectral, hyper spectral, or other imaging systems. Determine whether a proper use memorandum is necessary for imaging operations conducted over US territory for calibration, testing, or operational purposes.

2.5.8. For ISR designated satellites, work with HQ AFSPC/A2 and other appropriate offices to determine ISR collection requirements, tasking, management processes and systems as well as define processing, exploitation, and dissemination architecture prior to key program milestones. Ensure system and subsystem functionality is designed into the satellite early during the acquisition process.

2.5.9. Perform C-SSE for Protected SATCOM responsibilities IAW SI 714-02 until systems achieve IOC.

2.6. **Directorate of Safety (HQ AFSPC/SE):**

2.6.1. Develop, process, or manage all appropriate command mishap prevention instructions including system safety and developmental and operational test safety.

2.6.2. Incorporate all MAJCOM space safety requirements into specific requirements documents (e.g., Joint Capabilities Integration and Development System or AF IMT 1067, Modification Proposal) as appropriate.

2.6.3. Review safety assessments for 14 AF/CC , Space and Missile Systems Center (SMC), and SWs for each space system supported or operated by AFSPC.

2.6.4. Review ORB minutes to ascertain if safety criteria met a reportable mishap level.

2.6.5. Provide safety assessments and recommendations to AFSPC/CC for satellite courses of action and risk management decisions that may negatively impact disposal (e.g. use of a satellite for further testing that affects the ability to dispose in accordance with AF and DoD requirements.

2.6.6. Review safety assessments for operational concepts for Collision Avoidance (COLA), space system interference (e.g., Radio Frequency Interference (RFI)/Electromagnetic Interference (EMI)) reporting and resolution and defensive space control efforts.

2.6.7. Support development and maintenance of collision avoidance procedures. Coordinate with subordinate units on close approaches and conjunction assessments.

2.7. **Commander, Space and Missile Systems Center (SMC/CC):**

2.7.1. Ensure all developed and acquired spacecraft and launch systems and services are designed and launched IAW DODI 3100.12.

2.7.2. Develop, acquire, test, and evaluate new space systems capabilities before Satellite Control Authority (SCA) transfer or entry into operations (e.g. Trial Period or

Operational Acceptance). **Note:** SCA will be used synonymously with Payload Control Authority (PCA) throughout this document.

2.7.2.1. Upon satellite or payload fielding or certification decision, provide notification to HQ AFSPC/A3/A5 via memo, to include any existing limiting factors IAW AFMAN 63-119, *Certification of the System Readiness for Dedicated Operational Testing* and AFSPCI 10-205.

2.7.2.2. Upon new ground system fielding or certification decision, provide notification to HQ AFSPC/A3/A5 via memo, to include any existing limiting factors IAW AFMAN 63-119 and AFSPCI 10-205.

2.7.2.3. Establish Memorandum of Understanding (MOU) with non-SMC Organizations (e.g. Sandia National Labs, SMDC/ARSTRAT, National Oceanic and Atmospheric Administration, etc.) when SMC owns and has SCA over a satellite or payload but uses other crews and/or facilities for satellite TT&C or other satellite operational functions.

2.7.2.4. Maintain SCA from launch through Launch and Early Orbit (L&EO) activities or until the agreed upon SCA transfer to an operational unit. SCA transfer may take place via an SCA Acceptance Meeting or a telecon with applicable members (i.e., System Program Office [SPO], Numbered Air Force [NAF], SW, and unit). A documented follow-up of the SCA transfer notification is sent to the receiving SCA organization with a courtesy copy to HQ AFSPC/A3 (see **Attachment 3**).

2.7.2.5. Develop SCA transfer criteria ICW 14 AF/A3.

2.7.3. Provide sustainment and depot level maintenance of space systems operations hardware and software IAW AFI 63-101_20-101.

2.7.4. Provide technical advisors, as required, to support satellite launch and early orbit operations and anomaly resolution.

2.7.4.1. Develop satellite and ground segment test plans ICW satellite engineers, operators, and technical advisors.

2.7.5. Conduct Research, Development, Test and Evaluation (RDT&E) for satellite operations.

2.7.6. Provide transportable assets to support space systems operations as directed.

2.7.7. Provide assets to support factory compatibility testing and launch base compatibility testing on non-Eastern/Western Range launch facilities.

2.7.8. Provide test and calibration support for on-orbit assets.

2.7.9. Support transition of RDT&E and quick reaction capability space assets to operational units, if required, and provide related system life cycle management functions.

2.7.10. Provide expertise and resources for development and testing of new satellite TT&C and ground systems.

2.7.11. Coordinate with HQ AFSPC/A3/A5 and 14 AF/A3 to ensure SW units have the necessary resources to support new test and development efforts.

2.7.12. Provide training equipment (e.g. Standard Space Trainer or simulator) and training materials, as required, in support of fielding new or modified systems.

2.7.13. Provide logistics support products (e.g. Technical Orders, Integrated Electronic Technical Manuals, etc.) for operations and maintenance functions with the following exceptions: one of a kind Research and Development (R&D) systems, non-AF operations, launch or checkout conducted by contractors.

2.8. **14 AF/CC:**

2.8.1. Translate global and theater space support requirements into mission support priorities for allocation of satellite operations resources. Provide operational guidance to SWs pertaining to prioritization of satellite operations in support of global and theater operations, routine and emergency satellite relocation, operational status changes and disposal actions ICW USSTRATCOM Joint Functional Component Command (JFCC) for Space. 14 AF is responsible for identifying satellite health and status data as well as information services from SWs necessary to perform Blue Force Tracking.

2.8.2. Ensure operational readiness of forces and combat capability of systems to include operations inspections and on-site observations.

2.8.3. Provide operational tasking to the SWs for each CCMD-apportioned space system supported or operated by AFSPC.

2.8.4. Develop procedures and criteria for convening ORBs.

2.8.5. Accept SCA for spacecraft that will be operated by 14 AF units. Delegate to appropriate SW responsible for the mission. Provide written notice of SCA transfers for CCMD-apportioned systems to HQ AFSPC/A3S and appropriate HQ AFSPC/A3S workflow e-mail box, when SCA is transferred from or to an organization outside 14 AF.

2.8.6. Make satellite disposal recommendations to AFSPC/CC.

2.8.7. Develop concepts of operations for COLA, RFI reporting and resolution, and defensive space control efforts. Coordinate with HQ AFSPC/A2 as applicable.

2.8.8. Ensure tactics, techniques, and procedures, mishap prevention and space system safety, and policies are standardized among operational wings.

2.8.9. Conduct Operations Readiness Reviews to ensure readiness of launch vehicles, associated ground systems, and personnel to operate the mission.

2.8.10. Lead the Current Launch Schedule Review Board (CLSRB).

2.8.11. Communicate capability gaps requiring an organize, train, and/or equip activity to HQ AFSPC/A3/A5.

2.8.12. Request SMC deploy transportable assets to support space systems operations.

2.8.13. Serve as the approval authority for operational asset usage requests for testing.

2.8.14. As the user and operator representative, act as the concurring authority for Environmental, Safety, and Occupational Health (ESOH) serious mishap risks for which

the AFPEO/SP is the acceptance authority IAW DoDI 5000.02, *Operation of the Defense Acquisition System* and AFI 63-101.

2.8.15. Perform C-SSE for Protected SATCOM responsibilities IAW SI 714-02 for those systems past IOC.

2.9. **Operational Space Wings (SW) / Satellite Operations Units:**

2.9.1. Plan for and provide, per individual mission or program, continuous satellite operations at all required levels of conflict. **(T-2)**.

2.9.2. Ensure compliance with AFI 10-206 AFSPCSUP1, *Operational Reporting*, applicable supplements and all other operational space mission reporting requirements. **(T-2)**.

2.9.3. Support 14 AF and AFSPC for planning and resourcing of units performing legacy missions, space system upgrades, and operating new TT&C and satellite systems. **(T-2).**

2.9.4. Develop procedures to interface with satellite mission users and operators and other required external agencies to include MOU/MOA with appropriate coordination as necessary. **(T-3)**.

2.9.5. Ensure operational satellite procedures and policies are standardized to the maximum extent possible among operations units, without posing a threat to Operational Safety, Suitability and Effectiveness (OSS&E). **(T-3)**.

2.9.6. Delegate SCA, when assigned by 14 AF to appropriate units for day-to-day operations. **(T-3)**.

2.9.6.1. Ensure units relinquishing SCA provide the expected transfer duration, current spacecraft operational configuration, schedule of planned supports and other spacecraft maintenance activities, operational documentation as required and 24-hour points of contact for engineering and technical assistance to the accepting squadron or organization. **(T-3)**.

2.9.6.2. Ensure gaining and losing units record date and time of SCA transfers and names of authorizing officials in permanent operations logs**.** Forward SCA notification to 14 AF/A3. **(T-3)**.

