

# AFSC 1C6X1 SPACE SYSTEMS OPERATIONS



## CAREER FIELD EDUCATION AND TRAINING PLAN

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## ***SPACE BADGE HERALDRY***



**MASTER SPACE BADGE**



**SENIOR SPACE BADGE**



**BASIC SPACE BADGE**

The central globe represents the earth as viewed from space, the earth being the origin and control point for man's space endeavors. The global lines of latitude and longitude hearken to the original 20<sup>th</sup> Air Force patch and emphasize the global nature of the Air Force space mission. The thrusts and vectors behind the globe represent the dynamic and infinite space environment. The deltoid symbolizes the Air Force's upward thrust into space, the reentry vehicles of our Intercontinental Ballistic Missile force and the launch vehicles that place satellites in orbit. The ellipses represent orbital paths traced by satellites in earth orbit; the satellites symbolically depicted as four-pointed stars. The symmetric placement of the satellites signifies the Air Force's worldwide coverage in accomplishing its mission.

<b>BADGE</b>	<b>CRITERIA</b>
Basic	Basic Space Badge will be awarded upon completion of the Enlisted Space Operations (ESO) course and award of the 1C631 specialty code.
Senior	Education: completion of applicable 5- and 7-Skill Level Career Development Courses (CDC)
	Training: completion of applicable positional training, if required
	Experience: Staff Sergeants and above who have been awarded the 7 Skill level
Master	Education: N/A
	Training: completion of applicable positional training, if required
	Experience: Master sergeants and above with an additional 5 years of cumulative time from award of the 7 Skill level

***The criterion above applies only to the award of the space operations badge and does not reflect the Space Professional Development Program (SPDP) level of the wearer. Badge award is tied directly to skill level. SPDP and badge award are distinct and separate processes.***

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**CAREER FIELD EDUCATION AND TRAINING PLAN**  
**SPACE SYSTEMS OPERATIONS**  
**AFSC 1C6X1**

**Part I**

*Preface*

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle career development, mentoring, education/training requirements, training support resources, and minimum task requirements for all active duty, and Air Reserve Component (ARC) [Air Force Reserve and Air National Guard] members within this specialty. Due to the operations diversity within the career field, the use of core tasks does not apply to the 1C6X1 AFSC or this CFETP. This CFETP will provide personnel a clear career path to success and will instill rigor in all aspects of career field training. Note: Civilians occupying associated positions will use Part II to support duty position qualification training. Along with the CFETP, AFI 13-601, *Management and Development of Enlisted Personnel in Space Systems Operations*, provides additional direction and is available for enlisted space operators and all space leaders.

2. The CFETP consists of two parts. Supervisors use both parts to plan, manage, and control training within the specialty.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan; Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path; Section C associates each level with specialty qualifications (knowledge, education, experience, training, and other); and Section D indicates resource constraints. Some examples are funds, manpower, equipment, facilities; Section E identifies transition training guide requirements for SSgt through MSgt.

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, requirements to support training, AETC-conducted training, wartime course and core task, and correspondence course requirements. Section B contains the Course Objective List (COL) and training standards supervisors will use to determine if airmen satisfied training requirements. Section C identifies available support materials. An example is a Qualification Training Package, which may be developed to support proficiency training; Section D identifies a training course index supervisors can use to determine resources available to support training. Included here are both mandatory and optional courses; Section E identifies MAJCOM unique training requirements supervisors can use to determine additional training required for the associated qualification needs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

2.3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate points in their career. This plan will enable us to train today's work force for tomorrow's jobs.

3. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the 1C6 career field. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. Changes to training courses occur frequently. Requests to change courses must be submitted by the MAJCOM HQ, coordinated with HQ Air Force Reserve Command (AFRC) and the National Guard Bureau (NGB), and routed through the AFCFM at the Air Staff to HQ AETC for processing.

## ***ABBREVIATIONS AND ACRONYMS***

ADL—Advanced Distributed Learning  
AETC—Air Education and Training Command  
AF—Air Force  
AFCFM—Air Force Career Field Manager  
AFECD—AF Enlisted Classification Directory  
AFI—Air Force Instruction  
AFIT—Air Force Institute of Technology  
AFJQS—Air Force Job Qualification Standard  
AFMAN—Air Force Manual  
AFPC—Air Force Personnel Center  
AFRC—Air Force Reserve Command  
AFS—Air Force Specialty  
AFSC—Air Force Specialty Code  
AFSPC—Air Force Space Command  
ANG—Air National Guard  
ARC—Air Reserve Component  
AU—Air University  
BMT—Basic Military Training  
CCAF—Community College of the Air Force  
CDC—Career Development Course  
CFETP—Career Field Education and Training Plan  
CMR— Combat Mission Ready  
CoL—Continuum of Learning  
COL—Course Objective List  
CONOPS—Concept of Operations  
CT—Continuation Training  
CTL—Comprehensive Task/Sub-Task List  
CTS— Course Training Standard  
DL—Distributed Learning  
DoD—Department of Defense  
DRU— Direct Reporting Unit  
ESO—Enlisted Space Operations  
E&T—Education and Training  
FAM—Functional Area Manager  
FM—Functional Manager  
FOA—Field Operating Agency  
HAF—Headquarters Air Force  
HQ—Headquarters  
HST— Home Station Training  
IAW—In Accordance With  
ISD—Instructional System Development  
JPR—Job Performance Requirements  
JQS—Job Qualification Standard  
KDP – Key Developmental Position

KLP – Key Leadership Position  
MAJCOM—Major Command  
MDS—Mission Design Series  
MFM—Major Command Functional Manager  
MilPDS—Military Personnel Data System  
MRT—Mission Readiness Training  
MRTP—Mission Readiness Training Program  
MTL—Master Task List  
MTP— Master Training Plan  
OJT—On-the-Job Training  
OL—Operating Location  
OPR—Office of Primary Responsibility  
OSR—Occupational Survey Report  
PCS—Permanent Change of Station  
PME—Professional Military Education  
POC—Point of Contact  
POI—Plan of Instruction  
PS—Prior Service  
QT—Qualification Training  
RSP—Ready Spacecrew Program  
RTM—RSP Tasking Message  
SEI— Special Experience Identifier  
SKT—Specialty Knowledge Test  
SME— Subject Matter Expert  
STEEP – Strategy for Training, Education, Experience and Professional Development  
STEM – Science, Technology, Engineering, and Math  
STRT—Specialty Training Requirements Team  
STS—Specialty Training Standard  
TDY— Temporary Duty  
TM— AETC Course Training Manager  
TPM— Training Pipeline Manager  
TPT—Training Planning Team  
TRQI—Training Requester Quota Identifiers  
TTP—Tactics, Techniques, and Procedures  
U&TW—Utilization and Training Workshop  
UGT—Upgrade Training  
URE— Unit Review Exercise  
UTC—Unit Type Code  
WAPS—Weighted Airman Promotion System

## ***TERMS EXPLAINED***

**Advanced Space Operations School (ASOpS).** The Advanced Space Operations School (ASOpS) expands space system understanding by providing world-class, in-depth instruction of space systems, capabilities, requirements, acquisition, strategies and policies to support Joint military operations and U.S. National Security.

**Advanced Space Training.** Short, mission specific supplemental courses (ex. ASOpS courses).

**Advanced Training (AT).** Advanced Training is the set of formal training requirements, beyond weapon system qualification and Continuation Training (CT) to advance the skills required to ensure mission accomplishment in a Contested, Degraded, and Operationally-limited (CDO) environment. Advanced Training is the most important part of the Ready Spacecrew Program (RSP) for Air Force Space Command (AFSPC) Combat Mission Ready (CMR) units. Mission Planning, Execution, and Debriefing are critical to successful AT. Non-CMR units will adapt AT as necessary to meet mission needs.

**Air Education and Training Command (AETC) Distance Learning (DL).** Formal courses developed for export to a field location (in place of resident training) for trainees to complete without the on-site support of the formal school instructor.

**Air Force Career Field Manager (AFCFM).** Representative appointed by the respective HQ USAF Deputy Chief of Staff or Under Secretariat, to ensure assigned AF specialties are trained and utilized to support AF mission requirements. AFCFM is the OPR; however, works in concert with MAJCOM Functional Managers (FMs) as required. The CFM determines training needs, requirements, and resources for the entire career field, and is the sole waiver authority for training deviations.

**Air Force Job Qualification Standard (AFJQS).** AFCFMs issue AFJQSs for unique duty positions, weapons systems or equipment. The AFJQS supplements the CFETP, Part II, by outlining specific skill and task requirements.

**Air Force Specialty.** A group of positions (with the same title and code) that require common qualifications.

**Air Reserve Component (ARC).** All units, organizations and members of the Air National Guard (ANG) and the Air Force Reserve Command (AFRC).

**Annual Plan of Evaluation (APOE).** An APOE is developed from the unit/system Job Performance Requirements List (JPRL) or Comprehensive Task List (CTL). This document is used to perform annual evaluations/certifications within the 1C6X1 AFSC. There may be a separate APOE for each crew position within the specialty depending on the system being trained.

**Basic Mission Capable (BMC).** Applies to CMR, Mission Ready (MR) and non-MR units. A spacecrew member who satisfactorily completed Initial Qualification Training/Mission Qualification Training (IQT/MQT), or upgrade training as required, but is not fully MR/CMR.

**Career Field Education and Training Plan (CFETP).** A CFETP is a comprehensive core training document that identifies: life-cycle education and training requirements; training support resources, and minimum core task requirements for a specialty. The CFETP aims to give personnel a clear path and instill a sense of industry in career field training. It is a multipurpose document that outlines a logical career growth path, training resources, and is designed to eliminate duplication and make training identifiable and budget defensible.

**Certification.** A formal indication of an individual's ability to perform a task to required standards.

**Certifier/Certification Official.** A person the commander assigns to determine an individual's ability to perform a task to required standards. Task certifiers/certification officials for positional and crew evaluations may be conducted by evaluators and/or task certifiers.

**Combat Mission Ready (CMR).** Spacecrew who have satisfactorily completed IQT/MQT, or upgrade training as required, and maintain qualification and currency in the unit's mission and assigned position. CMR is the baseline status required to perform unsupervised operations duties.

**Comprehensive Task/Sub-Task List (CTL).** The CTL identifies all tasks and missions spacecrew need to perform to conduct operations. The CTL specifies what tasks are to be performed by each crew position and to what level the task should be understood or performed.

**Continuation Training (CT).** Additional advanced training exceeding the minimum upgrade training requirements with emphasis on present or future duty assignments. CT provides crew members with the volume, frequency, and mix of training necessary to maintain proficiency in their assigned position and experience level.

**Continuum of Learning (CoL).** Designed to deliberately integrate developmental opportunities through a common taxonomy to produce adaptable, knowledge-enabled Airmen for today and tomorrow.

**Core Task.** Tasks Air Force Career Field Managers (AFCFMs) identify as minimum qualification requirements within an Air Force specialty regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. The 1C6X1 career field does not have any specialty-wide core tasks due to the variance of tasks and duties within the AFSC.

**Course Objective List (COL).** A publication derived from initial and advanced skills Course Training Standard (CTS), identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-, 5- or 7-skill level in this career field. Supervisors use the CoL to assist in conducting graduate evaluations.

**Course Training Standard (CTS).** A training standard that identifies the training members will receive in a specific course. The CTS identifies the tasks and levels of proficiency to which those tasks will be taught and serves as a contract between Air Education and Training Command and the functional user to show the overall training requirements taught in formal schools and correspondence courses.

**Critical Task.** Training standard that identifies critical, essential, and non-essential training members will receive in a specific course.

**Distance Learning.** Structured learning that does not require the physical presence of the instructor.

**Distributed Learning.** Structured learning mediated with technology that does not require the physical presence of the instructor. Distributed learning models can be used in combination with other forms of instruction or it can be used to create wholly virtual classrooms.

**Duty Position Tasks.** Tasks assigned to an individual to be qualified for the position currently held. These include as a minimum all core tasks that correspond to the duty position as directed by the AFCFM or Major Command Functional Manager (MFM), and tasks assigned by the supervisor.

**Electronic Career Development Course.** Enhances the availability of CDCs and promotes utilization of Advanced Distance Learning (ADL) concepts resulting in an educationally sound product for all Airmen within their Air Force specialties.

**Electronic-Exam.** Administers Air Force Career Development Course (CDC), Professional Military Education (PME), and Special Course (SC) tests.

**En Route PCS Associated Training.** The training of students undergoing a Permanent Change of Station (PCS) while in Temporary Duty (TDY) status.

**Enlisted Space Operations (ESO) Course (aka: Enlisted Undergraduate Space Training (EUST)).** The ESO course teaches knowledge fundamentals for the enlisted Space Operations career field. The course is designed to prepare Air Force personnel for follow-on training in one of four 1C6X1 career field mission areas: Space Operations, Space Control, Space Support, and Space Situational Awareness. ESO graduates continue their specific weapon system training at their gaining wing. Graduation from ESO results in award of the 1C631 AFSC. The ESO course is taught within the 381 TRG at Vandenberg AFB, CA.

**Evaluators.** Capable individuals experienced, proficient, and current in the assigned defense/weapon system. Evaluators in the 1C6X1 field are appointed by commanders and evaluate selected tasks in assigned operational duty positions as governed by MAJCOM instructions.

**Exportable Training.** Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

**Functional Area Managers (FAM).** The individual accountable for the management and oversight of all personnel and equipment within a specific functional area to support the operational planning and execution. Responsibilities include, but are not limited to, developing and reviewing policy; developing, managing, and maintaining UTCs; developing criteria for and monitoring readiness reporting; force posturing; and analysis. At each level of responsibility (HAF, MAJCOM, Air Component, FOA, DRU, and Unit), the FAM should be the most highly knowledgeable and experienced person within the functional area and have the widest range of visibility over the functional area readiness and capability issues.

**Functional Manager (FM).** Senior leaders, designated by the appropriate functional authority (FA) who provide day-to-day management responsibility over specific functional communities at the MAJCOM, Field Operating Agency (FOA), Direct Reporting Units (DRU), or ARC level. While they should maintain an institutional focus in regards to resource development and distribution, FMs are responsible for ensuring their specialties are equipped, developed, and sustained to meet the functional community's mission as well as encourage force development opportunities in order to meet future needs of the total Air Force mission.

**Initial Plan of Instruction (IPOI).** The IPOI is developed from the unit/system JPRL or CTL and is used to perform Mission Qualification Training (MQT) in the 1C6X1 AFSC. Instructors use the IPOI to document each task a trainee is trained on while undergoing crew position certification. There may be a separate IPOI for each crew position within the AFSC depending on the system being trained.

**Individual Qualification Folder (IQF).** The IQF contains the basic documents that show the history of an individual's positional qualification. Only one IQF will be developed/maintained for an individual.

**Initial Qualification Training (IQT).** Training needed to qualify for basic spacecrew duties in an assigned crew position for a specific space Mission Design Series (MDS) conducted by a Formal Training Unit (FTU).

**Initial Skills Training (IST).** A formal technical training course that results in an AFSC 3-skill level award for enlisted personnel (refer to AFI 36-2201). These formal courses are listed in the web-based course catalogue, Education and Training Course Announcements (ETCA) at <https://rso.my.af.mil/etcacourses/default1.asp>.

**Instructional System Development (ISD).** A deliberate, orderly but flexible process for planning, developing, and managing instructional systems. It ensures personnel are taught in a cost-efficient way the knowledge, skills and attitudes essential for successful job performance. See Air Force Manual (AFMAN) 36-2234, *Instructional System Development*, for further details.

**Instructors.** Capable individuals experienced, proficient, and current in the assigned space system. Instructors in the 1C6X1 field are appointed by commanders and instruct selected tasks in assigned operational duty positions as governed by MAJCOM instructions.

**Job Performance Requirements (JPR).** The tasks required of the human component of the system, the conditions under which these tasks may be performed, and the quality standards for acceptable performance. JPRs describe what people should do to perform their jobs.

**Job Performance Requirements List (JPRL).** A list of JPRs, the JPRL identifies specific system tasks and subtasks, and the proficiency levels required for mission ready status. The JPRL is broken down by Area/Task/Subtask, Description, Units not Affected (when used for like-units), and Proficiency Levels A, B, or C (to include constraints, performance and standards as necessary). JPRLs may be written for a specific mission area, a specific system, or generic enough to cover several systems. Unit/system JPRLs are used to develop the IPOI and the Annual Plan of Evaluation (APOE).

**Key Developmental Position (KDP).** A KDP is used to complement leadership qualifications. These positions are utilized to provide experience necessary for KLPs that may not be gained through the normal assignment system.

**Key Leadership Position (KLP).** A KLP is defined as a unique, “no-fail” position with distinguishing responsibilities and education, training, experience, or performance requirements that cannot be realized through normal progression planning, and may not be prevalent in the majority of the career field.

**Knowledge Training.** Training used to provide a base of knowledge for task performance. It may also be used in lieu of task performance when the training capability does not exist. Learning gained through knowledge rather than hands-on experience.

**Master Task List (MTL).** A comprehensive list (100%) of all tasks performed within a work center and consisting of the current CFETP or AFJQS and locally developed AF Forms 797 (as a minimum). Should include tasks required for deployment and/or UTC requirements.

**Mission Qualification Training (MQT).** Also known as OJT (On-the-Job Training). The purpose of MQT is to qualify spacecrew members in assigned spacecrew positions to perform the command or unit mission.

**Master Training Plan (MTP).** Employs a strategy for ensuring the completion of all work center job requirements by using a Master task Listing and provides milestones for task, CDC completion, and prioritizes deployment/UTC, HST tasks, upgrade, and qualification tasks.

**Mission Ready (MR).** This term only applies to non-CMR units. Spacecrew who have satisfactorily completed IQT/MQT, or upgrade training as required, and maintain qualification and currency in the unit’s mission. MR is the baseline status required to perform unsupervised operations duties in non-CMR units.

**National Security Space Institute (NSSI)/Reserve NSSI.** NSSI/RNSSI is the Department of Defense's single focal point for space education and training, complementing existing space education programs at the Air University, the Naval Postgraduate School and the Air Force Institute of Technology.

**Occupational Survey Report (OSR).** Air Force Occupational Analysis (AETC/A3/OAA) compiles a detailed report showing the results of an occupational survey of tasks performed within a particular AFS. Conducted every three years for enlisted AFSCs.

**On-the-Job Training (OJT).** Hands-on, “over-the-shoulder” conducted to certify personnel in both upgrade (skill level award) and job qualification (position certification training). For space operations, OJT is also known as MQT.

**Plan of Instruction (POI).** The POI is a training guide outlining how the training program is applied and administered. A POI can be as simple as a syllabus of day-to-day events or as complex as using Lesson Plans and Student Study Guides. Units develop local methods that provide verification from both instructors and students that training has been completed.

**Position Qualification Training.** Training designed to qualify an Airman in a specific position that occurs after upgrade training.

**Proficiency Training.** Additional training, either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade.

**Qualification Training (QT).** Hands-on performance training designed to qualify an Airman in a specific position. This training occurs both during and after upgrade training to maintain up-to-date qualifications.

**Ready Spacecrew Program (RSP).** RSP is an overarching operations training program designed to enhance the knowledge and warfighting capability of AFSPC spacecrew members after MQT and throughout a spacecrew member’s tour(s) in a given MDS. It includes continuation training (CT) and advanced training (AT) and leverages the Weapons and Tactics process to continuously develop, test and train innovative warfighting TTPs.

**Resource Constraints.** Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being delivered.

**RSP Advanced Training Mission (RAM).** RSP advanced training missions are designed to improve a spacecrew’s ability to operate the weapon system under challenging CDO conditions. RAMs will focus on overall mission effectiveness in a CDO environment rather than individual task performance. RAMs are conducted throughout the AT period and are the primary means of achieving AT objectives and currencies.

**RSP Tasking Message (RTM).** AFSPC directed training that provides the baseline training requirements for use in developing a realistic training program tailored to operational space squadron requirements.

**Space Mission Forces (SMF).** Akin to the Air Expeditionary Force, the SMF is a long-term overarching initiative to prepare and present space forces, primarily those operating from garrison, as a ready force capable of operating in a contested, degraded and operationally limited (CDO) environment.

**Space Mission Task Force (SMTF).** The Air Force's space mission force presented to CDRUSSTRATCOM for operational use. It is based on the Air Expeditionary Task Force (AETF) concept, but acknowledges most space forces perform operations from CONUS. The SMTF uses Unit Type Codes as building blocks to aggregate the force. This force includes space operators, mission planning personnel, intelligence professionals, space weapon systems and other necessary equipment.

**Space Professional (SP).** Total population supporting the overall DoD space effort. SP includes all functional communities supporting space (operations, acquisition, communications, maintenance, weather, logistics, intelligence, security, etc.). Enlisted SP AFSCs include 1C6X1, 1N0X1, 1N2X1, 1N5X1, and 3C1X1. Officer SP AFSCs include 13S, 61X, 62X, 63X.

**Space Professional Development Program (SPDP).** An AF-level personnel development program designed to build space experts who thoroughly understand the medium of space--from concept to sustainment--including design, acquisition, fielding, operations, maintenance. The SPDP is a multi-faceted plan to ensure deliberate, purposeful individual development highlighted by expanded space education, training, and experience-building opportunities. The elements of this program are formalized through a three-level certification program to create and manage a knowledgeable community of SPs to meet the nation's space needs and national security objectives. SPDP is the official AF response to the 2001 Space Commission's recommendation to "develop the space cadre the nation needs."

**Specialty Training.** The total training process used to qualify airmen in their assigned specialty.

**Specialty Training Requirements Team (STRT).** The primary purpose of the STRT is for the AFCFM and functional leaders to determine and present training requirements to the AETC Training Pipeline Manager (TPM) and AETC Course Training Manager (TM).

**Specialty Training Standard (STS).** An AF publication that describes an AFS in terms of tasks and knowledge an Airman in that specialty may be expected to perform or to know on the job. Also identifies the training provided to achieve a 3-, 5-, or 7-skill level within an enlisted AFS. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses.

**STEM.** Academic degree programs in science, technology, engineering and mathematics are generally classified as STEM.

**Subject Matter Expert (SME).** Spacecrew member designated to build procedures and administer training/evaluations for significant changes in systems or procedures requiring new MR/CMR certification or Requalification Training.

**Supplemental Training.** Training toward a portion of an AFS without change by AFSC. Formal training on new equipment, methods and technology that are not suited for on-the-job training.

**Tactics, Techniques and Procedures (TTP).** TTPs provide an operator and/or tactician with a set of tools to use in developing the solution to a tactical problem. The solution to any specific problem is a unique combination of these TTP or the creation of new ones based on a critical evaluation of the situation.

**Task Certifier.** See Certification Official.

**Training and Evaluation Performance Standards (TEPS).** Air Force Space Command operational time-based task standards as established in AFSPCGM2016-13-01 and 14 AF guidance. TEPS timing standards will not be used as real-world operational guidance. When conflict exists between real-world operational guidance and TEPS, real-world guidance always takes precedence.

**Total Force.** All collective AF components (active, reserve, guard, and civilian elements) of the United States Air Force.

**Trainer.** A trained and qualified person who teaches personnel to perform specific tasks through OJT methods. Also, equipment that the trainer uses to teach personnel specified tasks.

**Training Capability.** The ability of a unit or base to provide training. Authorities consider the availability of equipment, qualified trainers, and study reference materials, and so on in determining a unit's training capability.

**Training Completion Date.** Date trainer or task certifier completes task evaluations and determines trainee is qualified to perform the task.

**Training Equipment.** The generic term for items trainers use to train aircrew, missile, maintenance, support, or operator personnel. Trainers teach with these items by picturing, simulating or otherwise demonstrating the characteristics of a system, facility or piece of equipment.

**Training Planning Team (TPT).** Comprised of the same personnel as a Utilization and Training Workshop (U&TW), however TPTs are more intimately involved in training development, and the range of issues is greater than is normal in the U&TW forum.

**Training Requester Quota Identifier (TRQI).** The TRQI is a four-character communication code within the Oracle Training Administration (OTA) used to convey annual or supplemental training requirements, allocations, allocation confirmations, and student tracking information

between a user of training and the provider (owner) of training. TRQIs are assigned to MAJCOMs, FOAs, and DRUs responsible for training accountability of personnel. Only one TRQI is assigned to a functional entity for the Mission Readiness Training Program (MRTP).

**Training Requirements Analysis.** A detailed analysis of tasks for a particular AFS to be included in the training decision process.

**Training Start Date.** Date training begins.

**Upgrade Training (UGT).** Training that leads to the award of a higher skill level in an Air Force specialty. UGT requirements are listed under Career Skill Progression in this CFETP. Other mandatory requirements are specified in the Air Force Personnel Center Enlisted Classification Directory and AFI 36-2201 and must be completed for award of 3, 5, and 7 skill level.

**Utilization and Training Workshop (U&TW).** A forum of AFCFM, MFMs, Subject Matter Experts (SME), and AETC training personnel that determines and manages career field education and training requirements. This is an executive decision meeting.

## ***Section A - General Information***

1. Purpose. This CFETP provides the information necessary for AFCFMs, MFMs, commanders, training managers, supervisors and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training individuals in this AFS should receive in order to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced and proficiency training. Initial skills training is the AFS specific training an individual receives upon entry into the AF or upon retraining into this specialty for award of the 3-skill level. This training is conducted by AETC at the technical training center located at Vandenberg Air Force Base. AFSC upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, 7-, 9-skill level. Qualification training is actual hands-on task performance training designed to qualify an Airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills and knowledge required to do the job. Advanced training is formal specialty training used for selected airmen. Proficiency training is additional training, either in-residence or exportable advanced training courses, or on-the-job training provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes—some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate career field training programs. It is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in the specialty and recommends education and training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training delivery method.

1.4. Identifies major resource constraints that impact full implementation of the desired career field training process.

2. Uses. The plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty. It is maintained by the specialty AFCFM. The AFCFM leads a formal review of the CFETP during the U&TW or at a career field management conference to ensure currency and accuracy. Identified changes are forwarded to AETC by the AFCFM. MAJCOMs must not create training programs that duplicate training provided by existing AETC courses. This plan will be used at all levels of training (where applicable) to ensure a comprehensive and cohesive training program is available and instituted for each individual in the career ladder.

2.1. AETC training personnel will develop or revise formal resident, nonresident and exportable training based on requirements established by the users, validated by the AFCFM, and documented in the Part II of the CFETP. The using command and AETC will work with the

AFCFM to develop procurement and acquisition strategies to obtain resources necessary to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. OJT, resident training, and contract training or exportable courses can satisfy identified requirements. MAJCOM-developed training to support this AFSC must be identified for inclusion into the plan.

