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OF THE AIR FORCE**

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VOLUME 1**



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**AIR FORCE SPACE COMMAND  
Supplement**

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**Operations**

**CYBERCREW TRAINING**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements Air Force Policy Directive (AFPD) 10-17, *Cyberspace Operations*. This instruction establishes the Cybercrew Training Program (CTP) that supports Air Force (AF) objectives and provides guidance on how to structure and monitor a cyber training program. This publication applies to all military and civilian AF personnel, members of the AF Reserve Command (AFRC), Air National Guard (ANG), third-party governmental employee and contractor support personnel in accordance with appropriate provisions contained in memoranda support agreements and AF contracts. This instruction requires collecting and maintaining information protected by the Privacy Act of 1974 (5 U.S.C. 552a). System of Records Notices F036 AF PC C, Military Personnel Records System, and OPM/GOVT-1, *General Personnel Records*, apply. Units may supplement this instruction. Coordinate supplements through HQ AFSPC/A3T prior to publication. Coordinate MAJCOM supplements with AF/A6SS. Guidance provided by the lead major command should contain specific training requirements unique to individual and crew positions. Send recommended changes or comments to HQ USAF/A6SS, 1480 Air Force Pentagon, Washington, DC 20330-1480, through appropriate channels, using AF Form 847, *Recommendation for Change of Publication*. When collecting and maintaining

information protect it by the Privacy Act of 1974 authorized by 10 U.S.C. 8013. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the AF Records Disposition Schedule (RDS) located in the AF Records Management Information System (AFRIMS). See attachment 1 for a glossary of references and supporting information.

(AFSPC) This instruction implements guidance in Air Force Instruction (AFI) 10-1703, Volume 1, *Cyberspace Operations*. Headquarters (HQ) Air Force Space Command (HQ AFSPC)/A2/3/6T is the Office of Primary Responsibility (OPR) for this supplement. This document provides guidance to Air Force Space Command Cyberspace professionals including their aligned Air National Guard (ANG) and Air Force Reserve (AFR) units. This instruction applies to Cyber crewmembers in positions that are designated Mission Ready (MR)/Combat Mission Ready (CMR) and Basic Mission Capable (BMC). The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, *Publication and Forms Management*, Table 1.1, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately to HQ AFSPC/A2/3/6T for non-tiered compliance items. NGB/A3C or AFRC/A3T will approve waivers for ARC aligned units after coordination with HQ AFSPC/A2/3/6T. Refer recommended changes about this publication to HQ AFSPC/A2/3/6TT using the AF IMT 847, *Recommendation for Change of Publication*; route AF Form 847 from the field through appropriate chain of command through the appropriate chain of command. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. This publication requires the collection and maintenance of information protected by the Privacy Act of 1974. The authorities to collect and maintain the records prescribed in this publication are Title 10, United States Code, Section 8013 and Executive Order 9397 (SSN) as amended by Executive Order 13478. Forms affected by the Privacy Act have an appropriate Privacy Act statement. System of Records Notice (SORN) F036 AF PC N, *Unit Assigned Personnel Information* applies. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) in the Air Force Information Management System (AFRIMS).

**SUMMARY OF CHANGES**

This interim change revises AFI 10-1703, Volume 1, by incorporating changes identified during the compliance statement review and updating office symbols and references. Several tiering codes have been updated and related language changed to improve readability and clarify responsibilities.

1.	General. ....	3
2.	Qualification Training. ....	8
3.	Continuation Training (CT). ....	14

4.	Upgrade Training. ....	15
5.	Multiple Qualification. ....	16
6.	Instructor Training and Certification. ....	16
7.	Cybercrews Operating on Non-US Air Force Weapon Systems and/or with Non-US Air Force Units. ....	16
8.	Documentation. ....	17
9.	(Added-AFSPC) Course Change Request. ....	17
10.	(Added-AFSPC) Formal Training Unit. ....	18
11.	(Added-AFSPC) Training for New or Upgraded System Requirements. ....	19
<b>Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION</b>		<b>21</b>
<b>Attachment 2—TRAINING DEVELOPMENT</b>		<b>25</b>
<b>Attachment 3—(Added-AFSPC) METRIC TEMPLATES</b>		<b>30</b>
<b>Attachment 4—(Added-AFSPC) CODE 55 REPORT EXAMPLE</b>		<b>33</b>

**1. General.** This instruction prescribes basic policy and guidance for training AF cybercrews according to AFPD 10-17.