2.9.6.3. Develop MOUs to describe conditions and responsibilities for SCA transfer between units of different operational space wings. **(T-3)**.

2.9.6.4. Develop MOUs describing roles, responsibilities, and relationships if an operational space wing crew is commanding a satellite or payload on behalf of another owning organization with SCA (e.g., SMC during L&EO checkout). **(T-2)**.

2.9.7. Develop supporting plans and procedures for COLA and RFI conflicts including pre/post-coordination, resolution, and reporting with appropriate organizations. **(T-3)**.

2.9.8. Support the SPO team as needed during rehearsals, L&EO activities, and on-orbit checkout and test activities to include providing a readiness determination of ground systems and operations to 14 AF prior to readiness reviews. **(T-2)**.

2.9.9. Supplement this instruction with local instructions as necessary **(T-3)**.

2.9.10. Develop crew operations procedures and appropriate Operations Instructions (OIs). Ensure units develop and manage operations, training, standardization, evaluation and crew force management programs as required to support the new space systems, components or operational capability, IAW AFSPCI 13-1. **(T-2)**.

2.9.11. As the user and operator representative, serve as the concurring authority for ESOH medium and low mishap risks for which the SPO PM is the acceptance authority IAW AFI 63-101_20-101. **(T-1)**.

2.10. **17th Test Squadron, 53rd Wing, United States Air Force Warfare Center (USAFWC):**

2.10.1. Perform Operational Test and Evaluation for space systems to enhance the military utility of space power to the warfighter and as required to support MAJCOM operational acceptance decisions and IOC-related testing requirements. **(T-2)**.

2.10.2. Provide appropriate post-IOC or sustainment OT&E support per HQ AFSPC, SMC, 14 AF, and SW requirements. **(T-2)**.

3. Command, Control, and Management. CDRUSSTRATCOM exercises Combatant Command (command authority) (COCOM) of assigned forces under Title 10, United States Code, and as directed by the Secretary of Defense (SecDef) Memorandum, Guidance for the Employment of the Force. SI 534-17, SI 534-22, and Operation Olympic Defender Operations Order (OPORD) outline the procedures and responsibilities for CDRUSSTRATCOM to accept or relinquish COCOM for designated operational satellites and payloads as they enter service. Component and/or service commands exercise OPCON and Tactical Control (TACON) under CDRUSSTRATCOM COCOM authority. Additionally, SCA is the authority to command and control the spacecraft and transfers at key points during the life cycle of the vehicle. The SPO has initial SCA, which it transfers to the operational community at a pre-determined time in the system life cycle (see **Attachment 2**). SCA is transferred from the SPO to the NAF, which in turn transfers SCA to the appropriate SW. For day-to-day operations, SCA is further delegated down to the tactical unit level. The initial SCA transfer can occur as early as vehicle separation from booster or as late as early orbit checkout, vehicle placement into operational orbit, or completion of test activities.

3.1. **Early CCMD Acceptance**. Based upon operational need and/or in time of war, USSTRATCOM may request early presentation of a satellite capability prior to formal operational acceptance by the service provider. To request early CCMD Acceptance, USSTRATCOM will send an official request to AFSPC/CC. After collecting and analyzing relevant satellite or payload test and performance data, AFSPC/CC will provide USSTRATCOM with a recommendation that includes an assessment of risk to users should the satellite or payload capability be accepted earlier than originally planned.

3.1.1. Early CCMD Acceptance may be driven by the need to satisfy a Joint Urgent Operational Need (JUON). A JUON is an urgent need identified by a warfighting commander that requires synchronization across multiple Services and Agencies to ensure complete and timely combat capability is provided to the Joint warfighter or contingency operation, which if not addressed, would result in unacceptable risk to life or combat mission accomplishment. Expedited staffing and review procedures are used for

urgent need requests IAW AFI 10-601, *Operational Capability Requirements Development*.

3.1.2. For an early CCMD Acceptance involving the first satellite of a new constellation, the recommendation will come from the AFSPC/CC to USSTRATCOM via the process explained in paragraph 3.2.3. For all subsequent launches, early CCMD Acceptance recommendations may come from HQ AFSPC/A3 to USSTRATCOM. **Note:** First launch of a new constellation includes next generation satellites or a new block design (i.e. GPS III-01, SBIRS GEO-1).

3.2. **CCMD Acceptance.** After collecting and analyzing relevant satellite or payload test and performance data from the SPO, test agencies, Satellite/SATCOM System Expert (SSE), C-SSE, and others; AFSPC will present the satellite or payload capability to USSTRATCOM with a CCMD Acceptance recommendation that includes an overall assessment of risk (ref. **Attachment 2 and Attachment 4**). Recommendations will be based upon the criteria outlined in AFMAN 63-119, AFSPCI 10-205, Developmental and Operational Test results, Trial Period, SI 534-17, SI 534-22, and USSTRATCOM Operation Olympic Defender, as applicable.

3.2.1. For satellites that are the first launch of a new constellation and upon successful satellite or payload checkout, AFSPC/CC will present satellite or payload capability to USSTRATCOM and submit CCMD Acceptance recommendations. **Note:** First launch of a new constellation includes next generation satellites or a new block design (i.e. GPS III-01, SBIRS GEO-1).

3.2.2. For all subsequent launches, CCMD Acceptance recommendations may be provided from HQ AFSPC/A3 to USSTRATCOM. HQ AFSPC/A3 will notify USSTRATCOM of the new asset and state readiness and limiting factors for CCMD Acceptance per para **3.2.3**

3.2.3. IAW SI 534-17 and Operation Olympic Defender, the standard CCMD Acceptance procedure is as follows: After launch and early-orbit testing and any required final orbit maneuvers (as specified in each system's test plan), AFSPC/CC or HQ AFSPC/A3 assesses the satellite's capability to support operational requirements, declares the satellite operational (Operational Acceptance), and recommends CCMD Acceptance via memorandum to USSTRATCOM/J3, JFCC SPACE/CC and SMDC/ARSTRAT (as required). If a new satellite and/or payload will have operational responsibility shared by more than one service/agency (e.g. SATCOM satellites where SMDC/ARSTRAT is the C-SSE for the payload), AFSPC will coordinate with the other service/agency and provide a consolidated CCMD Acceptance recommendation. CDRUSSTRATCOM then delegates OPCON for the system to the appropriate component and/or service. For Integrated Tactical Warning and Attack Assessment (ITW/AA) contributing satellites, additional guidance to support USSTRATCOM COCOM are referenced in SI 534-22 and its companion, NORAD Instruction 10-3 (see **Attachment 4**).

4. Operations. AFSPC's satellite operations include the following activities: pre-launch; launch, deployment and early orbit checkout; anomaly resolution; operational TT&C; mission operations; payload operations; end-of-life operations; and disposal support to all assigned space systems. The SWs and SPO will develop procedures to operate assigned space systems.

4.1. **Pre-Launch Preparation and Activities.**

4.1.1. The applicable SMC SPO will:

4.1.1.1. Develop satellite or payload test and checkout plans for each new satellite or payload to be operationally employed. Test and checkout plans will be coordinated with the developing organization as well as the receiving SW.

4.1.1.2. Develop, test, and checkout appropriate database updates for new satellites and ensure incorporation and compatibility with the ground segment prior to Ground Readiness Reviews, to include factory compatibility testing and launch based compatibility testing as applicable.

4.1.1.3. Conduct of Ground Readiness Reviews and dress rehearsals prior to launch with assistance from the SWs.

4.1.2. 14 AF/CC will:

4.1.2.1. Conduct Operational Readiness Reviews to ensure and verify all support missions requirements are met for all launch ranges to include associated ground systems, and personnel to operate the mission.

4.1.3. The applicable SW will:

4.1.3.1. Perform pre-launch satellite or payload TT&C compatibility checkout. Provide all required support for all planning efforts leading to launch, including Ground Readiness Reviews and Launch Rehearsals. **(T-2)**.

4.1.3.2. Provide mission readiness assessment to Launch Decision Authority (LDA) for all SW activities and resources supporting launch operations. **(T-1)**.

4.2. **Launch and Early Orbit (L&EO) Operations.** The SPO and/or SWs will develop and execute procedures for the following when assigned the mission responsibility for a system by AFSPC and/or 14 AF:

4.2.1. Launch Operations: The SPO and/or SWs support launch operations as required, including tracking and monitoring the satellite or payload while attached to the launch vehicle through booster and launch operations checkout. 14 AF will receive SCA from the SPO post launch or upon early orbit checkout, vehicle placement into operational orbit, or completion of test activities., as appropriate (see **Attachment 2 & Attachment 3**). **(T-2)**.

4.2.1.1. In cases where the satellite is contractor launched but is intended to be controlled and operated by AFSPC, SMC will lead the development of support agreements between themselves, the contractor(s), and the appropriate AFSPC wing(s). **(T-2)**. This agreement will clearly define the timeline and conditions for SCA transfer(s), the roles and responsibilities of contractor and government personnel, and the conditions for final SCA transfer to the military including DD Form 250, *Materiel Inspection and Receiving Report* signature.