2.3. Individual BMR/CMR certification is not linked to skill level award for the 1C6X1 AFSC. However, each individual will complete the mandatory training requirements specified in the Air Force Enlisted Classification Directory (AFECD) and AFI 36-2201 for award of 3-, 5-, and 7-skill levels. The list of courses in Part II will be used as a reference to support training.

3. Coordination and Approval. The AFCFM is the approval authority. Also, the AFCFM will initiate an annual review of this document to ensure currency and accuracy. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. Using the list of courses in Part II, they will eliminate duplicate training.

## ***Section B - Career Field Progression and Information***

1. Specialty Description. Refer to AFECD, paragraph 1. Manages or performs duties in space control, space force enhancement, and space force support. Related DoD Occupational Subgroup: 122100.

2. The Space Operations Functional Badge.

2.1. Description. The Space Operations Badge (see Figure 2.1) is the functional representation of personnel performing duties within the 1C6X1 specialty. The basic, senior and master badges signify the 1C6X1 skill levels.



**Figure 2.1. The Space Operations Functional Badge.**

2.2. Space Operations Badge Awarding for Enlisted Personnel. For active duty RegAF, ANG, and AFR military personnel, award of the Space Operations Badge is limited to personnel within the 1C6X1 AFSC. The badge WILL NOT be authorized independent of award of the 1C6X1 specialty code. IAW AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*, wear of the highest Space Operations Badge authorized is mandatory on all uniforms.

2.2.1. Space professionals are authorized to wear the Basic Enlisted Space Operations Badge upon completion of the ESO course and award of the 1C631 specialty code.

2.2.2. Staff Sergeants and above who have been awarded the 7-skill level in the specialty are authorized to be awarded the Senior Enlisted Space Operations Badge.

2.2.3. Master Sergeants and above with an additional 5 years of cumulative time from award of the 7 skill level in the specialty are authorized to be awarded the Master Enlisted Space Operations Badge.

3. Duties and Responsibilities:

3.1. Doctrinal Mission Areas

3.1.1 . Space control mission area. Space control (SC) capabilities attain and maintain a desired degree of space superiority by allowing friendly forces to exploit space capabilities while denying an adversary's ability to do the same (ex. surveillance, protection, prevention, and negation). The Air Force uses counterspace as an equivalent definition of the space control mission. Counterspace aligns more appropriately to other Air Force air and space power

functions (i.e., counterair, counterland, and countersea), provides less ambiguity, and provides common Air Force language. Space Control includes combat, combat support, and combat service support operations to ensure freedom of action in space for the United States and its allies and, when directed, deny an adversary freedom of action in space. The space control mission area includes: surveillance of space; protection of US and friendly space systems; prevention of an adversary's ability to use space systems and services for purposes hostile to US national security interests; negation of space systems and services used for purposes hostile to US national security interests; and directly supporting battle management, command, control, communications, and intelligence.

3.1.2. Space operations mission area. Space operations capabilities contribute to maximizing the effectiveness of military air, land, sea, and space operations (ex. Intelligence, Surveillance, Reconnaissance (ISR), warning, communication, PNT, blue force tracking, space environment monitoring, and weather services). Space operations includes combat support operations to improve the effectiveness of military forces as well as support other intelligence, civil, and commercial users. The space operations mission area includes: ISR; integrated tactical warning and attack assessment; command, control, and communications; position, velocity, time, and navigation; and environmental monitoring.

3.1.3. Space support mission area. Space support (SS) capabilities provide critical launch and satellite control infrastructure, capabilities and technologies that enable the other mission areas to effectively perform their missions. The space support mission area includes launching and deploying space vehicles, maintaining and sustaining spacecraft on-orbit, and deorbiting and recovering space vehicles, if required.

3.1.4. Space situational awareness mission area. All mission areas are underpinned by Space Situational Awareness (SSA). Annex 3-14, *Space Operations*, divides SSA operations into the following three components: ISR; Space Environmental Monitoring; and Command and Control.

## 3.2. Other Duties

3.2.1. Integrated Missile Defense (IMD). Missile defense operations are conducted to attain and maintain a desired degree of superiority by the destruction or neutralization of enemy air and missile forces. Space systems operations provides the sensor data to the shooter capability.

3.2.2. Intelligence, Surveillance and Reconnaissance (ISR). ISR operations conduct strategic intelligence collection and provide multi- and all-source intelligence in highly contested, communications-degraded environments across all domains. Intelligence integration provides awareness of the operational environment for tactical, operational, and strategic commanders and decision makers. Plans, integrates and coordinates intelligence, surveillance and reconnaissance in support of strategic and global operations and strategic deterrence. Tasks and coordinates ISR capabilities in support of global strike, missile defense and associated planning.

3.2.3. Integrated Operations. Integrated operations provide focal points, reach-back capabilities and centers of excellence for the employment of worldwide joint space forces. They enable space power integration into the range of military operations and provide direct support to air,

space and cyberspace war-gaming. Operations include but are not limited to C2 centers, space ranges, space aggressors, Air Operations Centers (AOC), cyberspace operations, and national programs.

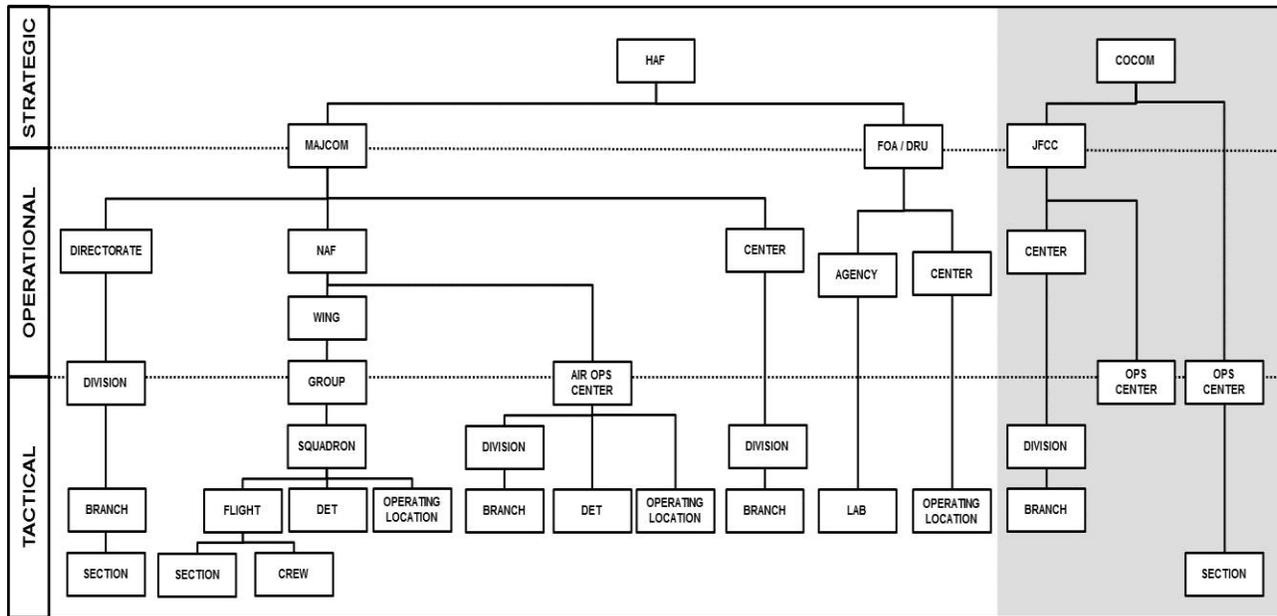
3.2.4. Space Test and Evaluation. Validates and enhances warfighter capabilities through testing and evaluation of space systems. Responsible for planning, executing and reporting all Force Development Evaluation, tactics and concepts testing, and command-directed testing of AFSPC's space assets.

3.2.5. Special Staff Positions. Special staff positions exist at the group, wing, NAF, MAJCOM, and Air Staff levels. These unique positions perform various functions that support space operations, establish policy, and provide guidance to space field forces.

3.2.6. Operations Support Functions. 1C6X1 personnel also serve in a variety of auxiliary duties that are critical to operational effectiveness, mission sustainment, and force management. Support functions include but are not limited to: Space Education and Training; Intelligence; Plans and Programs; Orbital Analysis; Quality Assurance; Standardization and Evaluation; Systems Acquisition; Systems Engineering; Systems Integration; Systems Test and Evaluation; and Weapons and Tactics. Expertise in the associated primary mission area is prerequisite to many operations support functions.

#### 4. Types of Work at Organizational Levels for Enlisted Personnel in Space Systems Operations

4.1. The 1C6X1s progress through functional roles based on their cumulative training, education, experience and professional development. Enlisted personnel in space operations perform highly specialized duties covering all aspects of space operations and organizational levels (tactical, operational, and strategic). In general, 1C6X1s spend the majority of their career assigned to duties at the tactical and operational level. NOTE: 1C6X1s are often assigned to tactical-level duties in operational-level organizations. Figure 4.1. (Organizational Levels for 1C6X1 Types of Work) depicts the level of duties 1C6X1s fill within organization types, and not the wartime level of the organization itself.



**Figure 4.1. Organizational Levels for 1C6X1 Types of Work.**

4.1.1. Tactical Operator. Primarily focused on operating or supporting operation of a space weapon system in direct support to a tactical mission. The tactical operator is the broadest function category and comprises opportunities for personnel in the specialty to obtain mission breadth and technical depth.

4.1.2. Operational Integrator. Subject matter expert in one or multiple mission areas that is focused on: developing and exercising tactics, techniques and procedures; integrating air, space and cyberspace capabilities; and delivering capabilities and effects across the space enterprise.

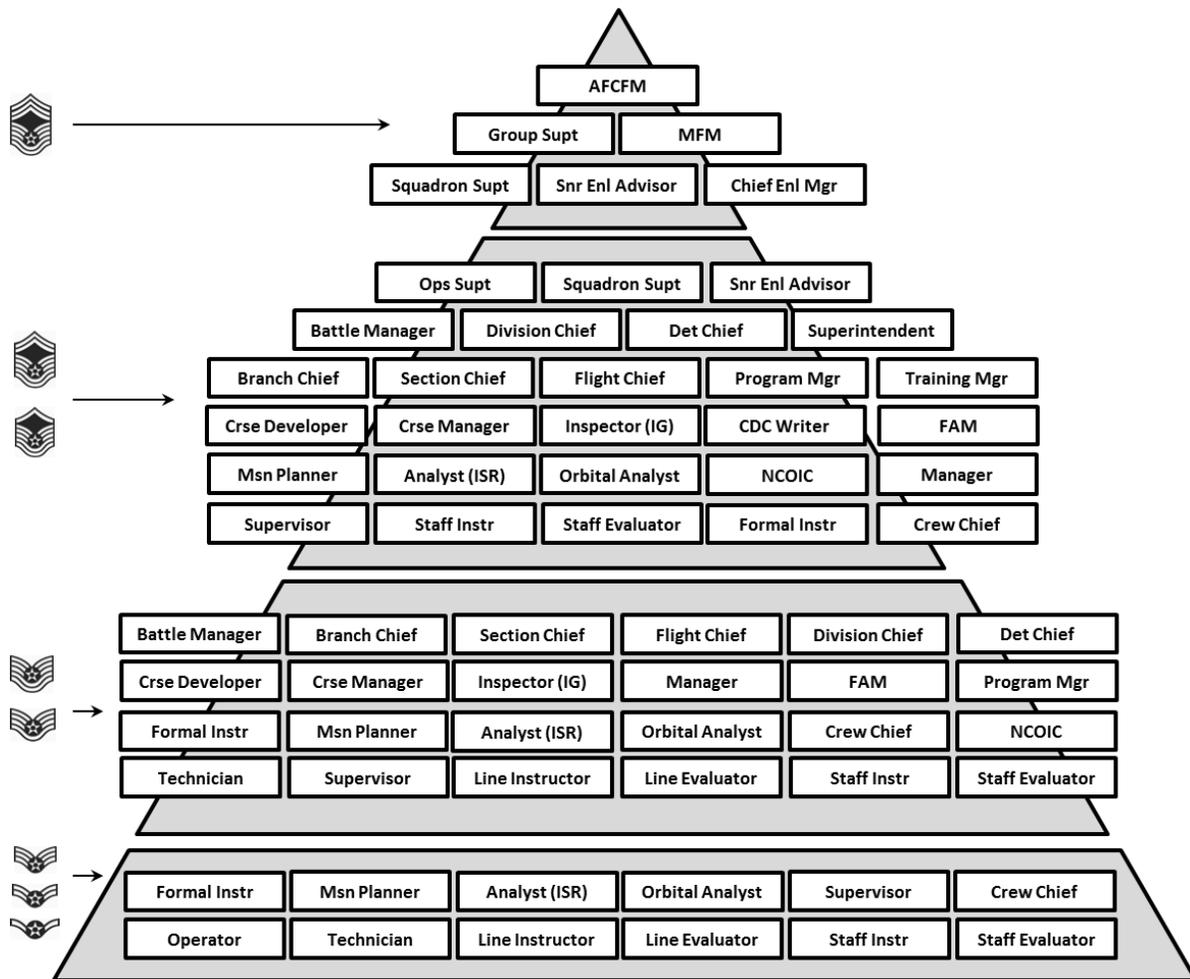
4.1.3. Strategic Manager. Enterprise expert in all facets of space acquisitions, operations, service and joint operations integration, and mission management.

4.1.4. Senior Leader. Senior enlisted leader/manager who provides enterprise guidance, policy and direction to ensure efficient and effective employment of space capabilities and human capital.

4.2. Authorized Duty Titles for Enlisted Personnel in Space Systems Operations. To comply with AFI 36-2618, Enlisted Force Structure, Chapter 7, the following are the only authorized duty titles for the 1C6X1 career field. When properly applied, duty titles facilitate a quick understanding of a person's role and level of responsibility. Standardized duty titles support purposeful and deliberate development of space systems operations Airmen and are required to meet the CSAF's vision of mentoring via Enlisted Developmental Teams. Enlisted duty titles will be assigned based upon scope of responsibility and the preponderance of duties being performed. A consistent, standard approach is important to ensure the terms are meaningful. Higher fidelity delineation within duties, specific missions, systems, roles and responsibilities will be distinguished through tailorable unit-derived duty descriptions, with unique experiences codified via Special Experience Identifiers (SEI). Deviations from or alterations made to

authorized duty titles will prevent experiences from being accurately represented in Air Force professional development tools and databases. The authority to waive adherence to authorized duty titles for the 1C6X1 specialty is the AFCFM.

4.2.1. Figure 4.2. (Authorized Duty Titles for Enlisted Personnel in Space Systems Operations) depicts appropriate duty titles for each grade. See AFI 13-601, *Management and Development of Enlisted Personnel in Space Systems Operations*, for a description of each authorized duty title.



**Figure 4.2. Authorized Duty Titles for Enlisted Personnel in Space Systems Operations.**

4.2.2. Authorized 1C6X1 Duty Titles are tied to space missions (Functions), Organizational Level, and Rank/Grade as depicted in Figure 4.3. (Space Systems Operations Airman Capability Matrix). The Airman Capability Matrix (ACM) establishes the AFSC's framework within the Air Force MyVector professional development and mentoring tool.

FUNCTION		ORGANIZATION LEVEL		AUTHORIZED DUTY TITLE					
Code	Description	Code	Description	Code	Description	Amn	NCO	SNCO	CMSgt
A	(Reserved)	A	(Reserved)	A	(Reserved)				
B	Satellite Systems – Warning	B	Detachment / OL	B	Operator	X			
C	Satellite Systems – ISR	C	Lab	C	Technician	X	X		
D	Satellite Systems – MILSATCOM	D	Squadron	D	Supervisor	X	X		
E	Satellite Systems – PNT	E	AOC	E	Line Instructor	X	X		
F	Satellite Systems – Networks	F	Group	F	Line Evaluator	X	X		
G	Satellite Systems – Orbital Analysis / Space Situational Awareness	G	Wing	G	Staff Instr	X	X	X	
H	Satellite Systems – Multi-systems	H	Program Office	H	Staff Evaluator	X	X	X	
I	Space Lift – Range Systems	I	Center	I	Formal Instr	X	X	X	
J	Space Lift – Mission Assurance	J	NAF	J	Crew Chief	X	X	X	
K	Ground Based Radar – Warning	K	MAJCOM	K	Msn Planner	X	X	X	
L	Ground Based Radar – Surveillance	L	AU / AETC / NSSI / ASOPS	L	Analyst (ISR)	X	X	X	
M	Space Based Warning – Operations	M	FOA / DRU / AF Agency	M	Orbital Analyst	X	X	X	
N	Missile Warning – Fusion	N	SAF / HAF / Air Staff	N	Inspector (IG)		X	X	
O	Space Control – Fusion	O	COCOM	O	NCOIC		X	X	
P	Space Control – Offensive	P	Joint (Other)	P	Branch Chief		X	X	
Q	Space Control – Defensive	Q	Joint Staff	Q	Section Chief		X	X	
R	Intelligence, Surveillance, Reconnaissance – Multi-systems	R	Interagency / OGA / ODA	R	Flight Chief		X	X	
S	Missile Defense – Theater	S		S	Div Chief		X	X	
T	Missile Defense – Operations	T		T	Manager		X	X	
U	Space Warfare – Multi-systems	U		U	Func Area Mgr		X	X	
V	Space Warfare – Space AOC	V		V	Crse Developer		X	X	
W	Space Warfare – Theater AOC	W		W	Crse Manager		X	X	
X	Space Warfare – Cyberspace	X		X	CDC Writer			X	
Y	Space Operations – Education and Training	Y		Y	Superintendent			X	
Z	Space Operations – Evaluation (Standardization / Evaluation / Inspection / Quality Assurance)	Z		Z	Program Manager			X	
0	Formal Education and Training	0		0	Training Manager			X	
1	Operations Support – Systems (Systems Test / System Evaluation / System Acquisition)	1		1	Detachment Chief			X	
2	Operations Support – Plans (Plans / Programs / Intelligence)	2		2	Operations Supt			X	
3	Operations Support – Management (Mission Scheduling / Procedures / Records / Safety)	3		3	Squadron Supt			X	X
4	Operations Support – Operations (Mission Planning / Engineering / Orbital Analysis)	4		4	Snr Enl Leader			X	X
5	Operations Support – Integration (Exercise / Simulation / System Integration / Modeling)	5		5	Group Superintendent				X
6	Operations Support – Weapons and Tactics	6		6	Chief Enl Mgr				X
7	Space Staff – Operations	7		7	MAJCOM Func Mgr				X
8	Space Staff – Policy (Policy / Plans / Programs / Strategy / Requirements)	8		8	Career Fld Mgr				X
9	Data Masked	9	Data Masked	9	Battle Manager		X	X	

Figure 4.3. Space Systems Operations Airman Capability Matrix.

## 5. Space Professional Development.

5.1. Space Professional Development Continuum. Space education does not end at the ESO course. Space professional development is a continual lifecycle of education and progressive experience management spread throughout a space systems operator's career. Development hinges on three areas: depth of experience, breadth of experience, and education and training, as depicted in Figure 5.1. (Development Matrix for Enlisted Personnel in Space Systems Operations).

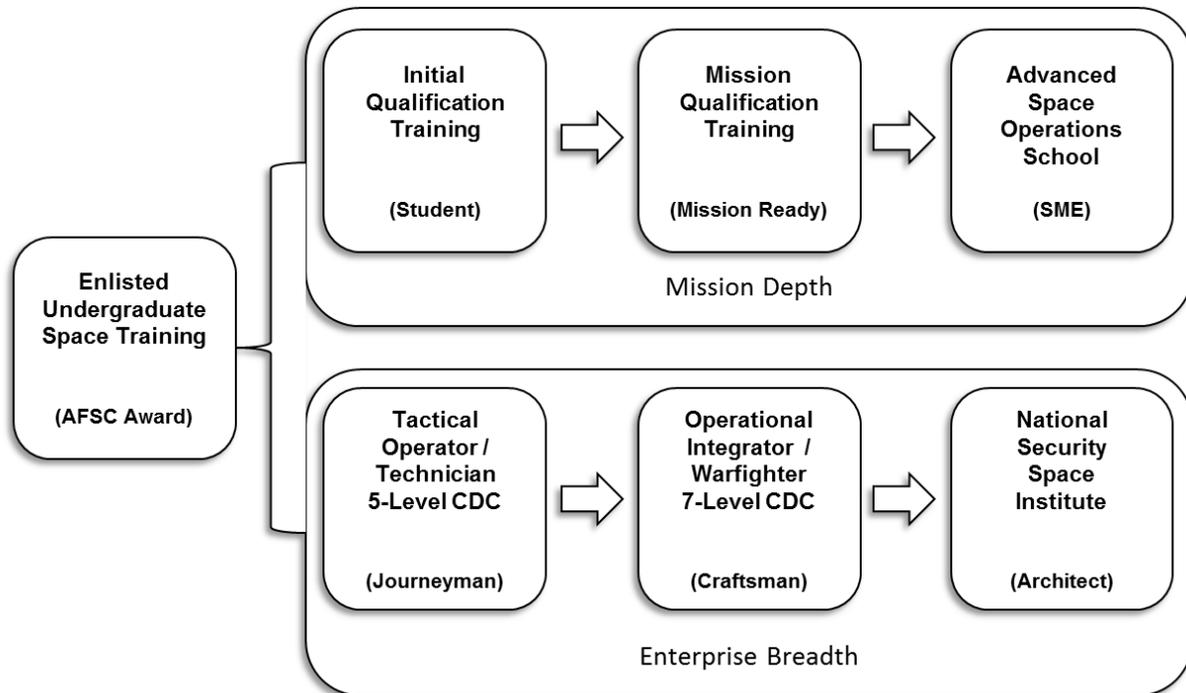
			
<b><u>AFSC Badge</u></b>	<b><u>Basic</u></b> Undergraduate Space Training + 3 Skill Level	<b><u>Senior</u></b> E5 & Above + 7 Skill Level	<b><u>Master</u></b> E7 & Above + 5 Years as 1C6 from 7 Level
<b><u>AFSC Skill Level</u></b>	<b><u>5 Skill Level – Journeyman</u></b> 1C631 Skill Level + 1C651 CDC + 1 Year OJT (AFSC Exp) *9 mos Retrainee + Positional Certification	<b><u>7 Skill Level – Craftsman</u></b> SSgt & 1C651 Skill Level + *1C671 CDC + 1 Year OJT (AFSC Exp) *6 mos Retrainee	<b><u>9 Skill Level – Superintendent</u></b> SMSgt & 1C671 Skill Level
<b><u>Space E&amp;T</u></b>	<b><u>Adv Space Ops Crs – Tactical</u></b> E5 or above & 5 Level + Type of Work + Career Airman w/ 6+ Years TAFMS + 2+ Years Retainability	<b><u>Space 200 – Operational</u></b> E5 or above & 5 Level + Space CCAF & Type of Work + Career Amn w/ 6+ Years TAFMS + 2+ Years Retainability	<b><u>Space 300 – Strategic</u></b> SNCO & 7 Level + Space CCAF & Type of Work + 10+ Years TAFMS + 2+ Years Retainability
<b><u>SPDP Tier</u></b>	<b><u>Tier 1 – Operator</u></b> Undergraduate Space Training + 1 Year of Space Experience	<b><u>Tier 2 – Integrator</u></b> Tier 1 & 5 Level + 6 Cumulative Years of Space Experience + Space 200 <i>or</i> Advanced Space Ops Crs <i>or</i> Space CCAF	<b><u>Tier 3 – Manager</u></b> Tier 2 & 7 Level + 10 Cumulative Years of Space Experience + Space 300 <i>or</i> STEM BS Degree

**Figure 5.1. Development Matrix for Enlisted Personnel in Space Systems Operations.**

5.1.1. Supplemental Space Education and Training. 1C6X1 personnel are offered a variety of in-resident, correspondence, and distance learning professional education and training opportunities (on and off duty) to gain breadth and depth, maintain a high degree of subject matter expertise, and supplement perishable knowledge and skills. Education and training opportunities include self-study of technical orders, professional papers, computer-based training offerings, etc.

5.1.2. Formal Education and Training Delivery Plan. Figure 5.2. (1C6 Formal Education and Training Delivery Plan) illustrates the progression of in-resident and correspondence formal instruction. Following completion of the ESO course, 1C6X1 personnel are developed for both mission depth and space enterprise depth. Space systems operations personnel require an intricate understanding of the weapon system(s) they employ and the mission(s) they directly

support, as well as a broad perspective of the collective relationships and effects of the space enterprise.



**Figure 5.2. 1C6 Formal Education and Training Delivery Plan.**

5.2. Space Education. The foundation for SP development is a continuum of educational courses. These courses are intended to advance the knowledge of officer, enlisted and civilian SPs. The courses bring members together at key increments in their careers to stay current on evolving space missions, technologies and capabilities, and to further professional relationships.

5.2.1. Enlisted Space Operations (ESO) Course. The ESO course is taught to personnel (usually accessions) to give them a foundation in space fundamentals and indoctrinate them into this unique “space culture.” It provides core career field training and the basic knowledge needed to perform the duties associated with the space systems operations career field. The ESO course includes an initial background in technical information in orbital mechanics, space environment, communications, sensor fundamentals, organizations, and history. The students receive instruction in: Missile Warning, Satellite Command and Control, Space Control, Spacelift/Range operations, and Space Surveillance. After graduation from the ESO course, students will receive more specific mission area training (MQT) at their gaining unit, with the length of the training dependent upon the weapon system trained. This course is part of the Space Professional Development concept. Graduation from IST results in award of the 1C631 AFSC. ESO training is conducted by 381 TRG, Vandenberg AFB, CA.

5.2.2. Ready Spacecrew Program (RSP). RSP is the overarching operations training program designed to enhance the knowledge and warfighting capability of AFSPC spacecrew members

after MQT and throughout a spacecrew member's tour(s) in a given MDS. It includes continuation training (CT) and advanced training (AT) and may include difference training as required.

5.2.2.1. Advanced Training (AT). Advanced Training is the set of formal training requirements, beyond weapon system qualification and CT to advance the skills required to ensure mission accomplishment in a Contested, Degraded, and Operationally-limited (CDO) environment. Advanced Training is the most important part of the RSP for AFSPC CMR units. Mission Planning, Execution, and Debriefing are critical to successful AT. Non-CMR units will adapt AT as necessary to meet mission needs.

5.2.2.1.1. Weapon System Technical Knowledge. Develop in-depth, technical knowledge and skills, to the sub-system level, on individual weapon systems and their associated support infrastructure (ex. system architecture, capabilities, limitations, vulnerabilities, etc.).