**1.1. Program Goals.** The AF CTP ensures all cybercrew members obtain and maintain the certification/qualification and proficiency needed to effectively perform their unit's mission. The objective of the CTP is to develop and maintain a high state of mission readiness for immediate and effective employment across the full range of military operations, while structuring each training mission to achieve optimum training experience.

1.1.1. Cybercrews consist of individuals who conduct cyberspace operations and are assigned to a specific cyber weapon system. Personnel who perform cyberspace intelligence, surveillance, and reconnaissance (ISR) functions do not fall under the purview of this instruction; training for these personnel is addressed in the 14-2XX series of AF Instructions.

1.1.2. This AFI applies to cybercrew positions that are designated mission ready/combat mission ready (MR/CMR) in guidance provided by the lead major command. Personnel filling MR/CMR positions at the 624 OC and the 960 CyOG-Det 1 (854th Command Control Squadron (CSS) (AFRC)) will adhere to guidance in Paragraphs 1 through 1.3.5.6, and applicable Lead MAJCOM provided policy and guidance.

1.1.2.1. **(Added-AFSPC)** This supplement applies to personnel performing duties in designated cyberspace weapon systems positions as identified in Attachment 7 of AFI 10-1703V2\_AFSPCSUP, *Cybercrew Standardization and Evaluation Program*.

1.1.2.2. **(Added-AFSPC)** Cyberspace MR/CMR status applies to 17D/17S and 1B4 personnel who have completed Undergraduate Cyber Training/Cyber Warfare Operations course, IQT and MQT, passed an evaluation and are certified by an appropriate certifying official. MR/CMR status also applies to 1NX and 14Ns

operating the Cyberspace Defense Analysis weapon system. MR/CMR requirements may apply to non-17D/17S and 1B4 personnel at selected units at the direction of HQ AFSPC/A2/3/6. (T-2).

1.1.2.3. (Added-AFSPC) The guidance provided in AFI 10-1703V1, *Cybercrew Training*, along with this AFSPC supplement, will provide training policy for the 624 Operations Center (OC) and associated units. Further guidance for the 624 OC and its associated units, may be provided in a separate supplement. (T-2).

1.1.3. Individuals who perform cyberspace support functions but are not assigned to a MR/CMR crew position within a weapon system follow the Quality Assurance policy in AFI 33-150, *Management of Cyberspace Support Activities*, and/or AFI 36-2201, *Air Force Training Program*, as applicable.

1.1.4. (Added-AFSPC) Contractors. U.S. contractor personnel who perform cyberspace operations duties in MR/CMR status shall comply with the requirements of this supplement when current contracting language allows. All future contracts (including modifications to existing multi-year contracts) that include cyberspace MR/CMR positions as defined in this instruction must state contractor personnel shall comply with the requirements of this instruction. MR/CMR designated contractor personnel are waived from the MR/CMR requirement to attend IQT; however, contracts shall require requisite knowledge, skills, and abilities to meet IQT standards. Contractors and their processes are subject to inspection visits. (T-2).

1.1.5. (Added-AFSPC) Government Civilians. Government civilians who perform cyberspace operations duties in MR/CMR status shall comply with the requirements of this supplement. (T-2).

1.1.6. (Added-AFSPC) Prior to filling a designated CMR position with a non-military member, the specific duties to be performed will be reviewed by 24 AF/JA to ensure compliance with existing policy and the Law of Armed Conflict. (T-2).