4.3. **Early Use**. Agencies who require satellite data, telemetry, or payload services for operational use outside of the normal testing process before the satellite or payload is operational must officially request those services from HQ AFSPC/A3. Early Use enables use of a satellite's services prior to entry into operations or completion of satellite checkout.

Early Use will be coordinated between the requesting agency and affected AFSPC organizations to determine limitations, risks, capabilities, interim procedures, resource requirements and readiness. Early Use operations may occur prior to OA and may not require transfer of SCA to provide the satellite services to the requesting agency under terms of Early Use. An established Mission Ready/Combat Mission Ready (MR/CMR) program is not required for Early Use operations. A training program should exist and be documented during the interim timeline and be acknowledged in a SW Operating Instruction IAW Instructional System Development (ISD). A MR/CMR program should be established prior to formal Operational Testing leading to OA. **(T-1)**.

4.4. **On-Orbit Operations.** The SWs will execute technical orders and/or operations manuals and develop unit-level procedures for the following:

4.4.1. On-orbit TT&C operations to evaluate satellite or payload status, maintain operational capability, and conduct satellite and payload operations as required. These activities include, but are not limited to, prescribed satellite TT&C activities, mission data recovery, mission data processing, repositioning maneuvers, and station keeping functions during the useful life of the satellite or payload. **(T-1)**.

4.4.2. Emergency responses for situations that require immediate decision and action, the SW will implement actions necessary to safe and recover the satellite or payload. In such cases, the SW may take actions as determined by unit anomaly team to the extent required in the interests of satellite or payload safety. In all cases, SWs will keep the 14 AF/SE, Joint Space Operations Center (JSpOC), and AFSPC Command Center informed of actions taken to safe and recover the satellite or payload. The anomaly team will keep Wing Safety informed to determine if mishap criteria are reached. Wing Safety will also work with the SPO system safety POC to assess the potential mishap risk associated with the contingency and support the SPO in updating and developing hazard analyses required IAW the prescribed Mil-Std-882E, *DoD Standard Practice for System Safety*, methodology. **(T-1)**.

4.4.3. Monitor and maintain the status of each subsystem and maintain and analyze available satellite or payload telemetry throughout the useful life. Analyze data to detect trends, degradation or anomalies, and develop procedures and recommend changes to minimize the effects of anomalies. **(T-2)**.

4.4.4. Monitor, trend, and analyze satellite or payload mission performance (e.g., detection capability, timing, etc.). Analyze data to detect trends or identify mission degradation to support the development of mitigation procedures and constellation redeployment and sustainment efforts. (T-2).

4.4.5. Report Operational Capability (OPSCAP) or System Capability (SYSCAP), as required, IAW established procedures for each supported mission area. **(T-1)**.

4.4.6. **(50 SW)** Operate and sustain the AFSCN to provide common use TT&C services and support to AF, DoD, National Reconnaissance Office, civil and authorized users. Plan and execute the Network Tasking Order to connect Satellite Operations Centers to network assets (e.g., communications, remote tracking antennas, etc.) for operations and rehearsals. **(T-1)**.

4.4.7. Conduct space system anomaly and trend analysis IAW HQ AFSPC/A3 direction and SPO Orbital Operations Handbooks (OOH) **(T-2)**. Any anomaly not immediately attributable to a known cause must be investigated for other potential sources. **(T-3)**.

4.4.7.1. Request HQ AFSPC/A2 support to determine possible hostile operations that display as anomalies or trends. **(T-3)**.

4.4.7.2. Request 614 AOC/SPD, JSpOC Weather Support Team, and 2d Weather Squadron, Space Weather Flight forecaster or analyst support, for investigation of whether environmental conditions were conducive to the subject anomaly. **(T-3). Note:** Both work centers should be contacted to ensure all relevant space environmental conditions are considered in the assessment.

4.4.7.3. Provide the 614 AOC/SPD and 2d Weather Squadron the following information: Date/Time of Anomaly, state vectors of satellite, system location/description at time of anomaly, and type of anomaly. **(T-3)**.

4.4.8. Develop tactics, techniques, and procedures (TTPs) for detecting and characterizing indications of potential hostile action taken against space systems (i.e., ground, communications, and space segment). Collect and correlate data across all assigned space systems. Identify actions that can be taken to mitigate effects of an attack. **(T-3)**. Coordinate TTPs with HQ AFSPC/A2.

4.4.9. In response to HQ AFSPC/A3 direction and operational needs, SWs will develop procedures for operating and sustaining residual capability satellites. 14 AF and the SW will coordinate residual satellite operational policies and plans through HQ AFSPC/A3 to ensure affected units are appropriately resourced. **(T-2)**.

4.4.10. Conduct orbital analysis operations to perform functions such as ephemeris generation and distribution, maneuver planning, collision avoidance, end-of-life test and checkout (TACO), and disposal. **(T-1)**.

4.5. **Contingency Operations.** The SWs will execute procedures to conduct contingency operations for the following:

4.5.1. Operate and correct malfunctioning satellites, payloads, or ground systems consistent with technical guidance provided by the SPOs, responsible or authorized external agencies and satellite, payload, or ground system contractors. The procedures will address correcting or mitigating the impact of failures, including safing the satellite or payload (i.e. ensure the satellite or payload does not sustain further damage). These procedures will also include actions aimed at maximizing on orbit capabilities while minimizing risk to satellite or payload health. All anomalies will be evaluated for indications of intentional hostile action or environmental conditions as part of the initial response to resolve the anomalies. **(T-2)**.

4.5.2. Convene an anomaly team as required to identify, assess, and resolve anomalous conditions. Transfer SCA as required. The anomaly team will keep Wing Safety informed to determine if mishap criteria are reached. Wing Safety will also work with the SPO system safety POC to assess the potential mishap risk associated with the contingency or new operation and support the SPO in updating and developing hazard

analyses required IAW the prescribed Mil-Std-882 methodology. **(T-1)**. Membership should consider intelligence and weather support. **(T-3)**.

4.5.3. Establish threat and intrusion detection procedures. Perform routine analysis of space systems telemetry to detect and report suspected or actual space system interference, attacks, natural threats, or system failures in a timely manner. Up channel reports as required by AFI 10-206, Commander's Information Request (CCIR), or operational requirements **(T-2)**.

4.5.4. Establish collision avoidance procedures. Respond to identified close approaches and coordinate with JSpOC for conjunction assessment. Determine Course of Action (COA) and implement approved COA as directed by JFCC Space or current designated TACON authority. **(T-1)**.

4.5.5. Notify system users of changes that may affect them. **(T-3)**.

4.6. **Backup Satellite Control.** Provide continuity of operations for satellite or payload control IAW AFI 10-208, *Air Force Continuity of Operations (COOP) Program* and AFI 10-208 AFSPCSUP_I (15 Jul 08).

4.6.1. Backup control capabilities (TT&C for satellites and payloads) may be established and function until primary control capabilities are restored following these guidelines:

4.6.1.1. This capability includes the necessary communication links, TT&C, maneuverability, reconfiguration, launch operations and anomaly resolution actions. Backup Satellite Operation Centers are not intended to mirror the full capability of the primary operation centers. However, backup communication links should have the same capability as the primary communication link.

4.6.1.2. Given the loss of the primary operations facility or communications link, backup resources will assume responsibility for conducting routine operations, anomaly resolution and/or contingency operations. Although the actual responsiveness required will vary with specific mission requirements, procedures and databases must be ready to implement with sufficient responsiveness to preclude lasting impact to mission capability. Facilities must be able to sustain operations, per operational requirements or IAW approved agreements, for reconstitution time of the primary space operation center(s).

4.6.2. Complimentary communication control node capabilities of the AFSCN will be established. The alternate node will have the capability to perform primary functions; however, not all capabilities are shared between the nodes. Two different AFSCN control nodes provide a capability of balanced workload across the network.

4.6.2.1. Provide for full primary and additional communications services to assure operator connectivity to all remote tracking stations of the AFSCN.

4.6.2.2. Given the loss of the primary control node facility, redundant control node communications must be maintained in a condition able to immediately assume responsibility for conducting TT&C, anomaly resolution and/or contingency operations.

4.6.3. Geographic separation should be sufficient to prevent simultaneous degradation to both the prime and backup operational control nodes that could degrade mission

capability from the same man-made or natural threat (e.g. severe weather, terrorist attack or earthquake) **(T-3)**.

4.6.4. While not required, it is desirable for backup capabilities to be organic AFSPC units in order to take advantage of the synergy gained from mutual support. RDT&E missions are exempt from having a backup satellite control capability; however, AFSPC RDT&E satellite control capabilities may be available to provide backup functions for operational missions. **(T-3)**.