5.2.2.1.2. CDO Challenges to Mission Success. Develop comprehensive knowledge of CDO challenges threatening mission success. Training should cover the following topics at a minimum: adversary threats and systems, adversary doctrine, adversary tactics, environmental impacts, and system degradation.

5.2.2.1.3. Weapon System Employment TTPs. Create in-depth knowledge and skills necessary to develop and employ weapon system capabilities to achieve current and emerging tactical and operational objectives under a wide range of operating environments and threat conditions. Training should allow and encourage the identification and initial development of new employment TTP.

5.2.2.1.4. Defensive TTPs. Demonstrate ability to overcome adversary attempts to undermine mission success (ex. defensive capabilities, etc.) to the extent possible for the system. Training should allow and encourage the identification and initial development of new defensive TTP.

5.2.2.1.5. System and Operational Integration. Demonstrate ability to effectively and rapidly integrate operations with external organizations (Joint Space Operations Center, Air and Space Operations Center (AOC), Space Operations Squadrons, etc.). Develop comprehensive understanding of the broad impacts of CDO events to current and future supported missions (ex. Command and Control relationships, Operation Orders, crisis action planning, theater commander and/or end-user requirements, AOC integration, etc.).

5.2.2.2. RSP Advanced Training Missions (RAMs). RSP advanced training missions are designed to improve a spacecrew's ability to operate the weapon system under challenging CDO conditions. RAMs will focus on overall mission effectiveness in a CDO environment rather than individual task performance. RAMs are conducted throughout the AT period and are the primary means of achieving AT objectives and currencies.

5.2.2.3. The Comprehensive Task List (CTL) specifies what tasks are to be performed by each crew position and to what level the task should be understood or performed. The CTL may specify different levels by experience level as required.

5.2.3. Education and Training for Types of Work. 1C6X1 professionals are offered education and training opportunities that are targeted for application in specific “types of work.” Figure 5.2. (Development Matrix for Enlisted Personnel in Space Systems Operations) illustrates the relationships between award criteria for the Space Operations Badge, skill levels, training and education opportunities and prerequisites, and Space Professional Development Program tiers.

5.2.3.1. NSSI/RNSSI. NSSI/RNSSI is the DoD’s single focal point for space education and training, complementing existing space education programs at the Air University and the Air Force Institute of Technology. The cornerstone of SPDP is a space education continuum of learning (CoL) that reinforces space cultural awareness throughout a space professional’s career. These courses are intended to advance the space knowledge of all officers, enlisted and civilian space professionals. <https://www2.peterson.af.mil/nssi/public/>

5.2.3.1.1. Space 200. Space 200 is usually taught to NCOs and SNCOs whose duties focus on the operational environment, the design and acquisition of space systems, and the integration of space capabilities into joint warfighting. This is a mid-career course for space professional continuing education. It develops space professionals to think critically about the application of space power. Enlisted space operations professionals are targeted for this course when assigned to an “operations integrator” type of work (ex. Formal Instructing, AOC, Space Aggressors, NAF staff, etc.). Eligibility: 5-skill level, SSgt or above with at least 6 years of Total Active Federal Military Service, 2-years retainability. This curriculum is applicable to units that perform Space AOC functions (ex. 614 AOC, 624 AOC, JSpOC, USSTRATCOM GOC, etc.), Operations Staff functions (ex. Inspector General, Joint Staff, NAF staff, etc.), Operations Integration functions (ex. Space Range and Lift, 25 SRS, 328 WPS, 526 SAS, 505 TEG, NASIC, NRO, USNORTHCOM, Warfare Centers, etc.), and/or Formal Training functions (ex. AETC, ASOpS, NSSI/RNSSI, Weapons and Tactics cells/division, etc.).

5.2.3.1.2. Space 300. Space 300 is offered in general to SNCOs (and officers) whose duties focus on space policy, doctrine and the strategic use of space capabilities. This is a capstone course for space professional continuing education. Space 300 develops Airmen in the specialty to understand national policy considerations and strategic thought within an international geopolitical environment. Enlisted space operations professionals are targeted for this course when assigned to a “strategic manager” type of work (ex. Systems Test and Evaluation, Acquisitions, Higher Headquarters, etc.). Eligibility: 7-skill level, SNCO with at least 10 years of Total Active Federal Military Service, 2-years retainability. This curriculum is applicable to units that perform Operational and Strategic Level functions (ex. HAF, MAJCOM, NAF, Program Office, ASOPS, NSSI/RNSSI, Operational Test & Evaluation, etc.).

5.2.3.2. ASOpS. ASOpS expands space system understanding by providing world-class, in-depth instruction of space systems, capabilities, requirements, acquisition, strategies and policies to support Joint military operations and U.S. National Security. Enlisted space operations professionals are targeted for this course when assigned to a “tactical operator” type of work (ex. Space Operations Squadron, Space Warning Squadron, Space Control Squadron, theater AOCs, etc.) or as Subject Matter Experts and Functional Area Managers in the course related mission. <https://www2.peterson.af.mil/nssi/CESET/ASOpS/index.htm>

5.2.3.2.1. Advance Orbital Mechanics. This course develops space professionals who can create innovative TTPs by applying the principles of advanced orbital mechanics to effectively plan and execute orbital rendezvous and proximity operations. This curriculum is applicable to units that perform Satellite Command and Control related missions (ex. 1 SOPS, 3 SES, 21 SOPS, 22 SOPS, 23, SOPS, etc.).

5.2.3.2.2. Overhead Persistent Infrared (OPIR) Advanced Course. This course provides an in-depth understanding of how OPIR capabilities are integrated into user communities' missile warning, missile defense, battle space awareness and technical intelligence mission areas. This curriculum is applicable to units that perform Space-based Warning related missions (ex. 2 SWS, 11 SWS, 460 OG units, JFCC-IMD, Missile Warning Center, NORAD, etc.).

5.2.3.2.3. Navigation Operations Advanced Course. This course provides in-depth knowledge of the Global Positioning System (GPS). This curriculum is applicable to units that perform Navigation operations related missions (ex. 2 SOPS, etc.).

5.2.3.2.4. Satellite Communications (SATCOM) Advanced Course. This course provides space and communications professionals with in-depth system knowledge so they may constructively influence SATCOM development, acquisition, employment and sustainment, as well as craft innovative operational tactics, techniques, and procedures. This curriculum is applicable to units that perform Military Satellite Communications (MILSATCOM) related missions (ex. 3 SOPS, 4 SOPS, etc.).

5.2.3.2.5. Space Control Tactics Course. This course takes operators already proficient in space electronic warfare missions and provides the knowledge and skills necessary to develop and implement advanced tactics, techniques and procedures in both offensive and defensive space control operations. This curriculum is applicable to units that perform Offensive and Defensive Space Control related missions (ex. 4 SPCS, 16 SPCS, 114 SPCS, 216 SPCS, etc.).

5.2.3.2.6. Space Warfighter Preparatory Course (SWPC). This course prepares space professionals to effectively augment theater Air Operations Centers during both exercises and real-world operations. This curriculum is applicable to units that perform Air Operations Center related missions (ex. 603 AOC, 607 AOC, 613 AOC, etc.).

NOTE: The RNSSI supports both the NSSI and ASOpS in the continuum of learning effort.

5.2.4. Community College of the Air Force (CCAF). Enrollment in CCAF occurs upon completion of basic military training. CCAF provides the opportunity to obtain an Associate in Applied Sciences Degree in Air & Space Operations Technology. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an AETC instructor should be actively pursuing an associate degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools. In addition to the associate's degree program, CCAF offers the following:

5.2.4.1. Trade Skill Certification. When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The college uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are listed on the CCAF transcript.

5.2.4.2. Degree Requirements. All airmen are automatically entered into the CCAF program. The Journeyman 5-skill level must be held at the time of program completion. The following tables indicate the requirements and approximate college credit hours needed for the Air & Space Operations Technology CCAF degree. Airmen are encouraged to check with the education office to determine the amount of credit hours received from technical training.

<b>Subject:</b>	<b>Sem Hrs</b>
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective Technical Education; Leadership, Management, and Military Studies, and General Education	15
<b>Total</b>	<b>64</b>

5.2.4.3. Technical Education. (24 Semester Hours): A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core or Technical Elective courses.

<b>TECHNICAL CORE</b>		<b>TECHNICAL ELECTIVE</b>	
<b>Subject/Courses</b>	<b>Sem Hrs</b>	<b>Subject/Courses</b>	<b>Sem Hrs</b>
CCAF Internship	18	Basic Electronics Theory/Applications	6
Space Systems Operations	24	Management Information Systems	3
Aerospace Control and Warning Systems	24	Solid-State Theory/Applications	3
		Aviation/Flight Safety	3
Air Weapons Control Operations	18	Programming Languages	6
Computer Networking	6	Technical Writing	3
Radio Communications	6	Space Propulsion	3
		Survival Training	3
		Astronautics	3
		Astronomy	3
		Computer Science	6

5.2.4.4. Leadership, Management, and Military Studies. (6 Semester Hours): Professional military education, and/or civilian management courses accepted in transfer and/or by testing credit.

5.2.4.5. Physical Education. (4 Semester Hours): This requirement is satisfied by completion of BMT.

5.2.4.6. General Education. (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subjects/courses as provided in the CCAF General Catalog.

Subject:	Sem Hrs
Oral Communication.....Speech	3
Written Communication.....English Composition	3
Mathematics.....Intermediate algebra or a college-level mathematics	3
Social Science.....Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	3
Humanities.....Fine Arts (Historical significance, Criticism, and Appreciation), foreign language, literature, philosophy, religion	3
<b>Total</b>	<b>15</b>

5.2.4.7. Program Elective. (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies (LMMS); or General Education subjects/courses, including natural science courses meeting GER application criteria. Six semester hours of CCAF degree applicable technical credit otherwise not applicable to this program may be applied. See the CCAF General Catalog for details regarding the Associates of Applied Science for this specialty.

5.2.5. Air Force Credentialing Opportunity On-Line (AFCOOL). Public Law 113-66, Section 542, *2014 National Defense Authorization Act for Fiscal Year 2014* (NDAA14), Section 542 directs the Services to use their respective Credentialing Opportunities On-Line (COOL) programs in order to make credentialing information available to service members, credentialing agencies, etc. AFCOOL implements NDAA14, enabling Airmen to obtain civilian credentials in their military occupations. The following agencies have credentials mapped to the 1C6X1 specialty that may be earned IAW their respective requirements:

<https://afvec.langley.af.mil/afvec/Public/COOL/Default.aspx>

5.2.5.1. Computing Technology Industry Association (CompTIA) offers:

5.2.5.1.1. CompTIA Network+ ce (continuing education)

5.2.5.2. Electronic Technicians Association, International (ETA-I) offers:

- 5.2.5.2.1. Certified Network Computer Technician (CNCT)
- 5.2.5.2.2. Certified Network Systems Technician (CNST)
- 5.2.5.2.3. Certified Computer Service Technician (CST)
- 5.2.5.3. International Society of Certified Electronics Technicians (ISCET) offers:
  - 5.2.5.3.1. Certified Electronics Technician – Associate Level

5.2.6. Advanced College/University Degrees. Advanced courses, academic certificates and advanced academic degrees are encouraged for enhancing professional qualifications and competency. These programs are intended to advance the space knowledge of Total Force space professionals, increase leadership skills, and help prepare space professionals for senior leadership positions.

5.2.7. Air Force Institute of Technology (AFIT). The Enlisted-to-AFIT program is a unique element of enlisted space professional development. In conjunction with other training and education programs, resident AFIT-sponsored science, engineering, and management graduate degree opportunities further develop NCO and senior noncommissioned officers' (SNCO) technical education and skills. Applicants for advanced academic degrees are limited to specific AFSCs. The 1C6X1 specialty is an approved AFSC for the AFIT Space Systems degree and the Systems Engineering degree programs.

## **6. Professional Development**

6.1. Tactical Development (E-1 to E-7, Years 1 - 15). During the initial phase enlisted Space Professionals (SP) should focus on developing depth in their assigned space system. It is critical to acquire technical depth and knowledge breadth that will be built upon during an entire career. The primary focus is on becoming a systems expert, but SPs must also understand when key career milestones need to be accomplished. Communication is essential during this phase. Supervisors and mentors must understand many elements of the space enterprise in order to provide feedback, evaluate strengths and weaknesses, and discuss career path options.

6.1.1. Education. Basic Military Training is followed by ESO, the first stage in the continuum of space education. After completing Combat Mission Ready (CMR) certification and Career Development Courses (CDCs), SPs should visit the base education office to determine the amount of Community College of the Air Force (CCAF) course credit they've already earned and the additional coursework they need to complete for a CCAF associate degree. Continuous learning is necessary throughout an enlisted SP's career, so a long-term education plan is invaluable.

6.1.2. Training. Following the ESO course, operators attend training in their assigned weapon system. Depending on the complexity of the system, this process may take several months. After attaining CMR status, enlisted SPs are immediately enrolled in the appropriate CDCs to increase their AF skill level. Mission ready monthly recurring training may also be required. In some cases, commanders may direct ASOpS advanced course attendance within a particular mission area.

6.1.3. Experience. The primary driver for enlisted assignments is mission requirements. Depending on mission needs, a typical airman may have three to four assignments during this

development phase in several different weapon systems and/or mission areas. Therefore, personnel are expected to deepen their system experience through opportunities in the following positions: line instructors, line evaluators, operational support staff, operational group evaluation positions or formal instructor duties. When the assignment process allows, SPs should also volunteer for positions that build on their mission depth. Some examples:

6.1.3.1. Complement ground-based missile warning experience with an operational tour in a space-based warning squadron.

6.1.3.2. After a space surveillance assignment at the 20 SPCS, deepen this experience with an assignment to the JSpOC.

6.1.3.3. After an assignment in the 50th Space Wing, move to the 460th Space Wing to deepen satellite systems experience with a space-based warning (systems) assignment.

6.2. Operational and Integration Development (E-5 to E-8, Years 6 - 18). In this stage of development, enlisted SPs transition to first line supervisor and mid-level leadership and management positions. There are still opportunities for building tactical depth in crew positions, but most mid-level NCOs are expected to broaden their experience as crew chiefs or Non Commissioned Officers in Charge (NCOICs). One aspect that hasn't changed is job performance, which is still the most important factor in determining future progression.

6.2.1. Education. At this point, individuals are encouraged to complete their CCAF degree and consider enrolling in a bachelor's degree or graduate-level program. A STEM degree related to the space profession would be the most beneficial. Space 200, Space 300 may be appropriate at this time to prepare an enlisted SP to integrate space capabilities. The AFIT Graduate Space Systems degree program is another option for members with the appropriate prerequisites to consider.

6.2.2. Training. Applicable advanced courses (ASOpS) may be appropriate at this time to support technical development in a mission area or weapon system. Advanced courses should complement the type of work being performed and is optimally attended before or early in the related assignment to realize the greatest return on the training investment.

6.2.3. Experience. The depth of experience gained as a technician is in very high demand. SPs serve as subject matter experts, and in mid-level staff and leadership roles. Deep understanding of weapon system capabilities and mission execution is expected from crew chiefs and when serving in other key NCOIC positions. Many opportunities outside the tactical unit are available that can continue to deepen as well as broaden space experience, such as: instructor/evaluator duty at squadron, group, ESO, NSSI/RNSSI, and ASOpS; mission or enterprise expert at an Air Operations Center, experimentation squadron, aggressor or range squadron, or operational test/evaluation organization, etc; and staff positions at group, wing, Numbered Air Force, or MAJCOM. Joint experiences also provide unique operational-level perspectives that help develop a more complete portfolio for the SP. Adding an additional mission area if multiple assignments have been spent in a singular area is also an excellent way to broaden understanding of the space enterprise. These positions help develop staff skills, the ability to apply expertise to

space issues at higher levels, and expand one's knowledge and perspective of the space enterprise.

6.3. Strategic Development (E-7 and above, Years 12 and higher). In this stage of development, senior enlisted SPs apply the depth and breadth of experience gained in previous phases, combined with leadership and management skills. These individuals compete for key developmental and key leadership positions and other advisory roles within squadrons, groups and wings, or serve as key staff members throughout the space enterprise and/or across the greater Air Force institution.

6.3.1. Education. By this point, enlisted SPs will have completed their CCAF degree. Individuals are encouraged to consider enrolling in a bachelor's degree or graduate-level program. A STEM degree related to the space profession would be the most beneficial. Space 200, Space 300 may be appropriate at this time to prepare an enlisted SP to integrate space capabilities. The AFIT Graduate Space Systems degree program is another option for members with the appropriate prerequisites to consider.

6.3.2. Training. Applicable advanced courses (ASOpS) may be appropriate at this time to support technical development in a mission area or weapon system. Advanced courses should complement the type of work being performed and is optimally attended before or early in the related assignment to realize the greatest return on the training investment.

6.3.3. Experience. SPs apply their skills to serve as a squadron flight chief, squadron superintendent, group superintendent, MAJCOM Functional Manager, or Air Force Career Field Manager, etc.

6.4. Enlisted Professional Military Education (EPME). EPME consists of resident and non-resident/distance learning (DL) courses for ALS, NCOA and AFSNCOA to prepare Airmen for increased responsibilities associated with promotion. Figure 6.1. (The Continuum of Enlisted Professional Military Education) conveys the blended EPME learning and Time in Service (TIS) model. Reference AFI 36-2301, *Developmental Education*, and/or the Air University Catalog and Education and Training Course Announcement (ETCA) online catalog (<https://etca.randolph.af.mil>) for course descriptions and additional details on DL programs. See also Table 12-1, Enlisted Professional Development Path.

6.4.1. Airman Leadership School (ALS). Airmen will first attend ALS between 3 and 6 years of TIS. ALS is an in-residence experience that prepares our SrA for leadership and supervisory responsibilities.

6.4.2. NCOA Distance Learning (DL) Course. Once members have graduated ALS and reached the 7 year TIS point, they will receive notification to enroll in the NCOA DL Course to satisfy Basic EPME requirements. Airmen must enroll and complete the distance learning course within 12 months to be eligible for promotion and reenlistment. The course addresses the declarative and procedural knowledge required to establish a foundation for continued development in the NCOA Intermediate Leadership Experience (ILE) taught at OCONUS/CONUS NCOAs. After

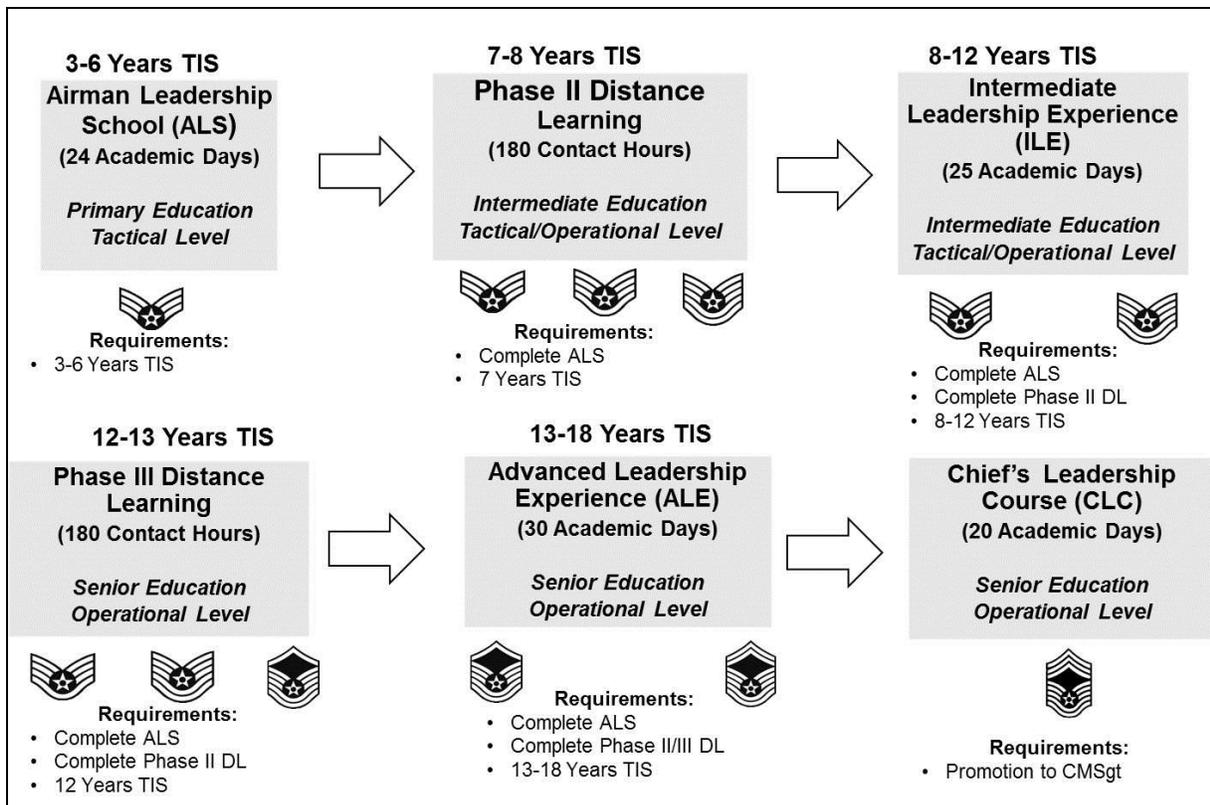
successfully completing the NCOA DL Course, many NCOs will attend the NCOA ILE resident experience between 8 and 14 years TIS.

6.4.3. NCOA Intermediate Leadership Experience (ILE). ILE is a Comprehensive level EPME course designed to prepare junior enlisted Airmen to be adaptable, ethical and willing to execute assigned leadership responsibilities to overcome current and future leadership and management challenges in order to effectively operate in complex and ambiguous environments. Students apply their understanding of concepts covered in the distance-learning and additional concepts covered during the resident course to situations each will likely encounter after graduation. The ILE prepares NCOs for increased leadership responsibility in their operating environment.

6.4.4. SNCOA DL Course. NCOs at 12 years TIS will also receive a notification to enroll and complete the current SNCOA DL Course within 12 months or be ineligible for promotion and reenlistment. The distance learning course prepares NCOs/SNCOs for leadership responsibilities and provides the foundational knowledge for success in the SNCOA Advanced Leadership Experience (ALE). After successfully completing the SNCOA DL Course, SNCOs may attend the SNCOA ALE when they reach at least 13 but no more than 21 years TIS.

6.4.5. SNCOA Advanced Leadership Experience (ALE). ALE provides comprehensive education to prepare senior enlisted to be adaptable, ethical, critically thinking, and strategically relevant leaders in diverse operating environments. Students apply their understanding of concepts covered in the distance-learning course as well as additional concepts covered during the resident course to situations each will likely encounter after graduation. The ALE prepares SNCOs for increased leadership responsibility in the joint, combined, and interagency operating/strategic environment.

6.4.6. Chief's Leadership Course (CLC). CLC is the Air Force EPME capstone. It is attended upon promotion to Chief Master Sergeant and enhances the senior enlisted leader's strategic perspective in preparation for assuming roles and responsibilities requiring a comprehensive mastery of Air Force institutional competencies.



**Figure 6.1. The Continuum of Enlisted Professional Military Education**

6.4.7. Enlisted Joint PME (EJPME). All enlisted personnel should be exposed to EJPME as they progress through their respective Services' EPME system. This exposure prepares them to succeed in the complex future operating environment by improving their ability to operate effectively as part of a Joint Force. Some senior enlisted personnel may require a more comprehensive joint education to prepare them for an assignment to a joint billet at the Senior Enlisted Leader/CSEL level. EJPME includes four educational levels that span an enlisted member's career and apply to all enlisted personnel. Figure 6.2. (Enlisted Professional Military Education Continuum) depicts how EJPME progressively develops the knowledge, skills, perspectives, and values essential for enlisted personnel to function effectively in joint, interagency, and multinational operations and organizations. Refer to CJCSI 1805.01B, *Enlisted Professional Military Education Policy*, for learning objectives.

6.4.7.1. Basic EJPME. The basic EJPME level addresses the progressive educational guidelines that should be completed by pay grade E6.

6.4.7.2. Career EJPME. This level addresses educational guidelines for personnel in grades E6/7 and above.

6.4.7.3. Senior EJPME (SEJPME). This level addresses educational guidelines for enlisted leaders in grades E7 to E9. The SEJPME courses are two stand-alone on-line courses that educate enlisted leaders serving in or slated to serve in joint organizations. SEJPME I

emphasizes curriculum commensurate with E6/E7 Joint Assignment responsibilities. SEJPME II emphasizes curriculum commensurate with E8/E9 Joint Assignment responsibilities.

6.4.7.4. Keystone EJPME. This level addresses educational guidelines for CSELs at the grade of E9 and prepares them for assignment in a flag level joint headquarters or Joint Task Force.