1.2. **Waiver Authority.** The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, Publications and Forms Management, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers as described in this paragraph.

1.2.1. HQ USAF/A6SS is the waiver authority for this instruction. Unless otherwise noted, HQ USAF/A6SS delegates waiver authority to HQ AFSPC/A3T. Waiver authority may not be further delegated.

1.2.2. Forward all waiver requests via email through the applicable Group/CC, NAF/A3 or NAF/OV (as applicable), to HQ AFSPC/A3T. Describe the specific requirement, state the reason a waiver is required, and include proposed risk management steps, as needed. Specify an expiration date for the waiver, if applicable. Intermediate command levels should recommend approval or disapproval of the waiver request.

1.2.3. If approved, waivers remain in effect for the life of the published guidance, unless HQ AFSPC/A3T specifies a shorter period of time, cancels in writing, or issues a change that alters the basis for the waiver.

1.2.4. AF Reserve Units. HQ AFRC/A3T is the waiver authority for this instruction for reserve units. AFSPC gained units process waivers IAW paragraph 1.2. The reserve group commander submits waiver requests through 10 AF/A3 to HQ AFRC/A3T. HQ AFRC/A3T provides a copy of the waiver request and HQ AFRC/A3T waiver decision to HQ AFSPC/A3T.

1.2.5. **(Added-AFSPC)** Clarifications. Process requests for clarification via memorandum through applicable Wing/NAF training and Stan/Eval channels to HQ AFSPC/A2/3/6TT describing in sufficient detail the issue requiring clarification. 24 AF will provide a position prior to forwarding to HQ AFSPC/A2/3/6T, 150 Vandenberg St., Ste 1105, Peterson AFB CO, 80914- 4240 or [a3t.wf@us.af.mil](mailto:a3t.wf@us.af.mil). Provide information copies to HQ AFSPC/IGIO, 125 East Ent Ave, Peterson AFB CO 80914-1281 or [igio.wf@us.af.mil](mailto:igio.wf@us.af.mil). (T-2).

### 1.3. Responsibilities.

#### 1.3.1. HQ USAF/A3C/A6C:

- 1.3.1.1. Formulates cybercrew training Concept of Operations (CONOPS).
- 1.3.1.2. Sets policy and guidance for the conduct and execution of the cybercrew training program, in coordination with the Lead MAJCOM.
- 1.3.1.3. Oversees development and management of cybercrew weapon system designations.
- 1.3.1.4. Oversees Lead MAJCOM development and management of all cyber policy and guidance documents.
- 1.3.1.5. Monitors and reviews MAJCOM programs to ensure MAJCOM policies, guidance and instruction supplements are adequate.
- 1.3.1.6. Hosts training conferences annually, or as required, to assist in maintaining appropriate commonality and identify shortfalls in cybercrew training programs. Base the attendee list on conference topics.
- 1.3.1.7. Coordinates cyber intelligence, surveillance and reconnaissance (ISR) requirements with HQ USAF/A2D.

#### 1.3.2. HQ USAF/A2:

- 1.3.2.1. Formulates cyberspace ISR training requirements and manages ISR-related training issues.
- 1.3.2.2. Coordinates cyberspace ISR training requirements and issues with HQ USAF/A3C/A6C and HQ AFSPC/A3T as required.

#### 1.3.3. HQ AFSPC (As Lead MAJCOM):

- 1.3.3.1. Develops and manages cybercrew weapon system designations.
- 1.3.3.2. Develops and manages, in coordination with user commands, the appropriate guidance documents to establish cybercrew training requirements and standards, regardless of mission designation and command of assignment. Refer to Attachment 2 for information on training development.

1.3.3.3. Hosts annual, or as required, weapon system-specific training conferences to review all programs for currency, applicability, compliance, and effectiveness, and address issues in lead command-provided guidance documents as appropriate. Attendees should include training representatives from career field managers, user commands, formal schools, Numbered Air Force (NAF) training and stan/eval offices (if applicable), and selected unit representatives. Submit formal training requirements to career field managers for incorporation in Utilization & Training Workshop process as defined in AFI 36-2201.