4.6.5. SWs will develop tactics, techniques and procedures to support satellite control backup operations. **(T-3)**.

4.6.6. HQ AFSPC/A3 will develop designed operational capability (DOC) statements for each backup control capability IAW AFI 10-201, *Status of Resources and Training Systems.*

4.7. **Satellite End-of-Life, CCMD Relinquishment, and Disposal.** The objective of normal satellite disposal is to reduce the potential for spacecraft collisions, frequency interference, space debris, and to open orbital slots to newer satellites. Therefore, de-orbiting or removing a non-mission capable satellite from its operational orbit and placing it into an established disposal region are of paramount importance. As a satellite approaches the end of its operational life, each SW will ensure every satellite maintains its disposal capability. This includes assured TT&C and sufficient fuel to reach the disposal region. All efforts and actions will be geared towards the objective of de-orbiting or removing a satellite from an operational orbit to an orbit of non-interference. When operational considerations allow, assets nearing disposal criteria should be considered for end-of-life testing activities which would generate spacecraft performance data which could inform future design efforts. Examples include damage testing to determine component failure mechanisms and actual performance thresholds. Further testing can be accomplished to develop TTPs for spacecraft protection from adversary threats. Any such testing activities must not impede the proper disposal of the spacecraft following testing. When a satellite and/or payload can no longer meet its mission requirements or approaches the disposal criteria in the End of Life Plan (EOLP) (e.g. fuel depletion), AFSPC will notify USSTRATCOM of the impending disposal and recommend CCMD relinquishment of the asset. In an emergency disposal situation, where the decision must be made within 24 hours, CDR JFCC Space is authorized to make the disposal decision IAW Operation Olympic Defender.

4.7.1. SMC/CC:

4.7.1.1. SMC Program Managers shall prepare, update and deliver to 14 AF/A3 an initial EOLP using format, content and schedule outlined in Attachment 3 of AFI 91-217, ***Space Safety and Mishap Prevention Program***. This instruction shall also be used as guidance for disposal of R&D satellites. Disposal of SATCOM satellites is outlined in Chairman Joint Chiefs of Staff Instruction (CJCSI) 6250.01E, ***Satellite Communication,*** USSTRATCOM Operation Olympic Defender, SI 505-4, and this instruction. Disposal of non-SATCOM satellites is outlined in USSTRATCOM Operation Olympic Defender, SI 505-4, and this instruction. For R&D satellites or those in long-term Test and Check out (TACO) the SSE or organization with system responsibility will recommend disposal to HQ AFSPC/A3 IAW the EOLP.

4.7.2. HQ AFSPC/A3:

4.7.2.1. Coordinate on all recommended disposal actions prior to the operational unit taking any disposal actions. **Note:** For SATCOM submissions, AFSPC will recommend disposal with Global SATCOM Support Center (GSSC) concurrence and forward the recommendation to USSTRATCOM (see **Attachment 5**).

4.7.2.2. For normal satellites and/or payloads disposal decisions where AFSPC has OPCON of the asset, HQ AFSPC/A3 will provide a disposal and CCMD relinquishment recommendation, NLT 10 days prior to the required disposal date, via memorandum to USSTRATCOM/J3, JFCC Space, and SMC/ARSTRAT (as required) (see **Attachment 6**). **Note:** A normal disposal is where the decision timeframe is greater than 24 hours to comply with the requirements of **paragraph 4.7** Otherwise, it is an emergency disposal and CDR JFCC Space makes the disposal decision.

4.7.2.3. IAW AFI 21-103 AFSPCSUP, ***Equipment Inventory, Status, and Utilization Reporting***, HQ AFSPC/A3S will send disposal notification to HQ AFSPC/A4S to update REMIS records in support of Financial Improvement Audit Readiness requirements.

4.7.2.4. As a satellite transitions through its on-orbit lifetime, SSE responsibility normally follows the organization with SCA, unless otherwise directed by HQ AFSPC/A3 **(**see **Attachment 2).**

4.7.3. HQ AFSPC/SE: Coordinate on all recommended disposal actions prior to operational units taking any actions that may affect a satellite's ability to comply with AF and DoD satellite disposal requirements.

4.7.4. 14 AF/CC:

4.7.4.1. Monitor satellite capability criteria as part of standard operations. Once 14 AF designates a satellite as Non-Mission Capable (NMC) and/or the satellite has potential disposal capability problems per established criteria, 14 AF/A3 will forward a disposal recommendation to HQ AFSPC/A3 for review, NLT 14 days prior to the projected date of disposal. At a minimum, the recommendation will include the disposal criteria the satellite meets and projected date of disposal.

4.7.4.2. Act as SSE for Defense Support Program (DSP), Space-Based Infrared System (SBIRS), Global Positioning System(GPS), Space-Based Space Surveillance (SBSS), Defense Meteorological Satellite Program (DMSP), Operationally Responsive Space (ORS) and any other satellite-system presented to USSTRATCOM through 14 AF. **Note:** SSE for MILSATCOM refers to the SATCOM System Expert. MILSATCOM SSE for wideband communications resides at Space and Missile Defense Command/Army Strategic Command (SMDC/ARSTRAT). MILSATCOM SSE for protected communication reside at HQ AFSPC/A5M and 614th Air and Space Communications Squadron (ACOMS).

4.7.4.3. Act as satellite bus experts for the Defense Satellite Communications System (DSCS) and Wideband Global SATCOM (WGS) constellations.

4.7.4.4. Approve criteria for identifying satellites as non-mission capable, and forwards the criteria to HQ AFSPC/A3.

4.7.4.5. Coordinate with DISA and SMDC/ARSTRAT, the SSE for Wideband Communication Systems, to identify satellites and payloads as non-mission capable.

4.7.4.6. Coordinate with HQ AFSPC/A5M and 614 ACOMS for protected communications systems, to identify satellites as non-mission capable.

4.7.4.7. Coordinate with Air Force Technical Application Center (AFTAC) for United States Nuclear Detonation Detection System (USNDS) payload criteria and for identifying USNDS payloads as non-mission capable.

4.7.4.8. Provide HQ AFSPC/A3 with plans for satellite disposal to include end-of-life testing requirements, means for disposal, disposal orbit, environmental and safety considerations. Send standard disposal recommendations 120 days in advance of the anticipated disposal date.

4.7.4.9. Develop and manage any end-of-life tests or other test activities prior to satellite disposal, as required

4.7.4.10. In the case where disposing of a satellite must be expedited (less than 30 days), sends immediate request for disposal to HQ AFSPC/A3.

4.7.5. SWs / Satellite Operation Units:

4.7.5.1. Develop and forward program-specific disposal criteria for non-mission capable satellites to 14 AF/CC for approval. As a minimum, these criteria will include on-board fuel estimate, fuel consumption, fuel requirements for disposal actions, the ability of the bus to support the payloads, payload capability and capacity (including secondary payloads), vehicle command/control capability, vehicle power capacity, disposal maneuver requirements, and operational safety considerations. For satellites that will reenter Earth's atmosphere, provide an analysis detailing probability, make-up and size of any object surviving reentry. Periodically review EOLP after major milestone or operations to ensure currency. **(T-2)**.

4.7.5.2. Upon direction and IAW USG Orbital Debris Mitigation Standard Practices, place satellites designated for disposal in a position (slot/plane/orbit) of non-interference with existing systems or de-orbit into the Earth's atmosphere. Operational units will consider operational orbit contamination, radio-frequency interference and future constellation development. These guidelines do not preclude any end-of-life testing deemed necessary either prior to or after satellites are placed in their disposal orbit. Ensure 32 CFR Part 989, *Environmental impact Analysis Process*, is completed in a timely fashion **(T-0)**.

4.7.5.2.1. Properly safing the bus and all payloads is a critical step in the disposal process. The operational unit will deplete all spacecraft fuel to the maximum extent possible, disable all spacecraft battery charging systems, stabilize the spacecraft in a neutral thermal flight mode (slow spin for most) and, when appropriate, disable transmitters. Safing the satellite takes precedence over all other disposal actions **(T-0)**.

4.7.5.2.2. Remove non-mission capable vehicles from operational orbits **(T-0)**.

4.7.5.3. Submit specific de-orbit or post-maneuver vectors to 14 AF before disposal for approval of reentry locations and/or orbital safety screening for possible conjunctions **(T-1)**.

4.7.5.4. Contact the HQ AFSPC/A3 in an emergency situation to expedite the decision process for the safe disposal of a satellite **(T-2)**.