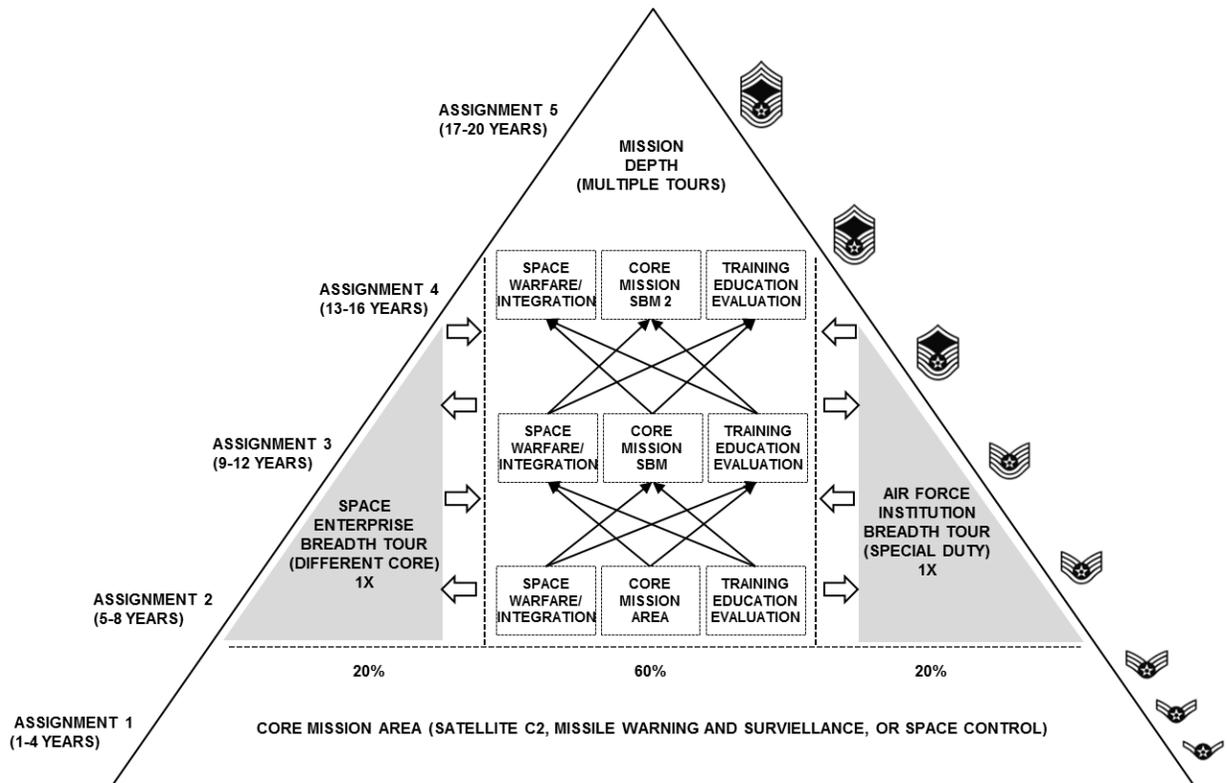
Grade	E1-E3	E4-E6	E6-E7	E8-E9	E9
EDUCATION LEVEL	INTRODUCTORY	PRIMARY	INTERMEDIATE	SENIOR	EXECUTIVE
<b>Educational Institutions Courses &amp; Opportunities</b>	<ul style="list-style-type: none"> <li>Service Initial Entry Training</li> <li>Basic Development Schools and Courses</li> </ul>	<ul style="list-style-type: none"> <li>PME Academies, Schools, &amp; Courses</li> </ul>	<ul style="list-style-type: none"> <li>PME Academies, Schools, &amp; Courses</li> <li>SEJPME I Course</li> </ul>	<ul style="list-style-type: none"> <li>PME Academies, Schools, Courses, Seminars, Symposiums, &amp; Conferences</li> <li>JSOU JSOFSEA</li> <li>SEJPME II Course</li> </ul>	<ul style="list-style-type: none"> <li>PME Academies, Schools, Courses, Seminars, Symposiums, &amp; Conferences</li> <li>NDU KEYSTONE</li> </ul>
<b>Emphasized Levels of War</b>	TACTICAL		OPERATIONAL		STRATEGIC
<b>Focus of Military Education and Professional Development Programs</b>	<ul style="list-style-type: none"> <li>Followership &amp; Fundamentals of Leadership</li> <li>Establish Tactical Warfighter Skills</li> <li>Service-specific Competencies</li> </ul>	<ul style="list-style-type: none"> <li>Leadership &amp; Management Skills in Service and MOS/AFSC/RATING</li> <li>Expand Tactical Warfighting Skills</li> <li>Small Team/Unit Leadership</li> </ul>	<ul style="list-style-type: none"> <li>Advanced Leadership &amp; Management Skills in Service and MOS/AFSC/RATING</li> <li>Advanced Tactical Warfighting Skills</li> <li>Introduce Operational Level of War</li> <li>Unit / Organizational Leadership</li> </ul>	<ul style="list-style-type: none"> <li>Advanced Leadership &amp; Management Skills in a Joint Environment</li> <li>Expand Operational Level of Warfighting</li> <li>Introduction to Interagency &amp; Multinational Operations</li> <li>Organizational &amp; Command Senior Enlisted Leadership</li> </ul>	<ul style="list-style-type: none"> <li>Advanced Leadership &amp; Management Skills in a Joint Environment</li> <li>Introduction to Strategic Theater Level of Warfighting</li> <li>Expand Interagency &amp; Multinational Operations</li> <li>Command Senior Enlisted Leadership</li> </ul>
<b>Career Long Development (EDLAs)</b>	<ul style="list-style-type: none"> <li>Operate on commander's intent and enable mission command at all levels</li> <li>Make sound ethical decisions based on the values and standards of the profession of arms</li> <li>Utilize available resources to enhance the discipline, readiness, resiliency, and health of the total force</li> <li>Anticipate, communicate, and mitigate risks</li> <li>Operate in joint, interagency, intergovernmental, and multinational environments</li> <li>Think critically and develop agile and adaptive leaders</li> </ul>				
<b>Joint Emphasis Areas</b>	<p><b>Basic</b></p> <ul style="list-style-type: none"> <li>National Military Capabilities</li> <li>Joint Forces Overview</li> <li>Joint Forces Non-Commissioned and Petty Officer</li> <li>Introduction to JIIM</li> </ul>		<p><b>Senior</b></p> <ul style="list-style-type: none"> <li>National Strategic Overview</li> <li>JIIM</li> <li>Foundations of Joint Operations</li> <li>Joint Force Leadership</li> </ul>		<p><b>KEYSTONE</b></p> <ul style="list-style-type: none"> <li>National Military Capabilities and Organization</li> <li>Joint Doctrine</li> <li>JIIM Capabilities</li> <li>Joint Force Leadership</li> </ul>
			<p><b>Career</b></p> <ul style="list-style-type: none"> <li>National Strategic Overview</li> <li>National Military Capabilities and Organization</li> <li>Foundations of Joint Operations</li> <li>Joint Forces Overview</li> <li>Regional Knowledge and Operational Culture</li> <li>Joint Force Leadership</li> </ul>		

**Figure 6.2. Enlisted Professional Military Education Continuum**

6.5. Continuing Education. Throughout their careers, SPs should pursue ongoing continuing education to keep current on key developments in the space arena, as well as within their areas of expertise. Professional reading, participation in space seminars and symposia, research, specialized courses and advanced degree studies are excellent means of sustaining SP knowledge in space subject areas.

6.6. Career Paths. To sum up enlisted guidance, sample career paths are provided in Figure 6.3 (1C6X1 Space Mission Area Depth Pyramid) and Figure 6.4 (Example 1C6X1 Career Pyramid). These are merely examples and do not imply the existence of any ideal career path. All SP members are strongly encouraged to work with a mentor in building an achievable timeline based on their own goals and circumstances. When diagramming a 20+ year career, it might seem a bit intimidating to consider all the important milestones that must be accomplished.

6.6.1. Deliberate Depth. Figure 6.3. (1C6X1 Space Mission Area Depth Pyramid) illustrates how mission area depth can be achieved while providing opportunities to experience enterprise and institutional breadth.



**Figure 6.3. 1C6X1 Space Mission Area Depth Pyramid**

6.6.2. Career Field Path. Figure 6.4 (Example 1C6X1 Career Pyramid) illustrates a typical career path for individuals in the 1C6X1 AFSC.

NOTE: For simplicity, Figure 6.4. (Example 1C6X1 Career Pyramid) focuses on only space-related progression and does not depict all Career Development or broadening opportunities that all SPs may pursue at relevant points in their careers.

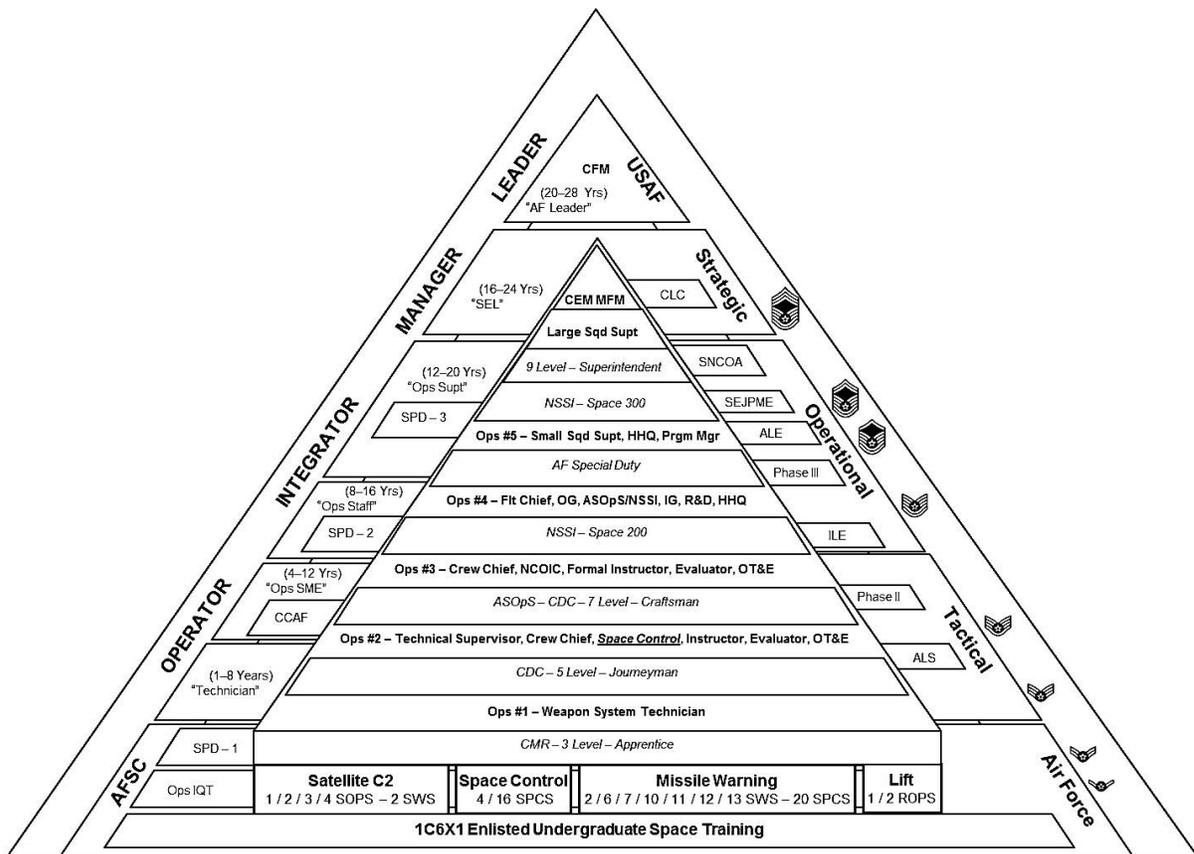


Figure 6.4. Example 1C6X1 Career Pyramid

## 7. Experience Identification.

7.1. SEIs for Space Related Duties. SEIs support force management. They are established when identifying space systems operations training, skills or experience as critical to matching the right skills to the right place at the right time. SEIs related to each space operations mission area and level of responsibility are used to rapidly identify an already experienced resource to meet unique circumstances, contingency requirements or management needs. They also provide a means to track individuals and identify positions requiring or providing unique experience or training that would otherwise be difficult to locate or identify. SEIs will be managed IAW AFI 36-2101, (*Classifying Military Personnel*). SEIs have been established in the AFECD for the space systems operations specialty. Some SEIs for space related duty are coded as Auto-Award within MilPDS allowing individuals serving in SEI-coded positions to be automatically awarded the SEI upon meeting the requisite education, training, positional certification, skill level, and number of months of experience. See Table 7.1. (Space Related SEIs).

SATELLITE COMMAND AND CONTROL		
WARNING		
156	2 SWS	BU1SF4V5
	8 SWS	V40MFTHR
	8 SWS DET 1	V40MF02Y
	11 SWS	FD1SFPSX
INTELLIGENCE RECONNAISSANCE SURVEILLANCE (ISR)		
157	1 SOPS	FD1SF67F, FD1SFP1Z
	3 SES	FD1SFP1L
MILSATCOM		
158	3 SOPS	FD1SF67D
	4 SOPS	FD1SFJNV
POSITION, NAVIGATION, TIMING (PNT)		
159	2 SOPS	FD1SF5YR
	19 SOPS	V40MFBNM
SATELLITE CONTROL NETWORK (SCN)		
160	21 SOPS	LK1SF8NB
	22 SOPS	FD1SFDGV
	23 SOPS	VQ1SFP8Q
ORBITAL ANALYSIS		
170	2 SWS	BU1SF4V5
	3 SES	FD1SF67D
	8 SWS	V40MFTHR
MULTI-SYSTEMS		
171	6 SOPS	V40MFR60
	50 OG	FD1SFJNR
	50 OSS	FD1SF5BG
	<i>FUTURE USE</i>	N/A

SPACE-BASED WARNING		
SPACE-BASED WARNING OPERATIONS		
257	2 SWS	BU1SF4V5
	8 SWS	V40MFTHR
	8 SWS DET 1	V40MF02Y
	11 SWS	FD1SFPSX
WARNING (FUSION CENTERS)		
258	9 SOPS	V40MFS4P
	14 AF	VQ1SFLFV
	CMOC	EP2SF82Y, EP3QFNDJ
	CMOC	EP2SF82Y, EP3QFNDJ
	JSPOC	VQ3QFJSK
	USSTRACOM/J3	OD3QFJ2G
SPACE CONTROL		
SPACE-BASED WARNING OPERATIONS		
259	<i>FUTURE USE</i>	N/A
FUSION CENTERS		
272	9 SOPS	V40MFS4P
	614 AOC	VQ1SFS0K
	614 AOC DET 1	AU1SFP1J
	JSPOC	VQ3QFJSK
OFFENSIVE OPERATIONS		
273	4 SPCS	HS1SFPB7
	76 SPCS	EP1SFB26
	DATA MASKED	EP1SFB26
	<i>FUTURE USE</i>	N/A
	<i>FUTURE USE</i>	N/A

SPACELIFT		
RANGE SYSTEMS		
172	1 ROPS	PF1SF8DB
	2 ROPS	VQ1SF8DD
	<i>FUTURE USE</i>	N/A
MISSION ASSURANCE/SPACE LAUNCH MAINT TECH		
173	<i>FUTURE USE</i>	N/A
GROUND-BASED RADAR		
WARNING AND SURVEILLANCE OPERATIONS		
255	6 SWS	LK1SFDPY
	7 SWS	BD1SF0HF
	10 SWS	GM1SFDPK
	12 SWS	EP1SFBQP
	13 SWS	EH1SFF09
	20 SPCS	ED1SFF07
MISSILE DEFENSE		
THEATER AOC		
327	613 AOC	HL0RFHKY
	USFJ/J3	YM3OFH9J
OPERATIONS		
331	9 SOPS	V40MFS4P
	JFCC-IMD	FD3QFNHQ
	JSPOC	VQ3QFJSK
	USAFE/MD	RF0DF5CC, RF0DFLC8
OPERATIONS (DEPLOYED)		
334	<i>FUTURE USE</i>	N/A
SPACE WAREFARE		
MULTI-SYSTEMS		
347	25 SRS	FD1CFP59
	26 SAS	V40MFHFP
	328 WPS	NJ1CFK4F
	379 SRS	V40MFW6C
	527 SAS	FD1CFCSC
	DATA MASKED	EB1MF2YY
SPACE AOC		
349	9 SOPS	V40MFS4P
	614 AOC	V41SFS4P, VQ1SFSXV
	JSPOC	VQ3QFJSK
THEATER AOC (DEPLOYED)		
353	<i>FUTURE USE</i>	N/A

DEFENSIVE OPERATIONS		
274	16 SPCS	EP1SFPJ5
	380 SPCS	V40MF02P
DEFENSIVE OPERATIONS (DEPLOYED)		
275	<i>FUTURE USE</i>	N/A
SPACE SITUATIONAL AWARENESS		
293	<i>FUTURE USE</i>	N/A
INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE		
MULTI-SYSTEMS		
319	DATA MASKED	EB1MF2YY
	NRO	HH1SFP3Y, HH1SFZHJ
		HH1SFFZV, HH1SFSYK
	NASIC	WE0UF2PM
	<i>FUTURE USE</i>	N/A
	<i>FUTURE USE</i>	N/A
SPACE EVALUATOR		
382	1 SOPS	FD1SF67F, FD1SFP1Z
	3 SES	FD1SFP1L
	4 SPCS	HS1SFPB7
	6 SWS	LK1SFDPY
	7 SOPS	V40MFCQ1
	7 SWS	BD1SF0HF
	10 SWS	GM1SFDPK
	11 SWS	FD1SFP5X
	12 SWS	EP1SFBQP
	14 AF	VQ1SFLFV
	16 SPCS	EP1SFPJ5
	20 SPCS	ED1SFF07
	21 OG	EP1SFKFB, EP1SFPKD
	30 OG	VQ1SFH66
	45 OG	PF1SFH0D
	50 OG	FD1SFJNT
	50 SW	FD1SF5BG
	76 SPCS	EP1SFB26
	310 OG	V40MF1ZD
	380 SPCS	V40MF02P
	381 TRG	VQ0JFNDC
	460 OG	BU1SFP08
	614 AOC	VQ1SFSXV
	HQ AFSPC/IG	EP1SF6KF
	<i>FUTURE USE</i>	N/A

SPACE WARFARE (CONT) THEATER AOC		
358	603 AOC	RF0DFMY0
	607 AOC	OP0RFGDG
	609 AOC	SP1CFB9W
	613 AOC	HL0RFHKY
CYBERSPACE		
377	624 AOC	LA1SFP5C
	HQ AFSPC	EP1SFP3W
	NRO	FT3QFKS3
SPACE TEST		
380	14 TS	V40MFTST
	17 TS	FD1CFP33, FD1CFPQ3, VQ1CFRPR, FD1CFPDB, PF1CFQRN,
	721 MSG/TC	EP1SF37B
	AFELM	NJ3VFC9N
	AFOTEC	EP03F37C, KV03FKTF
SPACE INSTRUCTOR		
381	381 TRG	VQ0JFNDD
	533 TRS	VQ0JFP51
	ASOPS	EP1SFP98
	NSSI	EP0JFQZY
	RNSSI	V40MF0SH

SPACE STAFF		
SPACE STAFF 1		
383	HQ AFSPC	EP1SF6KC, EP1SFVGB
	PENTAGON	HH3VFB23
SPACE STAFF 2		
384	SMC	LU1SFB1S, LU1SFGQG, LU1SFSB1, LU1SFB73,
SPACE STAFF 3		
390	14 AF	VQ1SFP3R
	21 SW	EP1SF8G4
	HQ AFSPC	EP1SFCRT, EP1SFQR7, EP1SFQR9
	JSPOC	VQ3QFJSK
SPACE STAFF 4		
391	HQ AFSPC	EP1SF6KC, EP1SFPKG
	WARFARE CTR	NJ1CFM5V
	HQ AETC	RJ0JF3L7
OTHER SPACE RELATED		
INSTRUCTIONAL MATERIALS WRITER MANAGER		
386	533 TRS	VQ0JFP51
	HQ AFSPC	EP1SF6KC
	<i>FUTURE USE</i>	N/A

SPACE BATTLE MANAGER <sup>1</sup>		
7AA	SATELLITE SYSTEMS	SPACE BATTLE MANAGER
7AB	SATELLITE SYSTEMS	SPACE BATTLE MANAGER 2
7AC	WARNING AND SURVEILLANCE	SPACE BATTLE MANAGER
7AD	WARNING AND SURVEILLANCE	SPACE BATTLE MANAGER 2
7AE	SPACE CONTROL	SPACE BATTLE MANAGER
7AF	SPACE CONTROL	SPACE BATTLE MANAGER 2
7AG	SPACE INTEGRATION	SPACE BATTLE MANAGER
7AH	SPACE INTEGRATION	SPACE BATTLE MANAGER 2
<p>NOTES:</p> <p>1. Space Battle Manager SEIs provide Functional Managers with the ability to manage technical expertise at the 7/9 skill level.</p> <p>2. Enlisted Development Team SEIs are utilized to identify Airmen vectored to Key Developmental and/or Key Leadership Positions only, and are not associated with any special experience or training.</p>		

ENLISTED DEVELOPMENT TEAM <sup>2</sup>		
1CA	MSGT, SMSGT, CMSGT	SQUADRON SUPERINTENDENT
1CB	SMSGT	OPERATIONS SUPERINTENDENT
1CC	MSGT, SMSGT	MAJCOM/WING/NAF
1CD	<i>RESERVED</i>	<i>RESERVED</i>
1CE	MSGT, SMSGT	JOINT STAFF/JOINT OPS/AIR OPERATIONS CENTER
1CF	MSGT	STANDARDIZATION/TEST & EVAL/OPS INTEGRATION
1CG	MSGT	FORMAL EDUCATION AND TRAINING
1CH	SMSGT	KEY DEVELOPMENTAL POSITION
1CI	MSGT	LARGE FLIGHT CHIEF/DET CHIEF
1CJ	CMSGT	CAREER FIELD MANAGER
1CK	CMSGT	MAJCOM FUNCTIONAL MANAGER
1CL	CMSGT	TRAINING PIPELINE MANAGER
1CM	CMSGT	JOINT SUPERINTENDENT
1CN	CMSGT	MAJCOM SUPERINTENDENT
1CO	CMSGT	OPERATIONS GROUP SUPERINTENDENT

**Table 7.1. Space Related SEIs**

7.2. Space Professional Experience Codes. SPECS are experience tracking codes designed to identify and categorize the unique space expertise that differentiates SPs from other AF professions. SPECS are used to document the unique combination of skills possessed by individual SPs. SPECS are critical for identifying individual breadth and depth of experience and are a major factor in determining the level of space certification. See Table 7.2. (Space Professional Experience Codes).

7.2.1. Ten codes parallel space missions/jobs: Satellite Systems; Nuclear; Spacelift; Warning; Space Control; Intelligence, Surveillance and Reconnaissance; Missile Defense; Space Warfare Command and Control; Space Test and Training; and Space Staff.

7.2.2. Experience codes are applied to an individual's duty history to detail an individual's space experience and are illustrated on them member's Space SURF.

7.2.3. Experience codes apply to individual space pro skill sets and space position requirements.

SPACE PROFESSIONAL EXPERIENCE CODES		
1st Character (alpha) Function Code	2nd Character (alpha) Mission Area Code	3rd Character (numeric) Experience Identifier Code
<b>A: <u>Acquisition</u></b> <b>O: <u>Operational</u></b> <b>S: <u>Staff</u></b>  Note: All wing positions are considered Ops (with one exception-XP is Staff)	A: Satellite Systems	0 - Multi Systems Knowledge 1 - Satellite C2 2 - MILSATCOM 3 - Precision Navigation & Timing (PNT) 4 - AFSCN 5 - Orbital Analysts 6 - ORS
	B: Nuclear	0 - Multi Systems Knowledge 1 - Missile Systems 2 - Missile Maintenance 3 - Missile Testing/Technology 4 - Command and Control 5 - Codes 6 - Emergency War Orders 7- Policy & Strategy 8 - Safety 9 - Plans & Programs/PPBE/PEM
	C: Spacelift	0 - Multi Systems Knowledge 1 - Range Systems 2 - Launch Systems 3 - SLEC-P 4 - Astronauts 5 - ORS
	D: Warning	0 - Multi Systems Knowledge 1 - Ground Based Systems 2 - Space Based Systems 3 - Fusion Centers
	E: Space Control	0 - Multi Systems Knowledge 1 - Ground Based Radars 2 - Space Based Systems 3 - Optical Systems 4 - Fusion Centers 5 - Space Control Operations 6 - Space Weather
	F: ISR	0 - Multi Systems Knowledge 1 - Environmental Monitoring 2 - Space Based Radar 3 - Other: AIA, NGA, NSA, DIA, NASIC, NRO, AFELM
	G: Missile Defense	0 - Multi Systems Knowledge 1 - Missile Defense

SPACE PROFESSIONAL EXPERIENCE CODES CONT)		
1st Character (alpha) Function Code	2nd Character (alpha) Mission Area Code	3rd Character (numeric) Experience Identifier Code
<b>A:</b> <u>Acquisition</u> <b>O:</b> <u>Operational</u> <b>S:</b> <u>Staff</u>  Note: All wing positions are considered Ops (with one exception-XP is Staff)	I: Space Training, Test & Evaluations	0 - Multi Systems Knowledge 1 - Space AOC 2 - Theater AOC 3 - Space Innovation & Development Center (SIDC) 4 - SOF 5 - Near Space
	J: Space Staff	0 - Executive Officer 1 - Assignments 2 - Joint 3 - Safety 4 - Program Element Monitor 5 - XP, Plans and Programs 6 - Research and Development 7 - Information Operations 8 - Other, anything not covered by another SPEC

**Table 7.2. Space Professional Experience Codes**

**8. Space Professional Development Program (SPDP).**

8.1. Purpose. The focus of SPDP is to develop, through individual career management, a group of Space Professionals (SP) with a thorough understanding of the space medium and its effective application to joint warfighting. SPDP’s goal is to build SPs who are skilled and knowledgeable in the development, application and integration of space concepts, doctrine and capabilities to achieve national security objectives. Every aspect of this program addresses one or more of the “space experience” deficiencies identified in the 2001 report by “*The Commission to Assess United States National Security Space Management and Organization.*”

8.1.1. The core of SPDP consists of five main elements:

8.1.1.1. A continuum of space education spread throughout each SP’s career.

8.1.1.2. Appropriate training for the SP’s duty position.

8.1.1.3. Experience coding based on SPECs.

8.1.1.4. A database system that tracks individual space-relevant experience, education, and training milestones, space billet requirements and provides data for metrics on the state of Space Pros (SP) and SPDP effectiveness.

8.1.1.5. A certification program that merges education, training and experience to establish three distinct levels of space expertise.

8.2. SPDP Certification. There are three levels of SPDP Certification, appropriately tailored for officers, enlisted and civilian personnel serving on active duty or in the ARC. SPs progress from

a foundation of technical competency (Level 1), through demonstrated depth of knowledge and experience in application (Level 2), to extensive knowledge and experience in space and warfighting operations (Level 3). Criteria for the various levels are tied to the three fundamental characteristics of AF personnel development--education, training and experience.

8.2.1. Level 1 Certification Requirements. Enlisted UST, current in position/CMR, one year of space experience, present Space Pro Certification Brief.

8.2.2. Level 2 Certification Requirements. 5-skill level, at least one of the following: Space 200, Advanced Space Operations course, or award of the Air & Space Operations Technology (4VAS) Community College of the Air Force (CCAF) degree; current in position, 6 years of experience in space billets.

8.2.3. Level 3 Certification Requirements. 7-skill level, Space 300 or a Bachelor Degree with a Science, Technology, Engineering, Mathematics (STEM) major; current in position, 10 years of experience in space billets.

## **9. Strategy for Training, Education, Expertise and Professional Development (STEEP).**

9.1. Purpose. The strategy's goals are to: deliberately develop technical depth and breadth through space training, education and experience; instill an operational understanding of how space capabilities are best woven into joint warfare; cultivate a space warfighter culture; and equip the specialty to strategically integrate capabilities into joint warfighting and intelligence operations. STEEP executes force development by connecting training, education, and experience opportunities to build and enhance institutional, occupational, and cross-functional competencies in individual Airmen. It establishes a professional development model based on a combination of exposures, experiences, and expertise over the career of a 1C6X1, and directly supports enterprise and institutional force development programs that ensure we have the right person, with the right education and training, in the right job, at the right time in their career. See Figure 9.1. (Strategy for Training, Education, Expertise and Professional Development).