5. R&D System Transition. AFSPC will implement its R&D system transition IAW AFI 10-601, AFI 63-101_20-101 and AFI 63-114, *Quick Reaction Capability Process*. Emerging technologies enable opportunities to quickly acquire advanced technology sensors, satellites, intelligent subsystems and threat avoidance systems on R&D space and ground systems. Operational and system requirements will be communicated to SMC in order to determine appropriate acquisition strategy to meet requirements. Decisions to address a critical capability gap, shortfall or system enhancement will be made by HQ AFSPC/A5 based on recommendations from HQ AFSPC Staff, to include validated requirements not met by existing systems, funding availability, and any resource limitations. All agencies are empowered to identify potential R&D capabilities to HQ AFSPC/A5. Transition to operations will be made by HQ AFSPC/A3 IAW AFSPCI 10-205. Once capability requirement is validated through either the Operational Capability Requirements Development or Quick Reaction Capability processes, new systems will follow established acquisition, integration, program management and testing standards (when applicable). Joint Capability Technology Demonstration (JCTDs), qualified prototype, and quick reaction technology projects will comply with the Joint Capabilities Integration Development System (JCIDS) process as they transition into the acquisition process. HQ AFSPC/A5 will produce JCIDS documents appropriate for the Milestone at which they are entering the acquisition process IAW CJCSI 3170.01H, *Joint Capabilities Integration and Development System*, Enc B, para 11.

5.1. **HQ AFSPC/A3:**

5.1.1. Assess operational needs and evaluate viability of proposed R&D capability to fulfill these needs ICW HQ AFSPC/A5.

5.1.2. ICW HQ AFSPC Staff and 14 AF, develop mission assignment recommendation for AFSPC/CC. Identify manning and funding required to resource identified unit.

5.1.3. Coordinate on transition plans to integrate required TT&C systems into the assigned SW and oversee development of crew training, evaluation, and operational procedures in preparation for normal operations IAW AFI 10-601, 63-101/20-101 and AFI 63-114.

5.1.4. Coordinate with USSTRATCOM/J3 for those spacecraft with OPCON delegated to the COMAFFOR. SMC will transition developed components or capabilities to operations IAW AFI 63-114.

5.1.5. Manage funding and identify funding requirements through system life and POM cycles to HQ AFSPC/A8/9 prior to system acceptance. Ensure new tasking is within the scope of the intended unit's DOC statement. If required, amend DOC statement. Ensure new systems are sustainable through logistics and maintenance infrastructure.

5.1.6. Coordinate on transition plans to include test and evaluation, mishap prevention, and/or system safety requirements as identified in AFI 10-601 and AFI 63-114.

5.1.7. Ensure transition planning documentation includes acceptance criteria of hardware and software changes to operations IAW AFI 10-601 and FI 63-101/20-101.

5.1.8. Ensure availability of appropriate command, control, and system integration documents to support transition of new systems, components, and capabilities.

5.1.9. Ensure acquisition strategy and transition plans system requirements, e.g. hours of support required per day, specialized payload requirements, scheduling requirements, ground system equipment configurations, disposal criteria, etc. as required by AFI 10-601 and AFI 63-114.

5.1.10. Coordinate on transition strategy included as part of the JCTD Management Plan as required by AFI 63-101_20-101.

5.1.11. Ensure new system data processing and products for integration into established, mission certified processing systems, are certified as required by AFI 63-101_20-101 prior to operational use.

5.1.12. Request HQ AFSPC/A1 assistance to validate manpower requirements IAW AFSPCI 10-205.

5.1.13. Recommend to 14 AF use of existing operations units and resources to perform operational testing of R&D assets.

5.1.14. Coordinate with Air Education and Training Command (AETC) and user community on training requirements for Operationally Responsive Capability (ORC) requirements IAW AFI 10-601 and AFI 63-114.

5.1.15. Participate in satellite operation planning activities such as the AFSPC Strategic Planning Process (i.e., Integrated Planning Process [IPP]).

5.1.16. For R&D satellites capable of imaging the Earth using electro-optical, radar, infrared, multi-spectral, hyper-spectral, or other imaging systems, coordinate with HQ AFSPC/A2 to determine whether a proper use memorandum is necessary for post-transition imaging operations conducted over US territory for calibration, testing, or operational purposes.

5.1.17. Declare system or technology operational and notify AFSPC/CC.

5.2. **HQ AFSPC/A5:**

5.2.1. Develop and process appropriate capability requirements documents IAW AFI 10-601 and AFI 63-114 and for Joint Capability Technology Demonstrations (JCTDs) and Advanced Technology Demonstrations (ATD).

5.2.2. Consolidate MAJCOM space system capability requirements into specific JCTD or ATD proposals, as appropriate.

5.2.3. Support Air Force Research Laboratory and DoD Space Test Program demonstrations.

5.2.4. Provide advocacy for space system JCTD and/or ATD requirements and funding.

5.2.5. Coordinate with users and SMC to define technical baselines for JCTD/ATD leave behind systems and to designate OSS&E responsibilities.

5.2.6. Ensure availability of appropriate technical and engineering support to new systems, components, and capabilities as required by AFI 63-101_20-101 and 63-114.

5.2.7. Coordinate on transition strategy included as part of the JCTD Management Plan as required by AFI 63-101_20-101.

5.3. **HQ AFSPC/SE:**

5.3.1. Provide advocacy for space safety requirements and funding.

5.3.2. Review SPO or 14 AF assessment of risk of introducing R&D data into established, mission-certified processing systems.

5.4. **Space and Missile Systems Center (SMC):**

5.4.1. Develop transition and fielding plan for ORC acquisitions ICW AFSPC as required by AFI 63-101_20-101 and AFI 63-114. Develop and execute acquisition strategy to meet defined requirements within coordinated timelines. Coordinate with user, contractor, HQ AFSPC/A5, and stakeholder communities in the acquisitions process to ensure needs are met in scope of acquisition strategy enabling ORC.

5.4.2. Develops JCTD Management Plan including a transition strategy for assigned ATD and JCTD projects IAW AFI 63-101_20-101. Coordinate JCTD Management Plan with HQ AFSPC/A5.

5.4.3. Provide technical support, OSS&E, and sustainment during the transfer of leave behind JCTD assets and ORC acquisitions to operational unites as required by AFI 63-101_20-101 and AFI 63-114.

5.4.4. Provide logistics support to R&D assets during their test period. Additionally, if the assets are required for follow-on operational use, continue logistics support IAW AFI 63-101_20-101 and AFI 63-114.

5.4.5. Develop or acquire appropriate technical documentation to support new systems, components and capabilities. Ensure R&D and ORC contracts do not limit the ability for the Government to assert data rights at a future point as required by AFI 63-101_20-101 and AFI 63-114. **(T-1).** SMC/CC should consider whether acquisition of data rights for R&D or ORC systems would be prohibitively expensive or slow down the acquisition process.

5.5. **14 AF/CC:**

5.5.1. Provide criteria for operational assessment and viability of proposed R&D system to HQ AFSPC/A3.

5.5.2. Provide assessment of proposed R&D system's ability to meet USSTRATCOM requirements levied on HQ AFSPC/A5.

5.5.3. ICW HQ AFSPC/A3/A8/9 develop mission assignment recommendation for AFSPC/CC.

5.5.4. Support Operational Testing to assess the impact of accepting the R&D asset.

5.5.5. Ensure new systems, components or capabilities are integrated into wartime missions and tasking.

5.5.6. Ensure units have adequate resources to operate their systems.

5.6. **17th Test Squadron/53rd Wing/United States Air Force Warfare Center (USAFWC)**

5.6.1. Provide technical assessment of proposed R&D system viability and Operational Testing as required to support operational acceptance decisions.

5.6.2. Determine compatibility and identify risk of introducing R&D data into established, mission-certified processing systems.

5.7. **Space Wings / Satellite Operations Unit:**

5.7.1. Develop crew operations procedures and appropriate OIs. Transition existing procedures to operational units and ensure units develop and manage operations, training, standardization, evaluation and crew force management programs as required to support the new space systems, components or operational capability IAW AFSPCGM 13-1**.**

5.7.2. Identify funding and resource requirements through 14 AF/CC and HQ AFSPC/A5 for operating new systems ICW SMC. **(T-3)**.

6. Capability Assessment and Reporting. SYSCAP is a continuous assessment of the capability of a system or program to perform its mission. OPSCAP is a continuous assessment of the capability of the major components of a system or program to perform the mission. SYSCAP and OPSCAP assessments support real-time planning and serve as a measure of system capability. Each SW will develop specific criteria to define mission degradation and SYSCAP/OPSCAP status changes. **(T-2)**. 14 AF/A3 is the final approval authority for these criteria, IAW COCOM mission policies and procedures. Submit reports IAW AFI 10-206 and AFI10-206 AFSPCSUP1.

7. Constellation Sustainment. Constellation Sustainment Assessment Teams (CSAT) will review on-orbit constellation status for DMSP, DSP, SBIRS GPS, DSCS, WGS, Milstar and AEHF and other assigned AFSPC satellite systems. CSATs will convene at least semi-annually, prior to the CLSRB, and review the Space Launch Manifest and Current Launch Schedule (CLS), examine the health of operational constellations (including possible disposal actions), ensure user requirements are satisfied and forecast launch requirements. CSATs will forward satellite reconfiguration, constellation repositioning, launch replenishment, and disposal recommendations to 14 AF/CC for approval. 14 AF/CC forwards for approval, reconfiguration, repositioning, and disposal recommendations to AFSPC/CC and issues launch schedule recommendations based upon the results of a resource assessment to the CLSRB. The 14 AF/CC approves or disapproves the launch schedule recommendations and the decision is reflected in the revised CLS. Teams will also convene on an as-needed basis in response to contingencies.