9.1.1. Continuum of Learning. Continuously developing current and future leaders is critical to achieving the Air Force mission. This requires ongoing occupational skills and institutional competencies development, which serve as the building blocks for developing leaders. The Continuum guides institutional competency development and:

9.1.1.1. Provides a roadmap for development through education, training, and experiential opportunities

9.1.1.2. Links three development levels (Tactical Expertise, Operational Competence, and Strategic Vision) to institutional competencies and the foundational and targeted programs used to develop leaders

9.1.1.3. Clarifies what the Air Force values in leadership development

9.1.1.4. Establishes requirements and expectations

9.1.1.5. Synchronizes institutional leadership development programs

9.1.2. Training. AF training includes the following categories and is many times linked directly to the job, required by law or governance (and therefore, used AF wide) or is needed to boost a skill set or deployment activity. AFI 36-2201, *AF Training Program*, is the instruction for training programs across the AF.

9.1.2.1. Ancillary Training

9.1.2.2. Computer-based and on-line training

9.1.2.3. Career Field Training

9.1.2.4. Supplemental Training

9.1.3. Education. One of the three major components of Force Development is education. Education programs will help prepare you to successfully do your job and to be able to anticipate and meet challenges across the range of military operations. Look to the Continuum of Learning and work with your leadership to plan and execute how to capitalize on the educational opportunities available to you. Many programs available are tied to career field and occupational development.

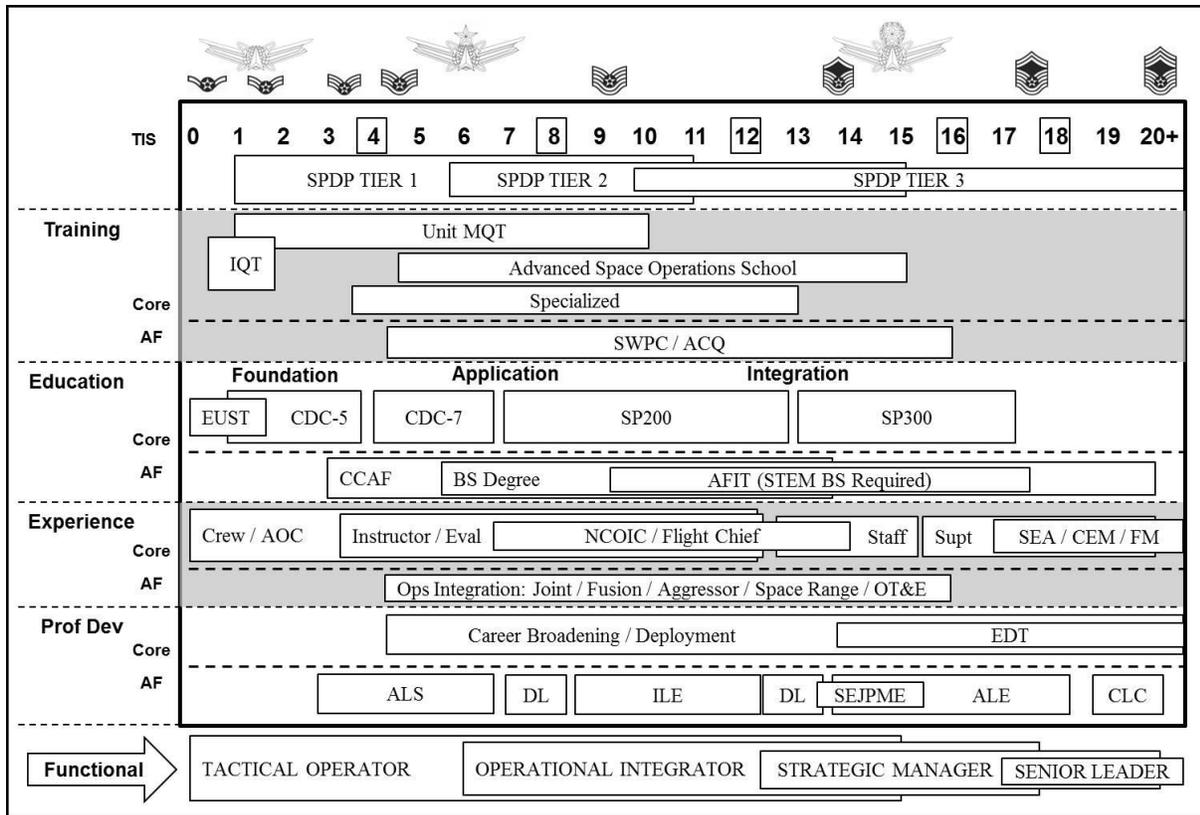
9.1.3.1. Tactical level development programs are designed to ensure you are qualified to perform primary duties and begin the process of developing leadership skills.

9.1.3.2. Operational level development is designed to increase occupational qualifications and mature individual leadership skills.

9.1.3.3. Strategic level development increases occupational qualifications and targets improvement and growth in the highest level of leadership.

9.1.4. Experience. Gaining expertise comes from the active participation/involvement in positions, events or activities leading to the accumulation of knowledge or skill which can be utilized to meet mission requirements. Experience at all levels includes development gained through an appropriate series of job assignments.

9.1.5. Professional Development. Professional development programs provide the nation with personnel skilled in the employment of air, space and cyberspace power in the conduct of war, small scale contingencies, deterrence, peacetime operations, and national security; provide USAF personnel with the skills and knowledge to make sound decisions in progressively more demanding leadership positions within the national security environment; and to develop strategic thinkers, planners and warfighters. In addition, professional development programs strengthen the ability and skills of AF personnel to lead, manage and supervise. See also Table 12-1 (Enlisted Professional Development Path).



**Figure 9.1. Strategy for Training, Education, Experience and Professional Development (STEEP).**

9.2. Space Battle Manager (SBM). The SBM program identifies unique 1C6X1 mission positions at the 7- and 9-skill levels requiring a minimum amount of technical depth within a space operations mission area or operational breadth across the space enterprise. Figure 9.2. (1C6X1 Space Battle Manager Development Matrix) illustrates notional SBM tracks.

9.2.1. Enlisted space systems operators may be manually awarded the SBM SEIs upon meeting the requirements established in the AFECDC for the space systems operations specialty IAW AFI 36-2101, *Classifying Military Personnel*.

9.2.2. SBM SEIs are built upon other mission related SEIs and advanced education/training. 1C6X1 personnel awarded the SBM SEI may be assigned to positions requiring a minimum number of prior experiences/exposures in the mission area.

9.2.3. Graduated SBM (second tier) SEIs are built upon associated SBM experience and advanced education/training. 1C6X1 personnel awarded these SEIs may be assigned to positions requiring prior experience as a SBM in the mission area.

TIS																						
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+	
	TOUR 1				TOUR 2				TOUR 3				TOUR 4									
Space Operations (Core)	UST	CDC	CCAF	CDC					SP200				SP300									
	SEI				CAREER BROADENING																	
Space Systems (Depth)	UST	CDC	CCAF	CDC	ASOPS				SP200 or SWPC				SP300									
	SEI				SEI				SBM TOUR				SBM TIER 2 TOUR									
Mission Integration (Breadth)	UST	CDC	CCAF	CDC	SP200				SWPC				SP300								SBM TOUR	SBM TIER 2 TOUR
	SEI				SEI				SEI													
	5 SKILL LEVEL				7 SKILL LEVEL								9 SKILL LEVEL									

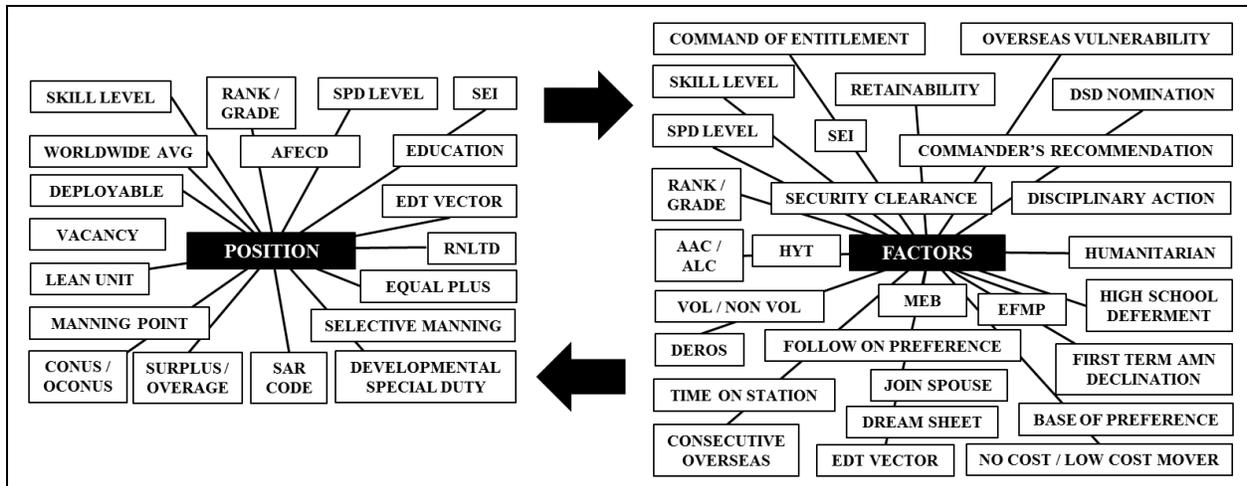
**Figure 9.2. 1C6X1 Space Battle Manager Development Matrix.**

## 10. Assignment Management.

**10.1. AB thru SMSgt 1C6X1 Assignment Management.** IAW AFI 36-2110, *Assignments*, AFPC/DPAA3 manages enlisted assignments for space systems operations.

**10.2. CMSgt Assignment Management.** Per AFI 36-2110, *Assignments*, Air Force Chief Master Sergeant Management Office (AF/DPE) is responsible for all chief master sergeant assignments. Chief master sergeants (including chief master sergeant selects) may be assigned in any AFSC or Chief Enlisted Manager (CEM) code they possess or are qualified to be awarded.

**10.3. Assignment Process Considerations.** Several factors influence the assignment matching process. Figure 10.1 (*Sample 1C6X1 Assignment Process Considerations*) illustrates a sampling of the factors (not all inclusive) that help determine requirements and priorities of positions to fill, and the quantity, eligibility and availability of potential candidates.



**Figure 10.1. Sample 1C6X1 Assignment Process Considerations**

**10.4. Assignment Locations.** Although a large percentage of space operations duties are centralized along the Colorado Front Range and at Vandenberg Air Force Base, there are many 1C6 assignment opportunities outside of these hubs that offer breadth of experience and technical depth. Table 10.1 and 10.2 (*1C6X1 / 1C600 Assignment Locations*) provide matrices of 1C6 active duty and ARC assignment locations by grade.

<b>1C6X1/1C600 WORLDWIDE ASSIGNMENT LOCATIONS (ACTIVE DUTY)</b>							
<b>ACTIVE DUTY</b>	<b>AB-A1C</b>	<b>SRA</b>	<b>SSGT</b>	<b>TSGT</b>	<b>MSGT</b>	<b>SMSGT</b>	<b>CMSGT</b>
<b>BARNSDALE</b>		X					
<b>BEALE</b>		X	X	X	X		
<b>BUCKLEY</b>	X	X	X	X	X	X	X
<b>CAPE COD</b>		X	X	X	X	X	
<b>CAVALIER</b>			X	X		X	
<b>CHANTILLY</b>			X	X	X	X	
<b>CHEYENNE MOUNTAIN</b>		X	X	X	X	X	
<b>CLEAR</b>		X	X	X			
<b>DAHLGREN</b>		X	X	X	X		
<b>EDWARDS</b>				X	X		
<b>EGLIN</b>	X	X	X	X	X		
<b>FT BELVOIR</b>				X			
<b>FT GEORGE MEADE</b>					X		
<b>HICKAM</b>			X	X	X	X	
<b>KEESLER</b>				X			
<b>KIRTLAND</b>					X		
<b>LACKLAND</b>				X	X		
<b>LOS ANGELES</b>			X	X	X		
<b>NELLIS</b>				X	X		
<b>OFFUTT</b>			X	X	X		
<b>OSAN</b>					X		
<b>PATRICK</b>	X	X	X	X	X		
<b>PENTAGON</b>							X
<b>PETERSON</b>	X	X	X	X	X	X	X
<b>RAMSTEIN</b>		X	X	X	X		
<b>RANDOLPH</b>							X
<b>SCHRIEVER</b>	X	X	X	X	X	X	X
<b>SHAW</b>					X		
<b>THULE</b>			X	X	X		
<b>VANDENBERG</b>	X	X	X	X	X	X	X
<b>WHITE SANDS</b>				X			
<b>WRIGHT PATTERSON</b>			X	X	X		
<b>YOKOTA</b>			X	X	X		

This chart does NOT represent an all-inclusive listing of 1C6X1 assignment locations and grade authorizations. Both are subject to change to meet Air Force requirements. Refer to Unit Manning Documents for current and projected authorizations, and to the online Assignment Management System (AMS) for advertised assignment opportunities. Some 1C6X1 assignment opportunities (ex. Data Masked, Green Door, NRO, etc.) are managed IAW SAP directives and related AFIs.

**Table 10.1. 1C6X1 / 1C600 Assignment Locations (AD)**

<b>1C6X1/1C600 WORLDWIDE ASSIGNMENT LOCATIONS (AIR RESERVE COMPONENT)</b>							
<b>AIR FORCE RESERVE <sup>1</sup></b>	<b>AB-A1C</b>	<b>SRA</b>	<b>SSGT</b>	<b>TSGT</b>	<b>MSGT</b>	<b>SMSGT</b>	<b>CMSGT</b>
<b>BUCKLEY</b>	X	X	X	X	X	X	X
<b>PETERSON</b>	X	X	X	X	X	X	X
<b>ROBINS</b>							X
<b>SCHRIEVER</b>	X	X	X	X	X	X	X
<b>VANDENBERG</b>	X	X	X	X	X	X	X
<b>AIR NATIONAL GUARD <sup>2</sup></b>	<b>AB-A1C</b>	<b>SRA</b>	<b>SSGT</b>	<b>TSGT</b>	<b>MSGT</b>	<b>SMSGT</b>	<b>CMSGT</b>
<b>CHANTILLY/ROME</b>	X	X	X	X	X	X	X
<b>CLEAR</b>	X	X	X	X	X	X	
<b>GREELEY</b>	X	X	X	X	X	X	X
<b>PATRICK</b>	X	X	X	X	X	X	X
<b>VANDENBERG</b>	X	X	X	X	X	X	X
<p>This chart does NOT represent an all-inclusive listing of 1C6X1 assignment locations and grade authorizations. Both are subject to change to meet Air Force requirements. Refer to Unit Manning Documents for current and projected authorizations. Some 1C6X1 assignment opportunities (ex. Data Masked, Green Door, NRO, etc.) are managed IAW SAP directives and related AFIs.</p> <p>1. Air Force Reserve members in the grades of E1-E7 may be assigned to any available authorization in the grades of E5-E7 (there are currently no E1-E4 authorizations).</p> <p>2. Air National Guard members in the grades of E1-E7 may be assigned to any available authorization in the grades of E5-E7 (there are currently no E1-E4 authorizations).</p>							

**Table 10.2. 1C6X1 / 1C600 Assignment Locations (ARC)**

## **11. Deliberate Development.**

11.1. Purpose. When compatible to Air Force needs, career-minded Airmen should serve in a variety of duty positions that support the professional development of not only themselves, but those they serve.

11.2. Mentoring. Mentoring is an inherent responsibility of supervision and leadership and is an essential ingredient in developing well-rounded, professional and competent future leaders. Mentors are advisors and guides who share knowledge, experiences, and advice in helping mentees achieve their career goals. Space professionals are encouraged to be and to actively seek mentors both internal and external to their chain of command. Follow instructions for mentoring provided in AFMAN 36-2643, *Air Force Mentoring Program*.

11.2.1. MyVECTOR. The Air Force uses the MyVECTOR web-based career planning and force development tool for all Airmen (Officer, Enlisted, Guard and Reserve). MyVECTOR is an enterprise solution that supports the Air Force's goal to provide a standardized process available to all Airmen for career development and mentoring. Airmen can be proactive about their career development and mentoring relationships.

11.2.1.1. Mentoring. MyVECTOR enables a web-based mentoring network that allows mentees to manage their career development with the input and guidance from a mentor. Mentees will be able to, in real-time, invite participants to serve as mentors, select mentors based on preferences, chat with their mentor online, and complete a mentoring plan. The goals of the mentoring program are to promote growth and leverage human capital.

11.2.1.1.1. Promote Growth. Create an environment that promotes personal and professional growth through the Continuum of Learning and enhancing occupational and institutional competencies.

11.2.1.1.2. Leverage Human Capital. Provide a vehicle for leaders and subordinates to leverage strategic knowledge and intellectual capital throughout the Air Force.

11.2.1.2. Career Planning. MyVECTOR allows the user to view their duty experience through career field specific experience codes. This structure also allows the user to build career plans based on real opportunities and to share these career plans with development teams and mentors.

11.2.1.3. Knowledge Sharing. MyVECTOR provides discussion forums and links to resources for online books and courses that discuss mentoring benefits, the differences between coaching and mentoring and techniques for managing mentoring relationships.

11.3. Progression Planning. Progression planning is the responsibility of the CFM and applies to all personnel in the career field. For most AFSCs, the progression plan developed through the Specialty Training Requirements Team and the Utilization and Training Workshop is sufficient to technically develop Airmen in the ranks of Airman Basic through Master Sergeant. The CFM utilizes input from the FAC and EDT to develop and adjust the career field progression plan as needed.

11.4. Succession Planning. Succession planning is the responsibility of EDTs and entails identifying Key Developmental Positions (KDPs) and Key Leadership Positions (KLPs), and ensuring a bench of qualified candidates is available to fill those positions. Succession planning typically happens at the senior master sergeant and chief master sergeant ranks.

11.5. Developmental Needs Analysis (DNA). While individual records of performance may be compared to understand and trend the norms within the specialty (ex. leadership positions, mission exposure, education, PME, diversity and inclusion, quality force indicators, etc.), the focus must be to derive the career opportunities that are in the best developmental interest of the individual and that support the career field's ability to fill existing/projected Air Force requirements. The EDT is NOT a promotion board. Therefore, records are not scored in a fashion that may be perceived as a collective stratification, endorsement, or a promotion recommendation by the EDT.

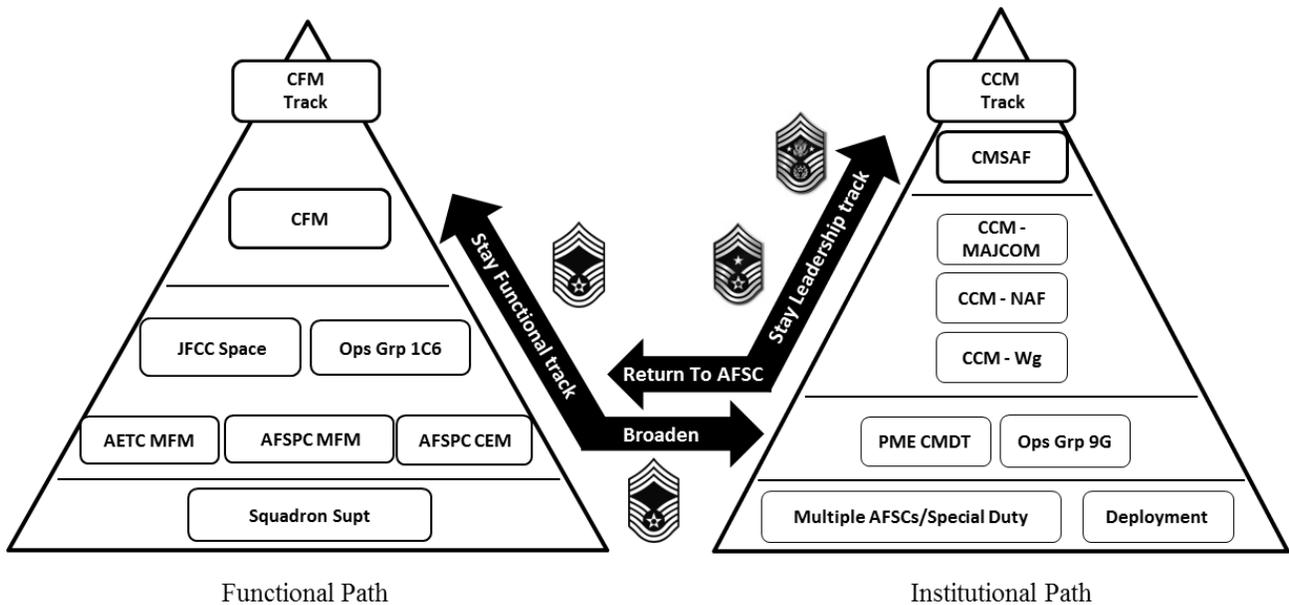
11.6. Vectoring. The vectoring process aims at purposefully guiding the career growth of Airmen. As Airmen develop in breadth and depth of technical experience, they will also progress through appropriate leadership positions and/or opportunities. Assignment vectors are the EDT's collective recommendation for an experience level or position type a member should be considered for during the upcoming EDT cycle (12 months following board execution). The vectors themselves DO NOT constitute an actual assignment, but are added fidelity to requirements provided to HQ AFPC/DPAA3 (Space Assignment Team). Assignments are matched IAW AFI 36-2110 (*Assignments*).

11.7. Broadening. Space systems operations professionals should pursue opportunities when available and appropriate for development, both within the specialty, as well as other institutional areas. Professionals experienced in multiple space mission areas are better suited to serve as "operational integrators" and "strategic managers." Developmental opportunities enhance leadership perspectives and prepare Airmen for "senior leader" roles.

11.8. AF Developmental Special Duty (DSD). The Air Force has placed special emphasis on certain special duties based on their broad impact on Airmen, families and the future of the Air Force. DSD is a deliberate eligibility and selection process that allows commanders to nominate their best performers for special duties that create, develop and care for Airmen. The nominative process is based on a minimum quota for each major command that is levied every six months.

## **12. CMSgt Development.**

12.1. CMSgt Career Development Paths. Space systems operations CMSgts are developed and utilized in functional (Career Field Management track) and institutional (Command CMSgt track) duties that prepare them for key developmental and key leadership positions within the specialty and Air Force at-large. Figure 12.1. (CMSgt Development Paths for Space Systems Operations) depicts the functional and institutional paths for the 1C600 CEM code.



**Figure 12.1. CMSgt Development Paths for Space Systems Operations.**

12.2. CMSgt Professional Development. In addition to managing assignments and retirements, the Chiefs' Group is responsible for the development of CMSgts. Refer to the Chiefs' Group website for more information on the development courses. This includes the following courses:

12.2.1. Air Force Smart Operations (AFSO) 21 Senior Executive Leadership Course. AFSO21 augments General Officer (GO), Senior Executive Service (SES), Career Field Manager (CFM), and Command Chief Master Sergeant (CCM) leadership skills with an understanding of how to manage performance and strategically align continuous process improvement using AFSO21 tools. This is a 2-day course, normally held at the University of Tennessee. Attendance is based on nomination by the MAJCOM.

12.2.2. Enterprise Perspective Seminar (EPS). EPS gives participants executive level insights into the inner workings of government. Participants will examine the local and global implications of congressional decisions; Administration policies and their impact on DoD; the Supreme Court and its role in policy; and issues in the economic, national security, and political arenas. This is a 4-day course, normally held in Washington, D.C. Attendance is based on nomination by the MAJCOM.

12.2.3. Gettysburg Leadership Experience (GLE). GLE brings into sharper focus the dual role of CMSgts as leaders and followers. The program explores the changing requirements and challenges of the CMSgt role, especially considering the expanding role of senior enlisted leaders in today's force.

12.2.4. KEYSTONE. KEYSTONE is the enlisted parallel to the CAPSTONE course for new General Officers tailored for the specific challenges of the Senior Enlisted Leaders (SEL). The course is designed for Command Senior Enlisted Leaders (CSELs) currently serving in or slated to serve in a general or flag officer level joint headquarters or Service headquarters that could be assigned as a joint task force. Participants visit the Combatant Commands, Joint Task Forces

(JTF), and both officer and enlisted senior leaders in the Washington, DC area to explore the relationships and challenges of operating in a joint environment. The course covers the very special relationship between the Command Senior Enlisted Leader of a Joint Force Commander and the enlisted personnel from all the services operating under the Commander. Attendance for Keystone is managed by the CMSAF's office while the Chiefs Group solicits nominations from the MAJCOM CCC and COCOM SELs. CMSgts must have at least 2 years retainability.

12.2.5. Leadership Enhancement/ Development Program (LEP/LDP) and Enterprise Leadership Seminar (ELS). These two senior leader development courses are primarily targeted for CMSgts serving in the highest institutional and organizational CMSgt positions (to include CFMs, CCM and CCM candidates). Because developmental opportunities are limited, CMSgts with at least 2 years retainability and those who have not attended a developmental opportunity within 12 months are generally considered. Once selected for a development course, the deferment request must be endorsed by the MAJCOM CV or equivalent. Attendance is based on nomination by the MAJCOM.

12.2.5.1. LEP/LDP is designed to enhance individual leadership capabilities and organizational impact through extensive assessment, group discussions, small group activities, and personal coaching.

12.2.5.2. ELS provides a collaborative and powerfully engaging opportunity for participants to increase their effectiveness by gaining an understanding of business skills within the context of current Air Force issues and Washington AOR perspective. Topics include Strategic Sourcing, Decision Making, Financial and Risk Management, Ethics, Strategic Human Resource Management, Negotiation and Collaboration across Organizations, and Leading Change.

12.2.6. Regional Seminars. The Regional Seminar series focuses on exploring the social, cultural, political, and economic developments of specific regions of the world. This is a 3-day course, normally held in Washington, D.C. Attendance is based on nomination by the MAJCOM.

12.2.7. Senior Enlisted Legal Orientation (SELO). SELO is a 2-3 day course designed to provide legal training to all first time Command Chiefs to ensure they are properly trained on the legal aspects of their position and to prepare them to advise their commanders on enlisted issues. Training subjects include, courts-martial, Article 15, ethics, installation issues, fundraising, Non-Federal Entities, and a host of other topics.