7.1. **Membership.** CSATs are chaired or co-chaired by 14 AF/A3 and will be comprised of members from HQ AFSPC, SMC, SWs, the operational units providing TT&C and mission support, the supporting Space Launch Squadron/Launch Support Squadron (if required), mission users and other interested agencies as required. DSCS/WGS CSATs are co-chaired by SMDC/ARSTRAT and 14 AF/A3.

7.2. **Responsibilities.** Responsibilities outlined in this instruction cover overall CSAT management and chairmanship. Specific responsibilities (e.g., secretariat, tracking of Action Items, etc.) will be defined in roles and responsibilities documents developed for each CSAT.

7.2.1. HQ AFSPC/A3 participates as a member in CSATs for DMSP, DSP, SBIRS, GPS, DSCS, WGS, Milstar and AEHF. HQ AFSPC/A3 presents constellation replenishment recommendations for COCOM constellations using the Operational Generalized Availability Program (OPGAP) model**.**

7.2.2. 14 AF/A3 organizes and chairs CSATs for DSP, SBIRS, GPS, DMSP, Milstar and AEHF. 14 AF/A3 organizes and co-chairs DSCS/WGS CSATs.

8. Reports. Accomplish reports IAW AFI 10-206 and AFI 10-206, AFSPC SUP1.

DAVID J. BUCK, Brigadier General, USAF
Director of Air, Space and Cyberspace Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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Abbreviations and Acronyms

14AF—14th Air Force

A3—Director of Air, Space and Cyberspace Operations

A3S—Space Operations Division

AEHF—Advanced Extremely High Frequency System

AETC—Air Education and Training Command

AFLCMC—Air Force Life Cycle Management center

AFOTEC—Air Force Operational Test and Evaluation Center

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFSCN—Air Force Satellite Control Network

AFSPC—Air Force Space Command (Air Force Component to US Strategic Command)

AFSPCI—Air Force Space Command Instruction

AFSTRAT—Air Forces Strategic

AFTAC—Air Force Technical Applications Center

ANG—Air National Guard

ARSTRAT—Army Strategic Command

ATD—Advanced Technology Demonstration

C2—Command and Control

CA—Command Authority

CDD—Capability Development Document

CDRUSSTRATCOM—Commander, United States Strategic Command

CI—Configuration Item

CJCSI—Chairman Joint Chiefs of Staff Instruction

CLS—Current Launch Schedule

CLSRB—Current Launch Schedule Review Board

MR/CMR—Mission Ready/Combat Mission Ready

C-NAF—Component Numbered Air Force

COA—Course of Action

CCMD—Combattant Command

COCOM—Combattant Command Command Authority

COLA—Collision Avoidance

COMAFFOR—Commander Air Force Forces for Space, AFSPC/CC

CPD—Capability Production Document

CSAT—Constellation Sustainment Assessment Team

DISA—Defense Information Systems Agency

DMSP—Defense Meteorological Satellite Program

DOC—Designed Operational Capability

DSCS—Defense Satellite Communications System

DSP—Defense Support Program

EHF—Extremely High Frequency

EMI—Electromagnetic Interference

EOLP—End of Life Plans

ESOH—Environmental, Safety, and Occupational Health

FLTSAT—Fleet Satellite

FLTSATCOM—Fleet Satellite Communications

FOC—Full Operational Capability

GSSC—Global SATCOM Support Center

GPS—Global Positioning System

GRR—Ground Readiness Review

GSRR—Ground Station Readiness Review

HHQ—Higher Headquarters

ICW—In Coordination With

IOC—Initial Operational Capability

IPP—Integrated Planning Process

ISD—Instructional System Development

ISR—Intelligence Surveillance and Reconnaissance

ITW/AA—Integrated Tactical Warning and Attack Assessment

JCIDS—Joint Capabilities Integration Development System

JCTD—Joint Capability Technology Demonstration

JFCC—Joint Functional Component Command

JSpOC—Joint Space Operations Center

JUON—Joint Urgent Operational Need

LDA—Launch and Deployment Authority or Launch Decision Authority

L&EO—Launch and Early Orbit

MAJCOM—Major Command

MILSATCOM—Military Satellite Communications

MMSOC—Multi-mission Satellite Operation Center

MOA—Memorandum of Agreement

MOU—Memorandum of Understanding

MUOS—Mobile User Objective System

NAF—Numbered Air Force

NASA—National Aeronautics and Space Administration

NRO—National Reconnaissance Office

NMC—Non-mission capable

NNSOC—Naval Network and Space Operations Command

NOAA—National Oceanic and Atmospheric Administration

NORAD—North American Aerospace Defense Command

OA—Operational Acceptance

OI—Operating Instruction

OPCON—Operational Control

OPGAP—Operational Generalized Availability Program

OOD—Operation Olympic Defender

OOH—On Orbit Handbook

OPORD—Operations Order

OPR—Office of Primary Responsibility

OPSCAP—Operations Capability

ORB—Operations Review Board

ORC—Operationally Responsive Capability

ORD—Operational Requirements Document

ORS—Operationally Responsive Space

OSS&E—Operational Safety, Suitability & Effectiveness

OT—Operational Test

OT&E—Operational Test and Evaluation

PCA—Payload Control Authority

PMC—Partial Mission Capable

PNT—Positioning, Navigation and Timing

POM—Program Objective Memorandum

RAF—Royal Air Force

R&D—Research and Development

RDS—Records Disposition Schedule

RDT&E—Research, Development, Test and Evaluation

RFI—Radio Frequency Interference

SATCOM—Satellite Communications

SBIRS—Space-Based Infrared System

SBSS—Space-Based Space Surveillance

SCA—Satellite Control Authority

SD—Strategic Command Directive

SECDEF—Secretary of Defense

SI—Strategic Command Instruction

SMC—Space and Missile Systems Center

SMDC—Space and Missile Defense Command

SOC—Satellite Operations Center

SOH—State of Health

SPO—System Program Office

SSA—Space Situational Awareness

SSE—Satellite System Expert or SATCOM System Expert

SW—Space Wing

SYSCAP—Systems Capability

TACO—Test and Check-Out

TACON—Tactical Control

TCS—Telemetry and Command Station

TT&C—Telemetry, Tracking and Commanding

UFO—Ultra High Frequency Follow-on

UHF—Ultra High Frequency

USAFWC—United States Air Force Warfare Center

USNDS—United States Nuclear Detonation Detection System

USSTRATCOM—United States Strategic Command

WGS—Wideband Global SATCOM

Terms

Air Force Satellite Control Network (AFSCN)—An operational national resource of communication links and worldwide TT&C antennas that provide global support for launch and on-orbit operations for DoD, national, RDT&E, NOAA, and Allied space systems and programs. The AFSCN provides network support for satellite operations in support of warfighters, the President, and Secretary of Defense.

Anomaly—An unexpected or unplanned condition or event affecting the space, ground or communications segment that does not meet system performance parameters.

Bus—The part of the satellite that carries and supports the payload. The bus includes the satellite's structure, power system, telemetry, tracking and commanding system, attitude control system, and thermal control. The satellite bus can degrade/fail before the payload, making disposal necessary even though the payload can still accomplish the mission.

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

Command Authority (CA)—Combatant command (command authority) cannot be delegated and 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. Combatant command (command authority) should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Combatant command (command authority) provides full authority to organize and employ commands and forces as the combatant commander considers necessary to accomplish assigned missions. Operational control is inherent in combatant command (command authority).

Configuration Control—The systematic proposal, justification, evaluation, coordination, approval or disapproval and implementation of all approved changes in the configuration of Configuration Item (CI) after formal establishment of the baseline.

Constellation—Considered to be a number of satellites with coordinated ground coverage, operating together under shared control, synchronized so that they overlap well in coverage and complement rather than interfere with other satellites' coverage.

Ephemeris—A table or data file giving the calculated positions of a celestial object at regular intervals throughout a period of time.

End-of-Life—When a satellite is no longer useful. This occurs when the satellite's payload or bus becomes so degraded it can no longer support operations, or when the payload's users no longer need it to accomplish their mission. It is possible for another agency to use a satellite's residual capability after the vehicle reaches end-of-life. However, this is not authorized if bus degradations would prevent possible satellite disposal.

Initial Operations Capability (IOC)—That first attainment of the capability to effectively employ a weapon, item of equipment, or system of approved specific characteristics with the appropriate number, type, and mix of trained and equipped personnel necessary to operate, maintain, and support the system. It is normally defined in the CDD. NOTE: IOC is event-driven and not tied to a specific future date.