<b>Education and Training Requirements</b>	<b>REQUIREMENTS</b>			
	<b>Rank</b>	<b>Avg TIS</b>	<b>Earliest</b>	<b>High Year Of Tenure</b>
<b>Basic Military Training school</b>				
<b>Apprentice Technical School</b> (3-Skill Level)	Amn A1C	6 months 10 months	N/A	N/A
<b>Upgrade To Journeyman</b> (5-Skill Level) - Minimum 12 months on-the-job training. - Minimum 9 months on-the-job training for retrainees. - Complete appropriate CDC - Complete duty tasks determined by supervisor - Complete mandatory items listed in Enlisted Classification Directory - Supervisor recommendation and commander approval	Amn A1C SrA	- 10 months 3 years	28 months	8 years of TAFMS
<b>Airman Leadership School (ALS)</b> - Must be a SrA with 48 months time in service or a SSgt Selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty only).	SrA	3-6 years		
<b>Upgrade To Craftsman</b> (7-Skill Level) - Minimum rank of SSgt. - 12 months OJT. (6 months retrainees) - Complete appropriate CDC - Complete duty tasks determined by supervisor - Complete mandatory items listed in Enlisted Classification Directory - Supervisor recommendation and commander approval	SSgt	4-5 years	3 years	15 years of TAFMS

<b>NCOA Phase II Distance Learning</b> - Complete ALS	SrA SSgt TSgt	7-8 years		20 years of TAFMS
<b>NCOA Intermediate Leadership Experience (ILE)</b> - Complete ALS - Complete Phase II DL	SSgt TSgt	8-12 years		
<b>SNCOA Phase III Distance Learning</b> - Complete ALS - Complete Phase II DL	SSgt TSgt MSgt	12 years		24 years of TAFMS
<b>SNCOA Advanced Leadership Experience (ALE)</b> - Complete ALS - Complete Phase II/III DL	MSgt SMSgt	13-18 years		26 years of TAFMS
<b>Upgrade to Chief Enlisted Manager (CEM, AFSC 1C600)</b> - TS security clearance	CMSgt	20-21 years	14 years	30 years of TAFMS
<b>Chief's Leadership Course</b> - Promotion to CMSgt	CMSgt			

**Table 12-1. Enlisted Professional Development Path**

## ***Section C - Skill Level Training Requirements***

**1. Purpose.** Skill level training requirements in this specialty are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Section A and B of this CFETP. In general, the 1C6 career field is made up of operational (crew jobs) and functional (staff jobs) requirements.

### 1.1. Job Progression.

1.1.1. Operational Job Progression. This section applies to all skill levels. When personnel transfer to an operational squadron, training beyond what was initially received at the ESO course may be required. This training may be waived IAW the gaining MAJCOM's policy(s) (for prior experience as an example).

1.1.2. Staff Job Progression. These jobs do not require formal AETC training but do require extensive experience within the career field. Generally, it is beneficial for an individual to have been certified in one or more of the various operational jobs within the field before filling a staff position. Tasks necessary to function in a staff position are trained and learned at the unit.

### 1.2. General Skill Level Requirements.

1.2.1. Personnel assigned to an operational unit are required to become mission-ready certified in the duty position commensurate with their grade. If they fail to do so, the next skill level may not be awarded. *NOTE:* SMSgts at operational units are not required to be mission-ready certified to be awarded the 9 skill level. However, mission requirements may necessitate positional certification.

1.2.2. Personnel assigned to staff positions (non-operational duty positions) during upgrade training must become duty position qualified in appropriate tasks for that position.

**2. Specialty Qualification.** The 1C6 career field does not require any additional special qualifications other than those described in Enlisted Classification Guide. This information is located in the AFECD.

2.1. Knowledge. Knowledge is mandatory of the following: Satellite C2 and principles of satellite and ground systems; space warning and control systems; range operations; orbital mechanics; data analysis procedures; sensor theory; data transmission, receiving, recording, and relaying theory; and administrative practices.

2.2. Education. For entry into this specialty, completion of high school algebra is required. Courses in physics, geometry, trigonometry, or computer science are highly desirable.

2.3. Training. For award of AFSC 1C631, completion of the ESO course is mandatory.

2.4. Experience. The following experience is mandatory for award of the AFSC indicated:

2.4.1. Apprentice (3) Skill Level. Initial skills training in the enlisted space systems operations career field consists of task and knowledge training provided in the resident apprentice enlisted space operations course listed in the formal schools catalog. Task and knowledge training requirements are identified in the CFETP Part II STS. In order to be awarded AFSC 1C631, an individual must complete the AFSC-awarding ESO course.

2.4.2. Upgrade Training. The 1C651 and 1C671 CDCs cover all major space operations mission areas and are designed to take students beyond what was learned in the ESO course on to a greater understanding of space operations.

2.4.3. Journeyman (5) Skill Level. Qualification in and possession of AFSC 1C631. To be awarded AFSC 1C651, an individual must, if required by the duty position, pass an initial crew position evaluation, successfully complete the 5-skill level Career Development Courses (CDC), and complete the required time in the skill level in accordance with AFI 36-2201, *Classifying Military Personnel*. Also, experience in functions such as C2 systems, missile warning, space surveillance, space control, telemetry processing, ground systems configuration, mission planning, anomaly resolution, or range operations. Active duty individuals will use the CDCs to prepare for promotion testing under the Weighted Airman Promotions System (WAPS). Additionally, members at this point in their career should be working towards completing their Community College of the Air Force (CCAF) degree.

2.4.4. Craftsman (7) Skill Level. Qualification in and possession of AFSC 1C651. To be awarded AFSC 1C671, an individual must be a SSgt, and if required by the duty position, complete all CMR training as identified in the appropriate space operations system IPOI, pass an initial crew position evaluation, successfully complete the 7-skill level Career Development Courses (CDC), and complete requirements in accordance with AFI 36-2201. Also, experience performing or supervising space systems operations functions and activities.

2.4.5. Superintendent (9) Skill Level. Qualification in and possession of AFSC 1C671. Also, experience managing space systems operations activities. To be awarded AFSC 1C691, an individual must be a SMSgt.

2.5. Other. The following are mandatory as indicated (reference *Air Force Enlisted Classification Directory*):

2.5.1. For entry, award, and retention of AFSCs 1C611/31/51/71, physical qualification for space operations duty according to the *Air Force Enlisted Classification Directory*.

2.5.2. For award and retention of AFSC 1C6X1, submission of a Single Scope Background Investigation (SSBI) and TS/SCI eligibility granted based upon the favorable adjudication and IAW AFI 31-501, *Personnel Security Program Management* is mandatory. Award of the 3-skill level without a completed SSBI is authorized provided an interim Top Secret clearance has been granted according to AFI 31-501.

### ***Section D - Resource Constraints***

**1. Purpose.** This section identifies known resource constraints that preclude optimal and desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, OPR, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

**2. Apprentice 3-Level Training:** No constraints. Changes to weapon systems, upgrades and/or modifications, and requests for additional/new training may drive additional resources; however, these will be addressed through the Course Resource Estimate (CRE) process once identified by the STRT, U&TW, TPT, or other formal meetings with appropriate coordination.

**3. Journeyman 5-Level Training:** No constraints.

**4. Craftsman 7-Level Training:** No constraints.

**5. Superintendent 9-Level Training:** Not applicable.

### ***Section E - Transitional Training Guide***

There are currently no transitional training requirements. This area is reserved.

## PART II

### *Section A – Specialty Training Standard (STS)*

1. Implementation. This STS will be used for technical training provided by AETC. Implementation date varies for each weapon system initial skills training course.

2. Purpose. As prescribed, this STS:

2.1. Lists in the column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and Technical References (TR) necessary for Airmen to perform duties in the 3-, 5-, and 7-skill level. Column 2 (Core Tasks) would identify, by asterisk (\*), specialty-wide training requirements; however, there are no core tasks identified for this specialty. Due to the wide variety of weapon systems and associated qualification requirements within the specialty, the career field does not have any core tasks due to the wide variance of tasks and duties within the AFSC.

2.2. Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use automated training management systems to document technician qualifications, if available. Task certification must show a certification or completed date.

2.2.1. Unlike other career fields, the 1C6 AFSC does not train and certify by individual tasks to attain skill level award. Certification involves the performance of many tasks simultaneously. Operational crew duty position certification is based on grade and meeting qualification requirements, not skill level.

2.2.2. Training example: Individual training tasks, such as fire procedures, is not a standalone task. Other stimuli (tasks) such as equipment overheating procedures will drive the performance requirement for fire procedures. Many such tasks are performed and evaluated simultaneously along with other crew positions.

2.2.3. Grade example: A retrainee NCO (3-level) will be trained and certified for the Crew Chief position as this position is designated for NCOs and above. The individual's 3-skill level will not affect this process, and there is no requirement to wait until the individual is awarded the 5-skill level to begin upgrading and certifying the individual to the Crew Chief position.

2.3. Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as a result of training on the task and knowledge and the career knowledge provided by the correspondence course.

2.4. Contains Qualitative Requirements. Contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and CDCs.

2.5. Is used to document task when placed in AF Form 623, *On-The-Job Training Record*, and according to AFI 36-2201, Chapter 6.

2.6. For the Active Duty component; is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the AETC Airman Advancement Division, by Senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in Chapter 1 of AFI 36-2605, *AF Military Personnel Testing System*. WAPS is not applicable to ARC personnel.

3. Recommendations. Report unsatisfactory performance of individual course graduates to 381 TRG/TTV, 1472 Nevada Avenue, Bldg 8290, Suite 219, Vandenberg AFB, CA, 93437-5327. Contact the 381 TRG/TTV office at DSN 275-8865 or 276-6037 if you have questions. For a quick response to any training concerns, call the Customer Service Information Line (CSIL) at DSN 276-7039 anytime, or email: [381TRG.TTV-Questions@Vandenberg.af.mil](mailto:381TRG.TTV-Questions@Vandenberg.af.mil). Reference specific STS paragraphs.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

MARTIN WHELAN  
Major General, USAF  
Director, Future Operations

<b>This Block Is For Identification Purposes Only</b>		
<b>Name of Trainee</b>		
<b>Printed Name (Last, First, Middle Initial)</b>	<b>Initials (Written)</b>	<b>SSAN</b>
<b>Printed Name Of Certifying Official And Written Initials</b>		
N/I	N/I	

### QUALITATIVE REQUIREMENTS

<b>PROFICIENCY CODE KEY</b>		
	<b>SCALE VALUE</b>	<b>DEFINITION: THE INDIVIDUAL</b>
<b>TASK PERFORMANCE LEVELS</b>	<b>1</b>	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
	<b>2</b>	Can do most parts of the task. Needs help only on the hardest parts. (PARTIALLY PROFICIENT)
	<b>3</b>	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	<b>4</b>	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
<b>*TASK * KNOWLEDGE LEVELS</b>	<b>a</b>	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	<b>b</b>	Can determine step by step procedures for doing the task. (PROCEDURES)
	<b>c</b>	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	<b>d</b>	Can predict, isolate, and resolve problems about the task. (ADVANCE THEORY)
<b>**SUBJECT ** KNOWLEDGE LEVELS</b>	<b>A</b>	Can identify basic facts and terms about the subject. (FACTS)
	<b>B</b>	Can identify relationships of basic facts and state general principles about the subject. (PRINCIPLES)
	<b>C</b>	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	<b>D</b>	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)
<b>EXPLANATIONS</b>		
Note: All tasks and knowledge items shown with a proficiency code are trained during wartime..		
* A task knowledge value may be used alone or with a task performance scale value to define a level of a specific task. (Examples: b and 1b)		
** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task or for a subject common in several tasks.		
/ This mark is used to show a difference between the career field training level desire and AETC's limited training resources. (Example: 2b/B. The career field desire is 2b, but only a B level can be achieved due to resource limitations.)		
<b>No proficiency codes indicate no training is provided in the course or CDC.</b>		

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
<b>1. INTRODUCTION TO SPACE AND ORGANIZATIONAL STRUCTURE</b>																	
TR: AU-18; AFR 39-36; AFMAN 35-1; AFI's 10-1202, 90-1001, 14-132; AFDD 3-14; AFSPCI 90-102; CJCSI 3170.01H; DoDD's 3100.01, 3100.12; JP's 1, 1-02, 3-14; Applicable Technical Publications; AFI 13-601																	
1.1 Air Force Contributions to U.S. Military Space Applications											A	-	-	B	-	-	
1.2 Other Services Contributions to U.S. Military Space Applications											A	-	-	B	-	-	
1.3 Warfighter Impact of U.S. Military Space Applications											B	-	-	B	-	-	
1.4 Key Civil Events in Space History											A	-	-	B	-	-	
1.5 Key Military Events in Space History											A	-	-	B	-	-	
1.6 Evolution of Spacelift											A	-	-	B	-	-	
1.7 Evolution of Satellites											A	-	-	B	-	-	
1.8 Evolution of Space Surveillance											A	-	-	B	-	-	
1.9 Evolution of Missile Warning Sensors											A	-	-	B	-	-	
1.10 Space Command History											A	-	-	B	-	-	
1.11 Space Effects on National Security through Civil Uses											A	-	-	B	-	-	
1.12 Space Effects on National Security through Commercial Uses											A	-	-	B	-	-	
1.13 Organizational Structure and Roles / Responsibilities of STRATCOM / MAJCOM / NAF / Wing											A	-	-	B	-	-	
1.14 Organizational Structure and Roles / Responsibilities of TFI											A	-	-	B	-	-	
1.15 Organizational Structure and Roles / Responsibilities of JFCC Space											A	-	-	B	-	-	
1.16 13S/1C6 Career Field											B	-	-	-	-	-	
1.17 Space Professional											A	-	-	B	-	-	
1.17.1 Managing Enlisted Space Operators											-	-	-	-	-	A	
1.17.1.1 DoD Space Professional Strategy											-	-	-	-	-	A	
1.17.1.2 1C6 Roles and Responsibilities											-	-	-	-	-	A	
1.17.1.3 Experience Management											-	-	-	-	-	A	
1.17.2 1C6 Professional Development											-	-	-	-	-	B	
1.17.2.1 Strategy for Training, Education, Expertise and Professional Development (STEEP)											-	-	-	-	-	A	
1.17.2.2 Career Development for Enlisted Personnel in Space Systems Operations											-	-	-	-	-	A	
1.17.2.3 Total Force Integration											-	-	-	-	-	A	
1.17.2.4 Special Access Program (SAP) Management											-	-	-	-	-	A	
1.18 Space Supporting AFSCs											A	-	-	B	-	-	
<b>2. ORBITAL MECHANICS</b>																	
TR: <i>Understanding Space</i> by Jerry Jon Sellers, third edition 2005; <i>Advanced Orbital Mechanics</i> , Study Guide Volumes 1 and 2, Advanced Space Operations School, December 2010																	
2.1 Orbit Fundamentals											B	-	-	B	-	A	
2.2 Orbit Characteristics											B	-	-	B	-	-	
2.3 Orbital Determination											B	-	-	B	-	-	
2.4 Orbital Maneuvers											B	-	-	B	-	-	
2.5 Orbital Rendezvous											A	-	-	B	-	B	
2.6 Orbital Proximity Operations											B	-	-	B	-	B	
2.7 Space Traffic Management											-	-	-	-	-	A	
<b>3. ELECTROMAGNETIC SPECTRUM AND SIGNALS</b>																	
TR: AU-18; AFDD 3-14; AFSPCI 90-102; JP's 1-02, 3-14; DoDD 3100.01; <i>Understanding Space</i> by Jerry Jon Sellers, third edition 2005; Applicable Technical Publications																	
3.1 Electromagnetic Spectrum											B	-	-	B	-	-	
3.2 Frequency Bands											B	-	-	B	-	-	

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC	3 Skill Level	5 Skill Level	7 Skill Level
3.3 Signal Parameters											B	-	-	B	-	-	
3.4 Methods of Mitigating the Contested EM Environment											B	-	-	B	-	-	
3.5 Decibel Math, Application and Calculations											B	-	-	B	-	-	
3.6 Signal Flow											B	-	-	B	-	-	
3.7 Antenna Characteristics											B	-	-	B	-	-	
3.8 Spread Spectrum											B	-	-	B	-	-	
3.9 SATCOM											B	-	-	B	-	-	
3.10 Advanced Communications Principles											-	-	-	-	-	-	B
3.10.1 Communications Fundamentals (Radio Frequency Principles and Applications, etc)											-	-	-	-	-	-	B
3.10.2 Space over Data Links and Broadcast (IBS-S, IBS-I, Link 16, TADIL)											-	-	-	-	-	-	B
3.11 Advanced EM Spectrum and Signals											-	-	-	-	-	-	B
3.11.1 EM Spectrum											-	-	-	-	-	-	B
3.11.2 Applications of the Infrared Spectrum											-	-	-	-	-	-	B
3.11.3 Radar and Pulse-Doppler Principles											-	-	-	-	-	-	B
3.12 Electronic Warfare and Effects											-	-	-	-	-	-	B
3.12.1 Electronic Warfare											-	-	-	-	-	-	B
3.12.2 Infrared (IR) Exploitation											-	-	-	-	-	-	B
<b>4. COMMAND AND CONTROL</b>																	
TR: AU-18; Annex 3-14 Space Operations; JP's 3-0, 3-14; Applicable Technical Publications																	
4.1 JSpOC Divisions and Theater AOC Divisions / Cells / LNOs											A	-	-	B	-	-	
4.2 JSTO / ATO Cycle											A	-	-	B	-	-	
4.3 Force Enhancement											A	-	-	B	-	-	
4.4 Space Situation Awareness Global Planning											A	-	-	B	-	-	
4.5 Space Control Theater Planning											A	-	-	B	-	-	
4.6 Joint Space Doctrine											B	-	-	-	-	-	
4.7 Service Space Doctrine											A	-	-	B	-	-	
4.8 Space Policy											A	-	-	B	-	-	
4.9 Space Law											A	-	-	B	-	-	
4.10 Elements of Command and Control											-	-	-	-	-	-	A
4.11 Enabling Capabilities											-	-	-	-	-	-	A
4.12 Advanced C2 Considerations											-	-	-	-	-	-	A
4.12.1 Demand Signal for Space Capabilities (Air, Land, Maritime, Global)											-	-	-	-	-	-	A
4.12.2 Integrated Planning											-	-	-	-	-	-	A
4.12.3 Cross-domain Implications (Air/Space, Cyber/Space)											-	-	-	-	-	-	A
4.12.4 Asymmetric Escalation (horizontal, vertical warfare)											-	-	-	-	-	-	A
<b>5. CREW OPERATIONS</b>																	
TR: TO's 00-5-1, 31P6-2FPS132-251, 31S5-2FSQ212-11; AFI's 10-206, 10-206 AFSPCSUP; AFSPC GM's 13-1, 2014-13-01; AFSPCI's 10-1202 14AF Supp, 10-1202 50OG Supp, 10-1204, 10-260, 10-415; JP's 3-13, 3-14; AFDD 3-12; MIL-PRF 38-314; <i>Understanding Space</i> by Jerry Jon Sellers, third edition 2005; Applicable Technical Publications; MAJCOM/Local Procedures; Functional Component for Command and Control of Space Forces 14 Mar 2007																	
5.1 Demand Response vs Non-demand Response Checklists and Checklist Warnings / Cautions / Notes											B	-	-	-	-	-	
5.2 Crew Actions of Checklist Processing and Prioritization											B	-	-	-	-	-	
5.3 Perform Crew Actions											2b	-	-	-	-	-	
5.4 OPSCAP / SYSCAP / Reporting											B	-	-	B	-	-	
5.5 Crew Documentation											-	-	-	-	-	-	

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
5.5.1 Technical Orders and Development of Procedures											A	-	-	B	-	-	
5.5.2 Crew Information Files and Temporary Procedures											A	-	-	-	-	-	
5.5.3 Crew Logs											A	-	-	-	-	-	
5.5.4 Job Aids											A	-	-	-	-	-	
5.6 Crew Position, Routine Operations, and Changeover											A	-	-	-	-	-	
5.7 Crew Coordination for Contingency Operations											B	-	-	-	-	-	
5.8 Debrief Process											A	-	-	B	-	-	
5.9 Tactics, Techniques and Procedures											A	-	-	B	-	-	
5.9.1 Advanced TTP Concepts											-	-	-	-	-	B	
5.10 Cyberspace in an Operational Environment											A	-	-	B	-	-	
5.10.1 Cyberspace Support to Space and Theater Operations											-	-	-	-	-	B	
5.11 Influencing Space Mission Operations											-	-	-	-	-	A	
5.11.1 Traditional versus concurrent operations planning											-	-	-	-	-	A	
5.11.2 Elements and Functions of the Space Mission Operations System											-	-	-	-	-	A	
5.11.3 Satellite Control Network Activities											-	-	-	-	-	A	
5.11.4 Key Mission Operations Trades and Issues											-	-	-	-	-	A	
5.11.5 Mission Operations Concept											-	-	-	-	-	A	
<b>6. ACQUISITION SYSTEM LIFECYCLE</b>																	
TR: DoDD 5000.01; DoDI 5000.02; DTM 09-025; Defense Acquisition Guidebook; JCIDS Manual. <i>Manual for the Operation of the Joint Capabilities Integration and Development System</i> . January 19, 2012; <i>Defense Acquisition University Glossary</i> . November 2009. <a href="http://www.dau.mil/pubscats/PubsCats/13th_Edition_Glossary.pdf">http://www.dau.mil/pubscats/PubsCats/13th_Edition_Glossary.pdf</a> ; <i>Space Systems Acquisition Policy [ACQuipedia]</i> . November 27, 2012; Applicable Technical Publications; DAU, Key Performance Parameters (KPPs); Understanding Space, Jerry Jon Sellers; Space Systems Acquisition Primer, National Security Space Institute; DoDD 5000.1, Defense Acquisition System; DoDI 5000.02, Operation of the Defense Acquisition System; DAU Glossary of Defense Acquisition Acronyms and Terms; GAO Applied Research and Methods; Best Practices for Developing and Managing Capital Program Costs; Schedule Delays and Cost Overruns Plague DOD Automated Information Systems; Cost and Time Overruns for Major Defense Acquisition Programs (2011); Center for Strategic and International Studies; GPS.gov website; Federal Acquisition Regulation (FAR); Contract Changes, 2014 Contract Attorneys Deskbook; Defense Acquisition Guidebook; SMC Systems Engineering Primer and Handbook; Gebicke, Space Project Testing: Uniform Policies and Added Controls Would Strengthen Testing Activities; Disposal and Disposition of Military Systems; DoDI 5000.02, January 7, 2015																	
6.1 Traditional Space System Acquisitions											A	-	-	B	-	A	
6.1.1 Organizational Structure, Roles and Responsibilities											-	-	-	-	-	A	
6.2 Space Science, Acquisition, and Program Cycle											-	-	-	-	-	A	
6.2.1 Acquisitions Terminology											-	-	-	-	-	A	
6.2.2 Space Science and Acquisition											-	-	-	-	-	A	
6.2.3 Space Program Lifecycle											-	-	-	-	-	A	
6.2.4 Traditional Space System Acquisitions											-	-	-	-	-	A	
6.2.5 Rapid Space System Acquisitions (Deliberate, Emergent, Urgent Requirements)											-	-	-	-	-	A	
6.2.6 Requirements (Concepts and CONOPS)											-	-	-	-	-	A	
6.2.7 Joint Requirements											-	-	-	-	-	A	
6.2.8 Types of Contracts											-	-	-	-	-	A	
6.2.9 Evolutionary Acquisition and Single-Step Development											-	-	-	-	-	A	
6.3 Operations Acceptance and End of Life											-	-	-	-	-	A	
6.3.1 Roles in Operational Test and Evaluation (OT&E)											-	-	-	-	-	A	
6.3.2 Program Milestones											-	-	-	-	-	A	
6.3.3 Measures of Effectiveness, Suitability, and Performance											-	-	-	-	-	A	
6.3.4 Acquisition Categories, Types, and End of Life											-	-	-	-	-	A	

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC	3 Skill Level	5 Skill Level	7 Skill Level
6.3.5 Complexities of the Acquisition Process											-	-	-	-	-	-	A
6.4 Acquisition Science and Technology											-	-	-	-	-	-	A
6.4.1 Technology Readiness											-	-	-	-	-	-	A
6.4.2 Independent Research and Development (IR&D or IRAD)											-	-	-	-	-	-	A
6.4.3 Challenges Facing Space Acquisitions											-	-	-	-	-	-	A
<b>7. OPERATING ENVIRONMENT</b>																	
TR: AU-18; Applicable Technical Publications; AFDD2-2.1, 2 Aug 2004; JP 1-02, Department of Defense Dictionary of Military and Associated Terms, 12 April 2001; JP 3-14, 2 May 2013																	
7.1 Contested, Congested, Competitive Environment											-	-	-	-	-	-	-
7.1.1 Space Threats and Mitigation											B	-	-	B	-	-	B
7.1.1.1 Position, Navigation, and Timing Spacecraft Threats and Mitigation											-	-	-	-	-	-	B
7.1.1.2 Satellite Communications Spacecraft Threats											-	-	-	-	-	-	B
7.1.1.3 Intelligence, Surveillance, and Reconnaissance Spacecraft Threats											-	-	-	-	-	-	B
7.1.1.4 Satellite Bus Threats											-	-	-	-	-	-	B
7.1.2 Meaconing, Intrusion, Jamming, Interference (MIJI)											-	-	-	-	-	-	A
7.1.3 Space Protection											-	-	-	-	-	-	A
7.1.4 Threat Assessments for North America and Theater Operations											-	-	-	-	-	-	B
7.1.4.1 NORAD											-	-	-	-	-	-	A
7.1.4.2 USNORTHCOM											-	-	-	-	-	-	A
7.1.4.3 Disruptive Threats											-	-	-	-	-	-	B
7.1.4.4 Traditional Threats											-	-	-	-	-	-	B
7.1.4.5 NORAD End States											-	-	-	-	-	-	A
7.1.4.6 Determining Strategic Risk											-	-	-	-	-	-	B
7.1.5 Resilience, Replenishment											-	-	-	-	-	-	A
7.1.5.1 Residual and Repurposed Capabilities (Super-synch sensors)											-	-	-	-	-	-	A
7.1.5.2 Operationally Responsive Space (ORS) Mission Assurance											-	-	-	-	-	-	A
7.1.5.3 Commercial Off-the-Shelf (COTS) Space Capabilities											-	-	-	-	-	-	A
7.1.5.4 Layered Capabilities for Space Effects											-	-	-	-	-	-	A
7.1.6 Foreign / Commercial / Civil / National / Coalition Space Capabilities											A	-	-	B	-	-	-
7.2 Terrestrial Weather											A	-	-	B	-	-	-
7.3 Space Weather											A	-	-	B	-	-	-
7.3.1 Space Environment Challenges											-	-	-	B	-	-	-
7.3.2 Advanced Space Weather Concepts and Applications											-	-	-	B	-	-	-
7.4 Temperature in Space											A	-	-	B	-	-	-
7.5 Vacuum in Space											A	-	-	B	-	-	-
7.6 Radiation in Space											A	-	-	B	-	-	-
7.7 Advanced Space Environment											-	-	-	-	-	-	B
7.7.1 Anatomy of the Sun											-	-	-	-	-	-	A
7.7.2 Interplanetary Magnetic Field											-	-	-	-	-	-	A
7.7.3 Anatomy of the Earth's Atmosphere											-	-	-	-	-	-	A
7.8 Impacts of Space Weather on Operations											-	-	-	-	-	-	B
7.8.1 Military Operations											-	-	-	-	-	-	A
7.8.2 Support Organizations and Products											-	-	-	-	-	-	A
7.9 Space Doctrine, Policy and Strategy											-	-	-	-	-	-	A

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC	3 Skill Level	5 Skill Level	7 Skill Level
7.10 Space Capabilities											-	-	-	-	-	-	A
7.11 Space Power											-	-	-	-	-	-	A
7.11.1 Space System											-	-	-	-	-	-	A
7.11.2 Regions of Space											-	-	-	-	-	-	A
7.12 Space Characteristics											-	-	-	-	-	-	A
7.13 Trends											-	-	-	-	-	-	A
7.14 Force Employment Strategies											-	-	-	-	-	-	A
7.15 Military Reliance on Commercial Space											-	-	-	-	-	-	B
7.16 United States Economic Dependence on Space											-	-	-	-	-	-	A
7.16.1 Commercial Growth and Use of Space Assets											-	-	-	-	-	-	A
7.16.2 Space Generated Revenue											-	-	-	-	-	-	A
7.16.3 Economic Impact with the Loss of Commercial Space Applications											-	-	-	-	-	-	A
7.17 Globalization											-	-	-	-	-	-	A
<b>8. BASIC SYSTEMS DESIGN</b>																	
TR: AU-18; AFDD's 2-2, 2-5, 2-5.2; AFMAN 10-401 V2; <i>Understanding Space</i> by Jerry Jon Sellers, third edition 2005; Applicable Technical Publications																	
8.1 Spacecraft Design and Subsystems											-	-	-	-	-	-	-
8.1.1 Structures											A	-	-	B	-	-	-
8.1.2 Power											B	-	-	B	-	-	-
8.1.3 Propulsion											B	-	-	B	-	-	-
8.1.4 Attitude Control											B	-	-	B	-	-	-
8.1.5 Thermal Control											A	-	-	B	-	-	-
8.1.6 Communications and Tracking, Telemetry and Commanding											B	-	-	B	-	-	-
8.1.7 Payloads											A	-	-	B	-	-	-
8.2 Radar Design											A	-	-	B	-	-	-
8.3 Rocket Design											A	-	-	-	-	-	-
8.4 Space Surveillance Optical Systems Design											A	-	-	-	-	-	-
<b>9. OPERATIONS</b>																	
TR: AU-18; AFDD's 1, 3-13.1, 3-14, 3-60; AFI 10-403; AFSPCI's 10-1204, 10-120105; DoDI 3100.12; JP 3-14; TO's A1-31R2-26548AG-1, 31P6-2FPS132-251, 31S52FSQ212-1, 31S52FSQ212-11, 31S52FSQ212-21, 31S52FSQ212-31, 31S5-2FSQ217-21, 31S8-2USQ192-1; SD's 505-1, 515-2; SI 534-16; <i>Understanding Space</i> by Jerry Jon Sellers, third edition 2005; Applicable Technical Publications; MAJCOM/Local Procedures																	
9.1 Satellite Station Keeping											B	-	-	B	-	-	-
9.2 Satellite Maintenance											B	-	-	B	-	-	-
9.3 Telemetry											B	-	-	B	-	-	-
9.4 Maneuver / COLA											B	-	-	B	-	-	-
9.5 Payload and Mission Management											B	-	-	B	-	-	-
9.6 Pre-pass											B	-	-	B	-	-	-
9.7 Perform Pre-pass											2b	-	-	-	-	-	-
9.8 Pass											B	-	-	B	-	-	-
9.9 Perform Pass											2b	-	-	-	-	-	-
9.10 Post-Pass											B	-	-	B	-	-	-
9.11 Perform Post-Pass											2b	-	-	-	-	-	-
9.12 State of Health											B	-	-	B	-	-	-
9.13 Perform State of Health											2b	-	-	-	-	-	-
9.14 Commanding											B	-	-	B	-	-	-
9.15 Perform Commanding											2b	-	-	-	-	-	-
9.16 Ranging and Tracking											B	-	-	B	-	-	-
9.17 Perform Ranging and Tracking											2b	-	-	-	-	-	-
9.18 Radar Operations											-	-	-	-	-	-	-

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC	3 Skill Level	5 Skill Level	7 Skill Level
9.18.1 Radar Types											B	-	-	B	-	-	
9.18.2 Radar Tracking, Ranging, Telemetry and TEARR Data											B	-	-	-	-	-	
9.19 Surveillance											B	-	-	B	-	-	
9.20 Warning											B	-	-	B	-	-	
9.21 Spacelift and Range											A	-	-	B	-	-	
9.22 Space Control											B	-	-	B	-	-	
<b>10. SPACE FOCUS AREA</b>																	
TR: AU-18; AFD's Vol 1, Vol 4; AFDD 3-14; AFH 33-337; JP 3-14; Annex 3-14 Space Operations, Defensive Space Control; Applicable Technical Publications; MAJCOM/Local Procedures																	
10.1 Satellite Operations											A	-	-	-	-	-	
10.2 Surveillance and Warning											A	-	-	-	-	-	
10.3 Space Control											A	-	-	-	-	-	
10.4 Spacelift											A	-	-	-	-	-	
10.5 Perform Mission Brief											1a	-	-	-	-	-	
<b>11. GLOBAL WARFIGHTER CAPABILITIES</b>																	
JP 1-02, Dictionary; FM 3-14, Space Support; The White House, National Space Policy of the United States of America, 28 June 2010; National Security Space Strategy, January 2011; DoD Directive 3100.10, Space Policy, 18 October 2012; Functional Component for Command and Control of Space Forces 14 Mar 2007; JP 3-14, Space Operations, 6 January 2009; DODI 3100.13, Space Force Application; JP 5-0, Joint Operation Planning, 26 December 2006; AFDD 2-2, Space Operations, 27 November 2006; FM 3-14, Space Support to Army Operations, 18 May 2005; AFDD 1, Air Force Basic Doctrine, 17 November 2003																	
11.1 Levels and Phases of Warfare											-	-	-	-	-	-	B
11.1.1 Strategic (Phase 0-1)											-	-	-	-	-	-	A
11.1.2 Operational (Phase 1-3)											-	-	-	-	-	-	A
11.1.3 Spectrum of Conflict (Shape, Deter, Seize the Initiative, Stabilize/Enable Civil Authority)											-	-	-	-	-	-	A
11.1.4 Space Influence on Deterrence and Escalation Control											-	-	-	-	-	-	B
11.1.5 Space Postures and Conditions											-	-	-	-	-	-	A
11.2 Assured Tactical Access to Space											-	-	-	-	-	-	B
11.2.1 The Military Problem											-	-	-	-	-	-	A
11.2.2 Supporting Ideas											-	-	-	-	-	-	A
11.2.3 Influencing Partners' Capabilities and Programs											-	-	-	-	-	-	A
11.2.4 Gaining and Maintaining Advantages to Tactical Space Access											-	-	-	-	-	-	B
11.2.5 Building a Versatile and Adaptable Space Organization											-	-	-	-	-	-	A
11.3 Resilience and Replenishment											-	-	-	-	-	-	A
11.4 Space in Support of Joint Operations											-	-	-	-	-	-	B
11.4.1 Space-enabled Effects											-	-	-	-	-	-	A
11.4.2 Space Contributions to Joint Military Operations											-	-	-	-	-	-	B
11.4.3 Unique Views to Consider Regarding Space Forces											-	-	-	-	-	-	A
11.5 Weaponization and Militarization of Outer Space											-	-	-	-	-	-	A
11.5.1 Protecting Space Assets: Potential Use of Force in Space											-	-	-	-	-	-	A
11.5.2 "Peaceful Purposes"											-	-	-	-	-	-	A
11.5.3 Arms Control Limitations and Other Bilateral Agreements											-	-	-	-	-	-	A
11.5.4 US Policies on Militarization and Weaponization of Outer Space											-	-	-	-	-	-	A
11.5.5 Rules of Engagement: Implementation of Law and Policy											-	-	-	-	-	-	A
11.6 Space Access and Control											-	-	-	-	-	-	B

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
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	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC	
11.6.1 Degraded and Operationally Limited Environment											-	-	-	-	-	B	
11.6.2 Asymmetric Challenges											-	-	-	-	-	A	
11.6.3 Technology Diffusion											-	-	-	-	-	A	
11.6.4 Anti-Access / Area Denial (A2/AD)											-	-	-	-	-	A	
11.7 Challenges to U.S. Space Dominance											-	-	-	-	-	A	
11.7.1 Post 9/11 Deterrence											-	-	-	-	-	A	
11.7.2 Confronting High-End and Asymmetric Threats											-	-	-	-	-	A	
11.7.3 Non-Space Options											-	-	-	-	-	A	
11.8 Attack Mitigation – Space, Ground, Link Segment & Network Elements											-	-	-	-	-	B	
11.9 Offensive Space Control											-	-	-	-	-	A	
11.9.1 Offensive Space Control Operations											-	-	-	-	-	A	
11.9.2 OSC Targeting Considerations											-	-	-	-	-	A	
11.9.3 OSC Targets											-	-	-	-	-	A	
11.9.4 OSC Resources and Forces											-	-	-	-	-	A	
<b>12. SINGLE INTEGRATED SPACE PICTURE</b>																	
DoDI 4650.06, DoD Positioning, Navigation, and Timing (PNT) Executive Committee and Working Groups, 24 November 2009; JP 3-14, Space Operations, 29 May 2013; Precise Positioning Service Performance Standard, February 2007; FM 3-14, Army Space Operations, August 2014; “Agreement between the Government of Canada and the Government of the United States of America on the North American Aerospace Defense Command,” 28 April 2006; H. F. Cooper, Summary of SDI Programs and Plans for Theater and National Ballistic Missile Defenses (Washington, DC: Strategic Defense Initiative Organization, 4 January 1993); Smithsonian National Air and Space Museum, “Sensor, Infrared, Series III, Missile Defense Alarm System”; Jeffrey Richelson, “Space-Based Early Warning: From MIDAS to DSP to SBIRS”; Maj Jay A. Moody, Achieving Affordable Operational Requirements on the Space Based Infrared System (SBIRS) Program: A Model for Warfighter and Acquisition Success? (Maxwell AFB, AL: Air Command and Staff College, 1997); Lori Reichert, “Lockheed Martin Team Passes SBIRS High System Critical Design Review,” Lockheed Martin Press Release; Marcia S. Smith, Military Space Programs: Issues Concerning DOD’s SBIRS and STSS Programs, Congressional Research Service Report for Congress (Washington, DC: Library of Congress, January 2006); Air Force Space Command (AFSPC), “Space Based Infrared Systems,” Fact Sheet; AFSPC, “Space Based Infrared Systems.”; Ball, A Base for Debate, 49–51; Maj James J. Rosolanka, Defense Support Program (DSP): A Pictorial Chronology, 1970–1998 (Los Angeles AFB, CA: SBIRS System Program Office, 1998); Paul B. Stares, Space and National Security (Washington, DC: Brookings Institution Press, 1987); Northrop Grumman, “Defense Support Program”; Austronautix, “DSP”; “Defense Support Program,” Federation of American Scientists; Tamar A. Mehuron, ed., 2002 Space Almanac, Air Force Magazine, August 2002; Mohamed M. Abid, Spacecraft Sensors (Hoboken, NJ: John Wiley & Sons, 2005); NASA, “Space Shuttle STS-44 Press Kit”; USSTRATCOM, “Theater Ballistic Missile Warning”; Mike Nadler, Space and Missile Defense Future Warfare Center, “Early Warning,” briefing, 21 August 2007; Ibid; Joint Interoperability Test Command, “Tactical Data Dissemination System (TDDS); Col James W. McClendon, “Information Warfare: Impacts and Concerns,” in Battlefield of the Future: 21st Century Warfare Issues, ed. Barry R. Schneider and Lawrence E. Grinter (Maxwell AFB, AL: Air University Press, 1995); AFSPC, Space Surveillance Network (SSN) Site Information Handbook (24 October 2007); USASMDC/ARSTRAT Battle Lab; J-FFT Division Chief; Evolving Army Needs for Space-Based Support; U.S. Army War College, Strategic Studies Institute; Mc. Dermott, Roger, N. The reform of Russia’s Conventional Armed Forces: Problems Challenges and Policy Implications. The Jamestown Foundation, Washington, D.C. 2011; Course Training Standard (CTS) Space 200(1 July 2007); Joint Publication 3-14 Space Operation 29 May 2013; Air-Sea Battle: Service Collaboration to Address Anti-Access & Area Denial Challenges, May 2013; Capstone Concept for Joint Operations: Joint Force 2020, 10 September 2012; Joint Operational Access Concept, 22 Nov 11; Navy Maritime Domain Awareness Concept, 2007; Mc. Dermott, Roger, N. The reform of Russia’s Conventional Armed Forces: Problems Challenges and Policy Implications. The Jamestown Foundation, Washington, D.C. 2011																	
12.1 Enhancing the Warfighter											-	-	-	-	-	B	
12.2 The Space Imperative											-	-	-	-	-	A	
12.3 US Space Missions and Capabilities											-	-	-	-	-	A	
12.3.1 Advanced Sat C2											-	-	-	-	-	B	
12.3.2 Operationally Responsive Space Program											-	-	-	-	-	B	
12.3.3 Advanced Missile Warning and Defense											-	-	-	-	-	B	
12.3.3.1 Theater Missile Warning (TMW)											-	-	-	-	-	A	
12.3.3.2 Theater Missile Defense (TMD)											-	-	-	-	-	A	
12.3.3.3 Integrated Tactical Warning and Attack Assessment (ITW/AA)											-	-	-	-	-	A	
12.3.4 Space Control											-	-	-	-	-	B	
12.4 Position, Navigation and Timing (PNT)											-	-	-	-	-	B	
12.4.1 Theater PNT											-	-	-	-	-	B	
12.4.2 Dilution of Precision (DOP)											-	-	-	-	-	B	
12.4.3 Probable Error											-	-	-	-	-	B	

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
12.4.4 Scintillation Effects in GPS											-	-	-	-	-	B	
12.4.5 GPS Operations Center (GPSOC)											-	-	-	-	-	A	
12.5 Theater Space-based ISR											-	-	-	-	-	B	
12.6 Advanced SATCOM to the Warfighter											-	-	-	-	-	B	
12.6.1 SATCOM Applications											-	-	-	-	-	A	
12.6.2 Commercial SATCOM											-	-	-	-	-	A	
12.6.3 SATCOM Advantages											-	-	-	-	-	B	
12.6.4 SATCOM Limitations											-	-	-	-	-	B	
12.6.5 Considerations for Military Use of Commercial SATCOM Systems											-	-	-	-	-	B	
12.6.6 SATCOM Support Procedures											-	-	-	-	-	A	
12.7 Environmental Monitoring											-	-	-	-	-	A	
12.8 Space and Intelligence Integration											-	-	-	-	-	B	
12.8.1 Technical Intelligence											-	-	-	-	-	A	
12.8.2 Black and White Space											-	-	-	-	-	A	
12.8.3 Space Reconnaissance											-	-	-	-	-	A	
12.8.4 Imagery Intelligence											-	-	-	-	-	A	
12.8.4.1 Geospatial Intelligence											-	-	-	-	-	A	
12.8.4.2 Active Sensing Technologies											-	-	-	-	-	A	
12.8.4.3 Infrared Imagery											-	-	-	-	-	A	
12.8.4.4 Electrical-Optical Imagery											-	-	-	-	-	A	
12.8.5 Intelligence, Surveillance, and Reconnaissance (ISR)											-	-	-	-	-	A	
12.8.5.1 Imagery Resolution											-	-	-	-	-	A	
12.8.5.2 Military Utility and Implications											-	-	-	-	-	A	
12.8.5.3 Military Application of Commercial Imagery											-	-	-	-	-	B	
<b>13. VERTICAL WARFARE</b>																	
National Security Space Strategy; Army Space Journal, Assured Tactical Access to Space, 2012 Winter Edition; Paul W. Gydesen, Air War College, Air university, "What is the Impact to National Security Without Commercial Space Application?"; Dale L. Hayden, Air Power Research Institute, "The International Development of Space and Its Impact on U.S. National Space Policy"; Theresa Hitchens, CDI, "Weapons in Space: Silver Bullet or Russian Roulette? The Policy Implications of U.S. Pursuit of Space-Based Weapons"; Mr. Scott F. Large, National Reconnaissance Office, Senior Leader Perspective: "National Security Space Collaboration as a National Defense Imperative"; Air Command and Staff College, Air University, Space Doctrine for the 21st Century; Elizabeth S. Waldrop, "Weaponization of Outer Space: US National Policy"; IFPA-Fletcher Conference on National Security Strategy and Policy, "Air, Space, and Cyberspace Power in the 21st Century"; United States Army War College Press, "Evolving Army eeds for Space-Based Support; AFI 13-1 Air and Space Operations Volume 3 614th Air and Space Operations Center Supplement 19 Nov 14; JFCC SPACE Capstone Concept of Operations																	
13.1 Support to Vertical Warfare											-	-	-	-	-	B	
13.2 Exercises and Wargaming Types											-	-	-	-	-	A	
13.3 Vertical Warfare Operations											-	-	-	-	-	B	
13.3.1 Addressing the Challenges											-	-	-	-	-	A	
13.3.2 The Strategic Way Forward											-	-	-	-	-	A	
13.4 Space Situation Awareness (SSA)											-	-	-	-	-	B	
13.4.1 The Big Picture											-	-	-	-	-	B	
13.4.2 Components of Space Situation Awareness											-	-	-	-	-	B	
13.4.3 SSA Requirements and Tasks											-	-	-	-	-	B	
13.4.4 Find, Fix, and Track											-	-	-	-	-	A	
13.4.5 Blue on Blue Concerns											-	-	-	-	-	A	
13.4.6 Purple and Blue Forces											-	-	-	-	-	A	
13.5 Counterspace											-	-	-	-	-	B	
13.5.1 National Policy and Doctrine for Counterspace											-	-	-	-	-	A	
13.5.2 Fundamentals of Counterspace Operations											-	-	-	-	-	A	
13.5.3 Defensive Counterspace (DCS) Operations											-	-	-	-	-	A	

Space Systems Operations	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
13.5.4 Offensive Counterspace (OCS) Operations											-	-	-	-	-	A	
13.5.5 Air Force Counterspace Operations											-	-	-	-	-	A	
13.5.6 Adversary Threats											-	-	-	-	-	B	
13.5.7 Command Relationships for Counterspace Operations											-	-	-	-	-	B	
13.5.8 Counterspace Roles and Responsibilities											-	-	-	-	-	A	
13.6 Control of Global Space Forces in Theater Counterspace Operations											-	-	-	-	-	B	
13.6.1 Joint Time Sensitive Targeting											-	-	-	-	-	A	
13.6.2 Multi-domain Counterspace Operations											-	-	-	-	-	A	
13.7 Planning, Providing and Projecting Space Power											-	-	-	-	-	B	
<b>14. COMMAND AUTHORITIES AND RELATIONSHIPS</b>																	
Joint Publication 1 (JP-1) Doctrine for the Armed Forces, March 25, 2013; Joint Publication 3-14 (JP 3-14) Space Operations, May 29, 2013; Reconnaissance, Surveillance and Target Acquisition Annex (RSTA); AFDD 2-2, Space Operations, 23 August 1998; AFDD 2-5.2, Intelligence, Surveillance and Reconnaissance Operations, 21 April 1999; AFDD 2-8, Command and Control, 16 February 2001																	
14.1 Sectors and Government Organizations											-	-	-	-	-	A	
14.2 The Unified Command Plan											-	-	-	-	-	B	
14.3 Warfighting Authorities											-	-	-	-	-	B	
14.4 Command and Control (C2) of Space Forces											-	-	-	-	-	B	
14.4.1 Joint Space Capabilities											-	-	-	-	-	A	
14.4.2 Command Relationships											-	-	-	-	-	B	
14.4.2.1 Combatant Command Authority											-	-	-	-	-	B	
14.4.2.2 C2 of Global Space Forces											-	-	-	-	-	B	
14.4.2.3 C2 of Theater Space Forces											-	-	-	-	-	B	
14.5 Integrating Global Space Forces											-	-	-	-	-	B	
14.6 Air Force Presentation of Forces for Space Operations											-	-	-	-	-	B	
14.7 Director of Space Forces (DIRSPACEFOR or DS4)											-	-	-	-	-	A	
14.8 Space Support to the Joint Air Operations Center (JAOC)											-	-	-	-	-	A	
14.8.1 Space Operations Planning											-	-	-	-	-	B	
14.8.1.1 Deliberate Planning for the Joint Operations Planning Process											-	-	-	-	-	A	
14.8.1.2 Crisis Action Planning for the Joint Operations Planning Process											-	-	-	-	-	A	
14.8.1.3 Joint Operations Planning and Execution System											-	-	-	-	-	A	
14.8.2 Space Integration Considerations											-	-	-	-	-	B	
14.8.3 Space Tasking Process (Requesting and Responding)											-	-	-	-	-	B	
14.9 Joint Space Operations Center (JSpOC)											-	-	-	-	-	A	
14.10 The Air Operations Center (AOC) and Space Support to the Warfighter											-	-	-	-	-	B	
14.10.1 Geographic AOCs											-	-	-	-	-	A	
14.10.2 The AOC Weapon System											-	-	-	-	-	A	
14.10.3 AOC Space Integration											-	-	-	-	-	A	
14.10.4 AOC Divisions and Specialty/Support Teams											-	-	-	-	-	A	
14.11 Integration Across AOC Divisions											-	-	-	-	-	B	
14.12 Joint Command and Control (C2)											-	-	-	-	-	B	
14.13 AOC vs JSpOC											-	-	-	-	-	B	
14.14 Advanced Theater Operations											-	-	-	-	-	B	

## ***Section B - Course Objective List***

**1. Measurement.** Each objective is indicated as follows: W indicates task or subject knowledge, which is measured using a written test. PC indicates required task performance, which is measured with a performance progress check. P indicates required task performance, which is measured with a performance test. PC/W indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check.

**2. Standard.** The standard is 75% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructors use the checklist to document each student's progress on each task. Instructor assistance may be provided during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all PCs prior to taking the written test.

**3. Proficiency Level.** Most task performance is taught to the "2b" proficiency level, which means the student can do most parts of the task but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step-by-step procedures for doing the task. IST mixes classroom instruction with hands-on operation through the use of a trainer/simulator/emulator. A fully proficient, MR crewmember is attained through the unit's specific MQT.

**4. Course Objectives.** Detailed course objectives and course descriptions are available upon request through HQAETC/A3T.

***Section C – Support Material***

There are currently no support material requirements. This area is reserved.

## ***Section D - Training Course Index***

**1. Purpose.** This section identifies training courses available for the specialty and shows how the courses are used by each MAJCOM. Refer to Education and Training Course Announcements website <https://etca.randolph.af.mil/> for these courses.