Naval Network and Space Operations Command (NNSOC)—NNSOC, following operational acceptance, has overall responsibility for the Fleet Satellite Communications (FLTSATCOM) system satellites. The FLTSATCOM system includes, FLTSAT, Ultra High Frequency (UHF) Follow-on (UFO), and Mobile User Objective System (MUOS). Commander, NNSOC exercises system management responsibilities and operational control of the FLTSATCOM system satellites and payloads, through the Naval Satellite Operations Center, located at Point Mugu CA.

Operational Control (OPCON)—The authority to perform those functions of command over subordinate forces involving composition of those forces, assignment of tasks, designation of objectives and tactical and authoritative direction necessary to accomplish the mission. OPCON authority is exercised through component commanders and the commanders of established subordinate organizations.

Payload—The components performing the satellite's mission (for example, communications, navigation, weather, warning). A satellite can carry more than one payload, expanding its primary mission or giving it secondary missions.

Payload Control Authority (PCA)—The authority and ability to provide control and management of a satellite's payload.

Research and Development (R&D)—A one-of-a-kind or few-of-a-kind space experiment system used to demonstrate/validate new technology; not intended for use in an operational capacity.

Residual Capability Satellite—A residual satellite is not part of the operational constellation and has some capabilities that could be employed, if required.

SATCOM Operational Manager—Lead organization responsible for day-to-day operations of a system. This is normally designated as having primary responsibility for managing the system to maximize the satisfaction of user requirements.

Satellite Control Authority (SCA)—A transferable authority and ability to provide Telemetry, Tracking and Commanding (TT&C) of a satellite's bus and to provide control and management of a satellite's payload unless PCA is assigned to another organization.

Satellite Operations—Those operations conducted to maneuver, configure, operate, task,

and sustain on—orbit assets. Satellite operations are characterized as spacecraft and payload operations. Spacecraft operations include TT&C, maneuvering, monitoring state-of-health, and maintenance sub-functions. TT&C is the process of monitoring spacecraft systems, transmitting the status of those systems to the control segment on the ground, and receiving and processing instructions from the control segment. Payload operations include monitoring and commanding of the satellite payload to collect data or provide capability in the operational environment. Satellite operations are executed through a host of satellite operations centers linked to on—orbit assets via dedicated and shared networks. Some systems utilize dedicated antennas for both mission data retrieval and routine satellite TT&C. Additionally, as a critical and essential link between the satellite operator and joint force, and a significant contributor to SSA, satellite operations include protection mechanisms to assure access to space assets.

Satellite Operations Center (SOC)—Facility conducting prescribed on—orbit TT&C activities for operational satellites under COCOM authority. Activities include, but are not limited to mission data recovery, satellite vehicle (SV) status and safety, maintaining bus and payload capabilities, maneuvering and station keeping throughout the useful life of the SV.

Satellite/SATCOM System Expert (SSE)—The component or designated organization responsible for providing the technical planning and functions in support of the operational management of a specific satellite/SATCOM constellation.

Space and Missile Systems Center (SMC) System Program Office (SPO)—The SPOs, located at Los Angeles AFB, design, develop and procure space and associated satellite control systems and are Launch and Deployment Authority (LDA) for R&D and RDT&E systems. The SPOs provide technical advice and support, including Technical Advisors and other contractors, to the SW throughout the lifetime of their assigned satellite programs.

Space Mishap—Any unplanned event involving space systems that results in personnel injury, system damage/destruction or mission capability loss/delay. For reporting purposes, it also includes near misses, close calls and high accident potential events.

System Safety—The element of operational risk management that uses specialized engineering techniques to systematically identify, assess, mitigate, and communicate hazards to personnel

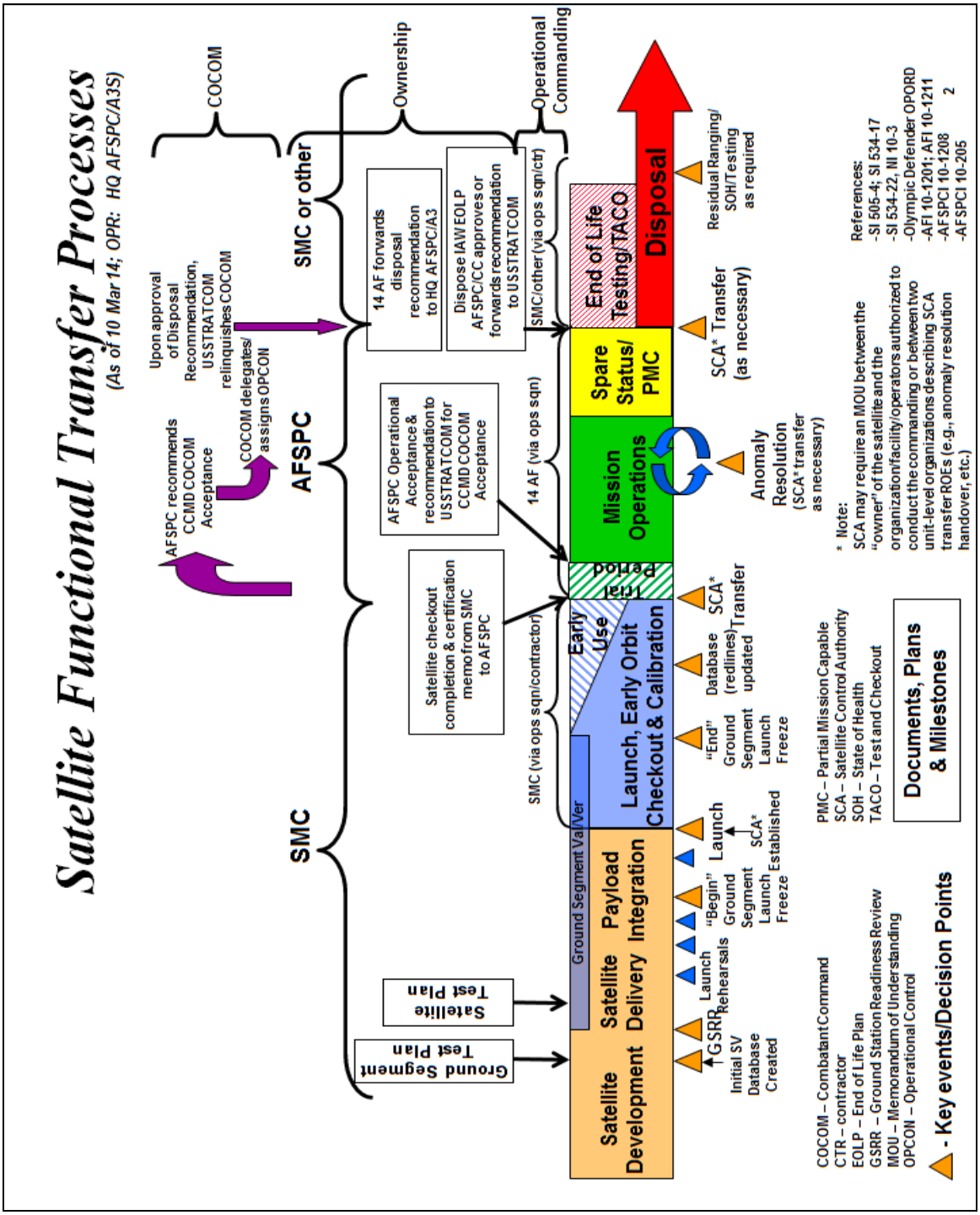
and high-value equipment/activities. Systems safety includes, but is not limited to the following skills sets (i.e., Developing Preliminary Hazard List, Preliminary Hazard Analysis, Energy Flow/Barrier Analysis, Failure Modes Effects Analysis, Failure Modes Effects and Criticality Analysis, Fault Tree Analysis, Fishbone Failure Analysis, Combinatorial, Failure Probability Analysis, Event Tree Analysis, Cause-Consequence Analysis, Risk Acceptance and Strategy Selection in Technology Activities, Failure Information, Propagation Modeling, Assessment of Operating Procedures, Human Factors and Operator Errors, Weighted Scoring Decision Making, Sneak Circuit Analysis, and/or Probabilistic Risk Assessment).

Tactical Control (TACON)—The authority and responsibility to take the necessary action with unit assets to provide mission data and sensor management. SCA is inherent in TACON but may be delegated.

Attachment 2

SATELLITE FUNCTIONAL TRANSFER PROCESSES

Figure A2.1. Satellite Ownership and SCA Transfer



Attachment 3

SATELLITE CONTROL AUTHORITY (SCA) SAMPLE LETTERS

A3.1. **Figure A3 1** and **A3.2** are sample letters to be used by appropriate agencies to transfer SCA or Payload Control Authority for all AFSPC satellite programs IAW this instruction.

Figure A3.1. SMC Letter to 14 AF/A3 Recommending SCA Transfer

DD MMM YYYY

MEMORANDUM FOR 14 AF/A3 [or HQ AFSPC/A3]

FROM: SMC/IS

SUBJECT: Transition of DSP Flight XX Satellite/Payload Control Authority (SCA/PCA)

1. The SMC/IS transferred SCA of DSP Flight XX to USSTRATCOM effective DD/HHMMZ MMM YY.

2. All Flight XX test activities were completed in 30 days with results assessed as nominal. No anomalies were identified and all technical issues encountered during testing have been evaluated as having no mission impact. These technical issues will be closed through the normal anomaly investigation process or delivery of the flight database to the Space-Based Infrared Systems Mission Control Station at Buckley Air Force Base CO.

3. Colonel Sam Jones, the SBIRS Space Group Commander, can address any questions or issues you or your staff may have. He can be reached at DSN XXX-XXXX, or contact Lt Col Tony Smith, DSP Operations and Sustainment, at DSN XXX-XXXX.

JOHN Q. SPACE, Colonel, USAF
Commander

cc:
HQ AFSPC/A3/A3S
(add additional office symbols as needed)

Figure A3.2. 14 AF Letter Notifying SW of SCA Transfer.

DD MMM YYYY

MEMORANDUM FOR 460 SW/CC

FROM: 14 AF/A3

SUBJECT: Transition of DSP Flight XX Satellite Control Authority

1. 14 AF/A3 accepted Satellite Control Authority of DSP Flight XX effective DD/HHMMZ MMM YY and immediately transferred that authority to 460 SW.

2. All Flight XX test activities were completed in 30 days with results assessed as nominal. No anomalies were identified and all technical issues encountered during testing have been evaluated as having no mission impact. These technical issues will be closed through the normal anomaly investigation process or delivery of the flight database to the Space-based Infrared Systems Mission Control Station at Buckley Air Force Base CO.

3. Col Sam Jones, the SBIRS Space Group Commander, can address any questions or issues you or your staff may have. He can be reached at DSN XXX-XXXX, or contact Lt Col Tony Smith, DSP Operations and Sustainment, at DSN XXX-XXXX.

XXX X XXXXXXX
Rank, USAF
Title

cc:
HQ AFSPC/A3/A3S
(add additional office symbols as needed)

Attachment 4

COMBATANT COMMAND (CCMD) COMMAND AUTHORITY (COCOM) ACCEPTANCE SAMPLE LETTER

A4.1. HQ AFSPC/A3 Letter to USSTRATCOM/J3 presenting a new capability to USSTRATCOM and recommending CCMD COCOM Acceptance. (Note 1: If this is the first satellite of a new constellation or block design, the memo will be from AFSPC/CC vice HQ AFSPC/A3. Note 2: Additional guidance applies for presentation of ITW&AA capabilities, reference paragraph 2.3.7).

Figure A4.1. Combatant Command (CCMD) Command Authority (COCOM) Acceptance Sample Letter

DD MMM YYYY

MEMORANDUM FOR USSTRATCOM/J3

FROM: HQ AFSPC/A3

SUBJECT: Presentation of DSP Flight XX Capability to the Operational Constellation

1. HQ AFSPC/A3 presents the DSP Flight XX capability to missile warning constellation. We recommend USSTRATCOM accept COCOM of the satellite.

2. All Flight XX test activities were completed in 30 days with results assessed as nominal. No anomalies were identified and all technical issues encountered during testing have been evaluated as having no mission impact. These technical issues will be closed through the normal anomaly investigation process or delivery of the flight database to the Space-based Infrared Systems Mission Control Station at Buckley Air Force Base CO. (**Note:** If there are anomalies or liens against the satellite, list them here with an explanation of mission risk)

3. Based on the test results, Flight XX should well serve the joint and national missile warning needs for many years to come. If you have any questions, please contact me directly at DSN XXX-XXXX, or contact my Chief, Space Operations Division, Col xxxx, at DSN XXX-XXXX.

xxxxxx
Brigadier General, USAF
Director of Air, Space and
Cyberspace Operations

cc:
CDR JFCC Space
CG SMDC/ARSTRAT (if required)
14 AF/CC
(add additional office symbols as needed)

Attachment 5

DISPOSAL AUTHORITY, PROCESS, AND METHODS

A5.1. Table A5 **1.** Identifies the normal disposal authority, the disposal process and method for current AFSPC satellite programs.

A5.2. Note: For emergency disposals, those which require a decision in less than 24 hours, CDR JFCC Space will make the disposal decision and notify AFSPC/CC and CDRUSSTRATCOM.

Table A5.1. Disposal Authority, Process and Methods.

PROGRAM	DISPOSAL RECOMMENDATION AUTHORITY	DISPOSAL PROCESS
AEHF	AFSPC/CC	14 AF/CC coordinates with DISA to make disposal recommendation to AFSPC. AFSPC forwards disposal and CCMD relinquishment recommendation to CDRUSSTRATCOM.
DMSP	14 AF/CC	14 AF/CC makes disposal recommendations to AFSPC. AFSPC makes CCMD relinquishment recommendation to USSTRATCOM and directs disposal.
DSCS	SMDC/ARSTRAT and AFSPC/CC	14 AF/CC coordinates with DISA to make disposal recommendation to AFSPC. AFSPC coordinates with SMDC/ARSTRAT and forwards disposal and CCMD relinquishment recommendation to CDRUSSTRATCOM.
DSP	14 AF/CC	14 AF/CC coordinates with AFTAC and makes disposal recommendations to AFSPC/CC. AFSPC makes CCMD relinquishment recommendation to USSTRATCOM and directs disposal.
EPS	14 AF/CC	14 AF/CC makes disposal recommendations to AFSPC. AFSPC makes CCMD relinquishment recommendation to USSTRATCOM and directs disposal.
GPS	14 AF/CC	14 AF/CC coordinates with AFTAC and makes disposal recommendations to AFSPC/CC. AFSPC makes CCMD relinquishment recommendation to USSTRATCOM and directs disposal.
Milstar	AFSPC/CC	14 AF/CC coordinates with DISA to make disposal recommendation to AFSPC. AFSPC forwards disposal and CCMD relinquishment

PROGRAM	DISPOSAL RECOMMENDATION AUTHORITY	DISPOSAL PROCESS
		recommendation to CDRUSSTRATCOM.
ORS—1 (MMSOC related)	14 AF/CC	14 AF/CC makes disposal recommendations to AFSPC. AFSPC makes CCMD relinquishment recommendation to USSTRATCOM and directs disposal.
SBIRS	14 AF/CC	14 AF/CC makes disposal recommendations to AFSPC. AFSPC makes CCMD relinquishment recommendation to USSTRATCOM and directs disposal.
Space—Based Space Surveillance (SBSS)	14 AF/CC	14 AF/CC makes disposal recommendations to AFSPC. AFSPC makes CCMD relinquishment recommendation to USSTRATCOM and directs disposal.
WGS	SMDC/ARSTRAT and AFSPC/CC	14 AF/CC coordinates with DISA to make disposal recommendation to AFSPC. AFSPC coordinates with SMDC/ARSTRAT and forwards disposal and CCMD relinquishment recommendation to CDRUSSTRATCOM.

Attachment 6

SATELLITE DISPOSAL AND/OR PAYLOAD RELINQUSHMENT NOTIFICATION TO CDRUSSTRATCOM (CCMD RELINQUISHMENT) SAMPLE LETTER

Figure A6.1. HQ AFSPC/A3 Letter to USSTRATCOM/J3 identifying satellite disposal and/or payload relinquishment criteria have been met

DD MMM YYYY

MEMORANDUM FOR USSTRATCOM/J3

FROM: HQ AFSPC/A3

SUBJECT: Recommendation of DSP Flight XX Disposal and Relinquishment from Combatant Commander Operational Use

1. DSP Flight XX can no longer meet mission requirements (or has met End-of-Life requirements). (Note: Provide a brief synopsis or mission requirements not being met or EOLP criteria that is being met). HQ AFSPC/A3 recommends DSP Flight XX be removed from the operational constellation and that USSTRATCOM relinquish Combatant Command authority of the satellite (or payload).

2. DSP Flight XX will be removed from its operational orbit location IAW USG Orbital Debris Mitigation Standard Practices to reduce the potential for spacecraft collisions, frequency interference, space debris, and open orbital slots to newer satellites. (**Note:** If there is end-of-life testing, provide a brief overview of it here). The final disposition of the satellite will place it in non-operationally relevant orbit.

3. If you have any questions, please contact me directly at DSN XXX-XXXX, or contact my Chief, Space Operations Division, Col xxxx, at DSN XXX-XXXX.

xxxxxx
Brigadier General, USAF
Director of Air, Space and
Cyberspace Operations

cc:
CDR JFCC Space
CG SMDC/ARSTRAT (as required)
14 AF/CC
(add additional office symbols as needed)