### **2. Air Force In-Residence Courses.**

<u>Course Number</u>	<u>Title</u>	<u>Location</u>	<u>User</u>
V3ABR1C631 0E2A	Enlisted Space Operator	Vandenberg AFB	AF

### **3. HQ AU/A4L Course.**

<u>Course Number</u>	<u>Course</u>	<u>User</u>
CDC 1C651	Space Systems Operations Journeyman	AF
CDC 1C671	Space Systems Operations Craftsman	AF

## ***Section E - MAJCOM Unique Requirements***

1. The purpose of the Enlisted Space Systems Operations (1C6X1) Air Force Job Qualification Standard (AFJQS) is to identify minimum and advanced training required for the 1C6X1 specialty. The AFJQS will remain in effect until superseded or rescinded.
2. Document training required by the AFJQS in accordance with AFI 36-2201, *Air Force Training Program*. The AFJQS will be filed in the AF Form 623, *Individual Training Record*, or electronic equivalent. Use pencil when documenting paper based JQS.
  - 2.1. Individuals are trained in each task to the proficiency code key (PCK) level indicated. Trainers are qualified on the task to be trained and are in the grade of SrA and above.
  - 2.2. Upon assignment, the supervisor identifies duty position requirements of the member by circling the paragraph number or letter of each task statement. As the member begins training on each task, enter a start date (day, month, and year). Upon completion of training, enter a completion date (day, month, year), and the trainee and trainers initials.
  - 2.3. If the trainee is assigned an additional duty or task not in the JQS, the supervisor will develop an AF 797 Job Qualification Standard Continuation/Command JQS. The supervisor/trainer will then develop a plan for the member to receive training and become duty position qualified.
  - 2.4. Transcribing documentation to a new JQS is an administrative function, not a reevaluation of training. Upon publication of a new JQS, use the following procedures to transcribe:
    - 2.4.1. For tasks previously certified and required in the current duty position, circle the subparagraph number next to the task statement and enter in the current date in the completion column. Trainee initials in the trainee column and the current task certifier or supervisor/trainer initials in the trainer column.
    - 2.4.2. For tasks previously certified but not required in the current duty position, transcribe only the previous certification date. Tasks are not circled or initialed.
    - 2.4.3. Annotate on AF Form 623a or approved electronic database (ex. AFTR, PEX, TBA, etc.) that the record was transcribed (i.e., "I certify the information contained in the JQS dated X was transcribed to the JQS dated XX, and then trainee was given the superseded JQS;" Signed, dated, supervisor and trainee).
3. Overall POC for this AFJQS is AF/A3XS, [usaf.pentagon.af-a3.mbx.a3st-workflow@mail.mil](mailto:usaf.pentagon.af-a3.mbx.a3st-workflow@mail.mil)

**Air Force Job Qualification Standard (AFJQS)  
Enlisted Space Systems Operations (1C6X1)**

This Block Is For Identification Purposes Only		
<b>Name of Trainee</b>		
Printed Name ( <i>Last, First, Middle Initial</i> )	Initials (Written)	SSAN
<b>Printed Name Of Certifying Official And Written Initials</b>		
N/I		N/I

**QUALITATIVE REQUIREMENTS**

PROFICIENCY CODE KEY		
	SCALE VALUE	DEFINITION: THE INDIVIDUAL
TASK PERFORMANCE LEVELS	<b>1</b>	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
	<b>2</b>	Can do most parts of the task. Needs help only on the hardest parts. (PARTIALLY PROFICIENT)
	<b>3</b>	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	<b>4</b>	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
*TASK * KNOWLEDGE LEVELS	<b>a</b>	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	<b>b</b>	Can determine step by step procedures for doing the task. (PROCEDURES)
	<b>c</b>	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	<b>d</b>	Can predict, isolate, and resolve problems about the task. (ADVANCE THEORY)
**SUBJECT ** KNOWLEDGE LEVELS	<b>A</b>	Can identify basic facts and terms about the subject. (FACTS)
	<b>B</b>	Can identify relationships of basic facts and state general principles about the subject. (PRINCIPLES)
	<b>C</b>	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	<b>D</b>	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)
<b>EXPLANATIONS</b>		
Note: All tasks and knowledge items shown with a proficiency code are trained during wartime..		
* A task knowledge value may be used alone or with a task performance scale value to define a level of a specific task. (Examples: b and 1b)		
** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task or for a subject common in several tasks.		
/ This mark is used to show a difference between the career field training level desire and AETC's limited training resources. (Example: 2b/B. The career field desire is 2b, but only a B level can be achieved due to resource limitations.)		
<b>No proficiency codes indicate no training is provided in the course or CDC.</b>		

1C6X1 Job Qualification Standard Active Space Surveillance	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
	A	B	C	A	B	C	D	E	A		B		C	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
<b>1. MISSION SUPPORT OPERATIONS</b>														
1.1. Radar System Characteristics	B													
1.2. Mission Equipment	B													
1.3. Operate Peripheral Equipment	2b													
1.4. Perform Voice/Data Communication Actions	2b													
1.5. Perform Contingency Procedures	2b													
1.6. Perform Operational Reporting	3b													
1.7. Communications Security Procedures	B													
1.8. Perform Shift Change/End of Zulu Day Procedures	2b													
1.9. Logging Procedures	B													
1.10. Perform Routine Crew Operations	3b													
<b>2. STATUS MONITORING</b>														
2.1. Perform Electromagnetic Interference Procedures	3b													
2.2. Perform Communications Failure Procedures	3b													
2.3. Perform Corrective/Preventative Maintenance Procedures	3b													
2.4. Perform Change of Command & Control Procedures	3b													
<b>3. MISSION PROCEDURES</b>														
3.1. Perform Database Management Procedures	3b													
3.2. Perform Time Sharing Operation Jobs	3b													
3.3. Perform Launch/Spacetrack Procedures	3b													
3.4. Perform Spacetrack Catalog Management	3b													
<b>4. PERFORM CREW COORDINATION AND PRIORITIZATION TASKS</b>	2b													

1C6X1 Job Qualification Standard Phased Array Warning System (PAWS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
	A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
<b>1. MISSION SUPPORT OPERATIONS</b>														
1.1. PAVE PAWS System Characteristics	B													
1.2. Perform Contingency Procedures	3c													
1.3. Perform Crew Actions	2b													
1.4. Operate Mission Equipment	2b													
1.5. Perform OPSEC/COMSEC Procedures	2b													
1.6. Perform Operational Reporting	3c													
1.7. Perform Voice/Data Communications Actions	2b													
1.8. Perform Test Control Procedures	2b													
<b>2. STATUS MONITORING</b>														
2.1. Perform Electromagnetic Interference Procedures	3c													
2.2. Perform Fault Anomaly Resolution Procedures	2b													
2.3. Perform Preventive Maintenance Procedures	3c													
2.4. Perform Change of Command and Control Procedures	3c													
2.5. Perform Power Transfer/Failure Procedures	3c													
2.6. Perform Severe Clutter Procedures	2b													
<b>3. MISSION PROCEDURES</b>														
3.1. Perform Site Reporting Procedures	3c													
3.2. Perform Database Management Procedures	3c													
3.3. Perform Launch/Spacetrack Procedures	2b													
3.4. Perform Radar Control Functions	2b													
<b>4. EMERGENCY PROCEDURES</b>														
4.1. Perform Fire Overheat Procedures	2b													
4.2. Perform Security Procedures	3c													
4.3. Perform Evacuation Procedures	2b													
4.4. Perform Emergency Fault Procedures	2b													
<b>5. PERFORM CREW COORDINATION AND PRIORITIZATION TASKS</b>	2b													

1C6X1 Job Qualification Standard Perimeter Acquisition Radar Attack Characterization System (PARCS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
<b>1. PARCS KNOWLEDGE</b>																	
1.1. Radar Fundamentals	A																
1.2. Weapon System Knowledge	A																
1.3. Orbital Mechanics	A																
1.4. Organizational Relationships	A																
1.5. Crew Operations	A																
<b>2. MISSION SUPPORT OPERATIONS</b>																	
2.1. Perform Crew Changeover/Shift Actions	3b																
2.2. Operate Mission Equipment	2b																
2.3. Perform Contingency Procedures	3b																
2.4. Perform Operation Security (OPSEC) Procedures	3b																
2.5. Perform Communication Security (COMSEC) Procedures	3b																
2.6. Perform Operational Report (OPREP) -3 Incident Reporting Procedures	2b																
2.7. Perform Test Control Procedures	2b																
<b>3. STATUS MONITORING</b>																	
3.1. Perform Electromagnetic Interference (EMI) Procedures	2b																
3.2. Perform Voice Communication Failure Procedures	2b																
3.3. Perform Miscellaneous System Fault Procedures	2b																
3.4. Perform Preventive Maintenance Procedures	2b																
3.5. Perform Command and Control Change Actions	3b																
3.6. Perform Power Transfer Procedures	2b																
3.7. Perform Communications Sustainment Actions	2b																
<b>4. MISSION PROCEDURES</b>																	
4.1. Perform Site Reporting Actions	3b																
4.2. Perform Search Procedures	2b																
4.3. Perform Normal Spacetrack Actions	2b																
4.4. Perform Break-up Procedures	2b																
4.5. Perform New Foreign Launch Procedures	2b																
4.6. Perform Pre-Planned Procedures	2b																
4.7. Perform Space Object Identification (SOI) Procedures	2b																
4.8. Perform Spacetrack Catalog Management	3b																
4.9. Perform Radar Restriction Procedures	3b																
<b>5. EMERGENCY PROCEDURES</b>																	
5.1. Perform Fire/Overheat Procedures	3b																
5.2. Perform Physical Security Violations Procedures	3b																
5.3. Perform Total Evacuation Procedures	3b																

1C6X1 Job Qualification Standard Perimeter Acquisition Radar Attack Characterization System (PARCS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
5.4. Perform Emergency Fault Procedures	3b																
<b>6. PERFORM CREW COORDINATION AND PRIORITIZATION TASKS</b>	2b																

1C6X1 Job Qualification Standard Upgrade Early Warning Radar (UEWR)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
<b>1. MISSION SUPPORT OPERATIONS</b>																	
1.1. UEWR System Characteristics	B																
1.2. Perform Crew Actions	2b																
1.3. Operate Mission Equipment	2b																
1.4. OPSEC/COMSEC	B																
1.5. Operational Reporting	B																
1.6. Perform Voice/Data Communications Actions	2b																
1.7. Perform Test Control Procedures	2b																
<b>2. STATUS MONITORING</b>																	
2.1. Perform Electromagnetic Interference Procedures	3b																
2.2. Perform Fault Anomaly Resolution Procedures	3b																
2.3. Perform Preventive Maintenance Procedures	3b																
2.4. Perform Change of Command and Control Procedures	3b																
2.5. Perform Power Transfer/Failure Procedures	3b																
2.6. Perform Severe Clutter Procedures	2b																
<b>3. MISSION PROCEDURES</b>																	
3.1. Perform Site Reporting Procedures	3b																
3.2. Perform Spacetrack Procedures	3b																
3.3. Perform New Foreign Launch Procedures	3b																
3.4. Perform Pre-Planned Launch Procedures	3b																
3.5. Perform Spacetrack Catalog Management	3b																
3.6. Perform Space Object Identification Procedures	3b																
<b>4. EMERGENCY PROCEDURES</b>																	
4.1. Perform Contingency Procedures	3b																
4.2. Perform Fire/Overheat Procedures	3b																
4.3. Perform Security Procedures	3b																
4.4. Perform Evacuation Procedures	3b																
4.5. Perform Emergency Faults Procedures	3b																
<b>5. PERFORM CREW COORDINATION AND PRIORITIZATION TASKS</b>	2b																

1C6X1 Job Qualification Standard Global Positioning System (GPS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
	A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
<b>1. SPACE FUNDAMENTALS</b>	-													
1.1. Exploitation of Space	A													
1.2. Spacecraft Orientation	A													
1.3. Satellite Communications Mission	A													
1.4. Precision Navigation and Timing Mission	B													
1.5. Satellite Ground Control Systems	A													
<b>2. SATELLITE FUNDAMENTALS</b>	-													
2.1. Space Assets for the Communications and Navigation Missions	A													
2.2. Satellite Subsystems	B													
2.3. Organization and Crew Actions	A													
<b>3. GPS PERFORMANCE</b>	-													
3.1. Perform AEP Console Routine Initialization Tasks	3c													
3.2. Mechanics of Contact	B													
3.3. Perform Satellite Contacts	2b													
3.4. Anomaly Resolution	B													
3.5. Perform Ground Troubleshooting Procedures	2b													

1C6X1 Job Qualification Standard Defense Satellite Communications System (DSCS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
<b>1. DEFENSE SATELLITE COMMUNICATIONS SYSTEM SATELLITE VEHICLE OPERATOR (DSCS SVO) OVERVIEW</b>	A																
<b>2. DSCS COMMAND AND CONTROL EQUIPMENT</b>	-																
2.1. Command and Control System-Consolidated (CCS-C) Hardware and Software	B																
2.2. Air Force Satellite Control Network (AFSCN) Elements	B																
2.3. Perform CCS-C Console Operations	2b																
<b>3. DSCS NOMINAL CONTACT PROCEDURES</b>	-																
3.1. SVO Routine Shift Actions	A																
3.2. Perform Shift Planning	2b																
3.3. Perform Vehicle Contact	2b																
3.4. Commanding Requirements	B																
3.5. Perform Commanding Contact	2b																
<b>4. PERFORM GROUND ANOMALY RESOLUTION</b>	2b																
<b>5. DSCS SATELLITE SUBSYSTEMS</b>	-																
5.1. Structures and Mechanisms Subsystem	B																
5.2. Telemetry, Tracking and Commanding Subsystem	B																
5.3. Electrical Power and Distribution Subsystem	B																
5.4. Thermal Control Subsystem	B																
5.5. Attitude Control Subsystem	B																
5.6. Propulsion Subsystem	B																
5.7. Payload Subsystem	B																
<b>6. PERFORM TELEMETRY, TRACKING AND COMMANDING SUBSYSTEM COMMANDS</b>	2b																
7. PERFORM ELECTRICAL POWER AND DISTRIBUTION SUBSYSTEM COMMANDING	2b																
<b>8. PERFORM ATTITUDE CONTROL SYSTEM COMMANDINGS</b>	2b																
9. PERFORM PROPULSION SUBSYSTEM COMMANDING	2b																
<b>10. PERFORM MANEUVER WRITING PROCEDURES</b>	2b																
11. PERFORM MANEUVER COMMANDING	2b																
<b>12. PERFORM PAYLOAD COMMANDING</b>	2b																
13. PERFORM DSCS SATELLITE ANOMALY RESOLUTION	2b																

1C6X1 Job Qualification Standard Defense Satellite Communications System (DSCS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
1. Tasks, Knowledge And Technical References	A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
14. PERFORM DSCS PAYLOAD ANOMALY RESOLUTION	2b													

1C6X1 Job Qualification Standard Advanced Satellite Mission Control System (ASMCS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
<b>1. SPACE FUNDAMENTALS</b>	-																
1.1. Exploitation of Space	A																
1.2. Spacecraft Orientation	A																
1.3. Satellite Communications Mission	B																
1.4. Precision Navigation and Timing Mission	A																
1.5. Satellite Ground Control Systems	A																
<b>2. SATELLITE FUNDAMENTALS</b>	-																
2.1. Space Assets for the Communications and Navigation Missions	A																
2.2. Satellite Subsystems	B																
2.3. Organization and Crew Actions	A																
<b>3. ASMCS PERFORMANCE</b>	-																
3.1. Perform Routine Crew Actions	2b																
3.2. Network Actions	A																
3.3. Perform Network Actions	3c																
3.4. Rekey Actions	A																
3.5. Perform Routine Rekey Actions	3c																
3.6. Perform Non-Routine Rekey Actions	2b																
3.7. Fundamental Procedures	A																
3.8. Perform Fundamental Procedures	2b																
3.9. Crosslink Actions	A																
3.10. Perform Crosslink Actions	2b																
3.11. Payload Actions	A																
3.12. Perform Payload Actions	2b																
3.13. Anomaly Resolution Actions	A																
3.14. Perform Anomaly Resolution Actions	2b																

1C6X1 Job Qualification Standard Space-Ground Link System (SGLS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
<b>1. SPACE FUNDAMENTALS</b>	-																
1.1. Exploitation of Space	A																
1.2. Spacecraft Orientation	A																
1.3. Satellite Communications Mission	B																
1.4. Precision Navigation and Timing Mission	A																
1.5. Satellite Ground Control Systems	A																
<b>2. SATELLITE FUNDAMENTALS</b>	-																
2.1. Space Assets for the Communications and Navigation Missions	A																
2.2. Satellite Subsystems	B																
2.3. Organization and Crew Actions	A																
<b>3. MILSTAR CCS-C PERFORMANCE</b>	-																
3.1. Perform CCS-C Console Routine Initialization Tasks	3c																
3.2. Mechanics of Contact	B																
3.3. Perform Satellite Contacts	2b																
3.4. Anomaly Resolution	B																
3.5. Satellite Alarms	A																
3.6. Perform Ground Troubleshooting Procedures	2b																
3.7. Perform Satellite Troubleshooting Procedures	1a																

1C6X1 Job Qualification Standard Wideband Global SATCOM (WGS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)						
	1. Tasks, Knowledge And Technical References	A	B	C	A	B	C	D	E	A		B		C	
		3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
<b>1. WIDEBAND GLOBAL SATCOM SATELLITE VEHICLE OPERATOR (WGS SVO) OVERVIEW</b>	A														
<b>2. TELEMETRY, TRACKING, AND COMMANDING (TT&amp;C) EQUIPMENT</b>	-														
2.1. Command and Control System-Consolidated (CCS-C) TT&C Equipment	B														
2.2. Air Force Satellite Control Network (AFSCN) TT&C Equipment	B														
2.3. Gapfiller Satellite Configuration Control Network (GSCCE) TT&C Equipment	B														
2.4. Satellite TT&C Overview	B														
<b>3. ROUTINE OPERATIONS</b>	-														
3.1. Routine Shift Actions	A														
3.2. Perform CCS-C Console Operations	2b														
3.3. Perform Shift Planning Procedures	2b														
3.4. Perform State of Health	2b														
3.5. Perform Commanding Actions	2b														
3.6. Perform AFSCN Vehicle Contact	2b														
3.7. Perform Mode 2 Vehicle Contact	2b														
3.8. Perform Telemetry Broadcast Vehicle Contact	2b														
3.9. Perform Mode 1 Vehicle Contact	2b														
<b>4. PERFORM GROUND ANOMALY RESOLUTION</b>	2b														
<b>5. WGS PLATFORM</b>	-														
5.1. WGS Satellite Subsystems Overview	A														
5.2. Telemetry and Commanding (T&C) Radio Frequency (RF) Subsystem Operations	B														
5.3. T&C Digital Subsystem Operations	B														
5.4. Perform T&C Configuration	2b														
5.5. Perform Spacecraft Control Processor (SCP) Commanding	2b														
5.6. Secure T&C Operation Tasks	B														
5.7. Perform Central Telemetry Command Unit (CTCU) Dwell Telemetry Operations	2b														
5.8. CTCU Data Stash Management Tasks	B														
5.9. Digital Data Bus (DDB) Tasks	B														
5.10. Restore T&C Tasks	B														
<b>6. ATTITUDE CONTROL SUBSYSTEM (ACS) OPERATIONS</b>	-														

1C6X1 Job Qualification Standard Wideband Global SATCOM (WGS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)						
	1. Tasks, Knowledge And Technical References	A	B	C	A	B	C	D	E	A		B		C	
		3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
6.1. ACS Subsystem	B														
6.2. Attitude Control Modes	B														
6.3. Perform Ephemeris Upload Management	2b														
6.4. Star Tracker Management	B														
6.5. Stellar Inertial Attitude Determination (SIAD) Operations	B														
6.6. Hemispherical Inertial Reference Unit (HIRU) Management	B														
6.7. Control Actuators	B														
6.8. Perform Solar Wing Drive Management	2b														
6.9. Solar Wing Positioner Management	B														
6.10. Gimbale Xenon Ion Propulsion System (XIPS) Platform Management	B														
6.11. Perform Reaciton Wheel Assembly (RWA) Operations Tasks	2b														
6.12. Small Gimbal Mechanism (SGM) Management	B														
6.13. Perform Eclipse Monitoring	2b														
<b>7. SPACECRAFT CONTROL PROCESSOR</b>	-														
7.1. SCP Operations	B														
7.2. Perform Battery Charge Management	2b														
7.3. Heater Control	B														
7.4. Perform SCP Clock Management	2b														
7.5. Perform SCP Memory Management	2b														
7.6. Perform Flexible Data Buffer Management	2b														
7.7. Perform Fault Protection Management	2b														
7.8. Payload Fault Protection	B														
<b>8. PROPULSION SUBSYSTEM</b>	-														
8.1. Propulsion Subsystem Operations	B														
8.2. Perform XIPS On-Station Operations	2b														
8.3. XIPS Maintenance	B														
8.4. XIPS Manual Burn	B														
8.5. XIPS Station Change	B														
<b>9. ELECTRICAL POWER SUBSYSTEM</b>	-														
9.1. ElectricalPower Subsystem Operations	B														
9.2. Perform Battery Monitoring	2b														
9.3. Perform Battery Calibration	2b														
<b>10. PASSIVE THERMAL CONTROL</b>	B														
<b>11. SPACECRAFT CONTINGENCY</b>	-														
11.1. Spacecraft Contingency Operations	B														

1C6X1 Job Qualification Standard Wideband Global SATCOM (WGS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)						
	1. Tasks, Knowledge And Technical References	A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
		3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
11.2. On Station Safing and System Recovery	B														
11.3. Post Toggle Return to Service	B														
11.4. Normal Mode Set Up	B														
11.5. Transient Free SCP Switch in Normal Mode	B														
11.6. Perform Emergency Sun Acquisition	2b														
<b>12. PERFORM WGS VEHICLE ANOMALY PROCEDURES</b>	2b														
<b>13. WGS PAYLOAD OPERATIONS</b>	A														
<b>14. WGS ANTENNA</b>	-														
14.1. WGS Payload Antenna	A														
14.2. X-Band Uplink Phased Array Antenna	A														
14.3. X-Band Downlink Phased Array Antenna	A														
14.4. Phased Array Initialization	A														
<b>15. WGS PAYLOAD</b>	-														
15.1. WGS Payload Units	A														
15.2. Ka-Band Low Noise Amplifier (LNA)	A														
15.3. X-band Earth Coverage Lane	A														
15.4. KA- and X-band Downconverter	A														
15.5. Uplink Beam Selection Switches	A														
15.6. Baseband Downconverter Assembly	A														
15.7. Baseband Upconverter Assembly	A														
15.8. Channelizer	A														
15.9. Channelizer Initiation	A														
15.10. Downlink Beam Selection Switches	A														
15.11. KA- and X-band Upconverter	A														
15.12. Ka-band Linearized High Power Amplifier	A														
15.13. X-band Linearized Traveling Wave Tube Amplifier (TWTA)	A														
15.14. Ka-band Polarization Switches	A														
15.15. Master Oscillator	A														
15.16. Local Oscillator Reference Generators	A														
15.17. Clock Generator	A														
15.18. Synthesizer Reference Generator	A														
15.19. Payload Central Power Supply	A														
<b>16. PAYLOAD INITIALIZATION</b>	-														
16.1. Command Channel Search	A														

1C6X1 Job Qualification Standard Wideband Global SATCOM (WGS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
	A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
16.2. SCP Stored Payload Telemetry	A													
16.3. Payload Initialization Operations	A													
16.4. Payload Shutdown	A													
<b>17. REDUNDANCY MANAGEMENT</b>	-													
17.1. Uplink Redundancy Management	A													
17.2. Downlink Redundancy Management	A													
17.3. Payload Anomaly Response	A													

1C6X1 Job Qualification Standard Space-Based Infrared Systems (SBIRS) – Mission	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
	A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
<b>1. SPACE BASED INFRARED SYSTEMS (SBIRS) KNOWLEDGE</b>	-													
1.1. SBIRS Elements	A													
1.2. Defense Support Program (DSP) Subsystems	A													
<b>2. CREW ENVIRONMENT</b>	-													
2.1. Operate Workstation Equipment	3c													
2.2. Use Interactive Electronic Technical Manual (IETM)	3c													
2.3. Setup Console	3c													
2.4. Geography and Missiles	A													
<b>3. MISSION CREW EMPLOYMENT</b>	-													
3.1. Process Single Missile Launch Events	3c													
3.2. Process Single Supplemental Events	3c													
3.3. Process Nuclear Detonations (NUDETs)	3c													
3.4. Process Multiple Events	3c													
3.5. Report on Events	3c													
<b>4. PROBLEM RESOLUTION AND REPORTING</b>	-													
4.1. Respond to Anomalies	3c													
4.2. Analyze Operations Capability (OPSCAP)	3c													
4.3. Report Operations Capability (OPSCAP)	3c													
4.4. Process Event Scenarios	3c													
4.5. Report Event Scenarios	3c													

1C6X1 Job Qualification Standard Space-Based Infrared Systems (SBIRS) – System	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
	A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
<b>1. SPACE BASED INFRARED SYSTEMS (SBIRS) KNOWLEDGE</b>	-													
1.1. SBIRS Elements	A													
1.2. Defense Support Program (DSP) Satellite Subsystem	A													
<b>2. CREW ENVIRONMENT</b>														
2.1. Operate Workstation Equipment	3c													
2.2. Use Interactive Electronic Technical Manual (IETM)	3c													
2.3. Set up Satellite Systems Operator (SSO) Console	3c													
2.4. Set up Ground Systems Operator (GSO) Console	3c													
<b>3. SYSTEMS CREW EMPLOYMENT</b>														
3.1. Monitor Telemetry	3c													
3.2. Perform State of Health	3c													
3.3. Initialize Ground Stations	3c													
3.4. Configure Ground Stations	3c													
3.5. Configure Air Force Satellite Control Network (AFSCN) Resources	3c													
3.6. Perform Commanding Actions	3c													
<b>4. PROBLEM RESOLUTION</b>														
4.1. Respond to Anomalies	3c													
4.2. Respond to Ground Segment Malfunctions	3c													
4.3. Respond to Space Segment Malfunctions	3c													
4.4. Process Event Scenarios	3c													

1C6X1 Job Qualification Standard Counter Communications Systems (CCS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
<b>1. SPACE CONTROL MISSION AREA</b>	-																
1.1 Space Control Mission Description	B																
1.2. Organizational Structure	B																
1.3. Technical Orders	B																
1.4. Signal Fundamentals	B																
1.5. Signal Processing	B																
1.6. Satellite Communication (SATCOM) Fundamentals	B																
<b>2. MISSION PLANNING</b>	-																
2.1. Joint Operations Planning (JOP) Process	B																
2.2. Deconfliction Process	B																
2.3. Tactics, Techniques, and Procedures (TTP)	B																
2.4. Mission Tasking	B																
2.5. Mission Messages	B																
<b>3. CCS MISSION OPERATIONS</b>	<b>B</b>																
3.1. Mission Protection Procedures	B																
3.2. Perform Mission Protection Procedures	2b																
3.3. Communications Equipment	B																
3.4. Communications Failure Procedures	B																
3.5. Respond to Mission Messages	2b																
3.6. Operational Reporting Procedures	B																
3.7. Perform Operational Reporting Procedures	2b																
<b>4. CCS BASIC MISSION EQUIPMENT (BME) OPERATIONS</b>	-																
4.1. CCS Basic Mission Equipment (BME)	B																
4.2. Block Converter Assemblies	B																
4.3. Configure Block Converter Assemblies	2b																
4.4. Spectrum Analyzer Assembly (SAA)	B																
4.5. Configure Spectrum Analyzer Assembly (SAA)	2b																
4.6. Narrowband Assembly (NBA)	B																
4.7. Configure Narrowband Assembly (NBA)	2b																
4.8. Signal Generator Assembly (SGA)	B																
4.9. Configure Signal Generator Assembly (SGA)	2b																
4.10. Transmit Control Assembly (TCA)	B																
4.11. Perform Transmit Control Assembly (TCA)	2b																
<b>5. CCS EXPANSION EQUIPMENT OPERATIONS</b>	-																

1C6X1 Job Qualification Standard Counter Communications Systems (CCS)	2. Core Tasks			3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)								
	1. Tasks, Knowledge And Technical References			A	B	C	A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	3 Level	5 Level	7 Level	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC			
5.1. CCS Expansion Equipment	B																
5.2. Wideband Digital Assembly (WDA)	B																
5.3. Configure Wideband Digital Assembly (WDA)	2b																
5.4. Wideband Analog Assembly (WAA)	B																
5.5. Configure Wideband Analog Assembly (WAA)	2b																
<b>6. CREW ACTIONS</b>	-																
6.1. Basic Mission Crew Actions	B																
6.2. Expansion Equipment Crew Actions	B																
6.3. CCS Crew Actions	B																
6.4. Electronic Attack (EA) Procedures	B																
6.5. Perform Electronic Attack (EA) Procedures	2b																
6.6. Electronic Support (ES) Procedures	B																
6.7. Perform Electronic Support (ES) Procedures	2b																
<b>7. PERFORM MISSION OPERATIONS</b>	-																
7.1. Perform Basic Mission Operations Procedures	2b																
7.2. Perform Expansion Equipment Operations Procedures	2b																
7.3. Perform CCS Operations Procedures	2b																