1.3.3.4. Determines total force cybercrew training requirements in coordination with National Guard Bureau (NGB)/AF Reserve Command (AFRC) across the FYDP. Forward requirements annually to HQ USAF/A3C/A6C, via the Program Requirements Document (PRD), for validation and inclusion in the Undergraduate and Graduate PGLs.

1.3.3.5. Follows AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, for additional responsibilities.

1.3.4. All MAJCOMs (with assigned cybercrews IAW para 1.1 and AFPD 10-17).

1.3.4.1. Establish a cybercrew training office responsible for the overall management of the command's cybercrew training program. (Air National Guard (ANG) is considered a MAJCOM for purposes of this instruction.)

1.3.4.2. Maintain oversight of cybercrew training within its chain of command and for attached units and gained units.

1.3.4.3. Convene conferences and working groups, as necessary, to review and improve training policies and procedures.

1.3.4.4. Send proposals for amending existing formal school course prerequisites and syllabi or deleting obsolete courses to the training command for approval.

1.3.5. All NAFs (with assigned cybercrews IAW para 1.1).

1.3.5.1. Establish a cybercrew training office responsible for the overall management of the cybercrew training program.

1.3.5.2. Maintain oversight of cybercrew training within its chain of command and for attached units and gained units.

1.3.5.3. Convene conferences and working groups, as necessary, to review and improve training policies and procedures.

1.3.5.4. **(Added-AFSPC)** Review and coordinate on subordinate unit supplements. NAF will provide copies to HQ AFSPC/A2/3/6T. **(T-2)**.

1.3.5.5. **(Added-AFSPC)** Validate, approve, and provide guidance on the implementation and use of Master Training Task Lists (MTTLs). NAFs will coordinate MTTLs with HQ AFSPC/A2/3/6TT. **(T-2)**.

1.3.5.6. **(Added-AFSPC)** Provide semiannual inputs on training devices to HQ AFSPC/A2/3/6TT using the formats and instructions in **Attachment 3**. **(T-2)**.

1.3.6. Training Command.

1.3.6.1. Is a command which operates a cyber weapon system and provides operational training for cybercrews.

1.3.6.2. Maintains quota allocation and management responsibilities.

1.3.6.3. Captures inputs from Air Staff, AFPC, lead and user MAJCOMs, and other users in the allocation of training quotas in order to fulfill maximum total force training requirements within programmed capacity.

1.3.6.4. Approves formal school courses and syllabi in coordination with lead commands and program managers.

1.3.6.5. Develops, updates, and maintains courseware and training syllabi to support Mission Essential Tasks (METs). Performs task and media analysis associated with cybercrew qualification training per AFI 36-2201; AFI 36-2251, *Management of Air Force Training Systems*; and function as the approving authority for these courses (coordinates with the lead command if different than the training command).

1.3.6.6. Outlines procedures for a Progress Review (PR) to be accomplished when a student fails to progress according to syllabus requirements.

1.3.7. **(Added-AFSPC)** Unit Training Organization and Responsibilities.

1.3.7.1. **(Added-AFSPC)** Scope. For the purpose of this instruction, "unit" includes levels of organization under HHQ required to establish a training function including the 624 OC. Most units are composed of an Operations Support Squadron (OSS) and cyber squadrons/detachments (henceforth in this AFI, "squadron" will be used synonymously with "detachment"). Where there is no parent OSS, squadrons will assume duties of the OSS.

1.3.7.2. **(Added-AFSPC)** Squadron Commander. The commander is responsible for the implementation of the Cybercrew Training Program. The commander:

1.3.7.2.1. **(Added-AFSPC)** Directs the conduct of the unit level training programs. **(T-3)**.

1.3.7.2.2. **(Added-AFSPC)** Provides manpower to the unit training function to execute the duties directed by AFI 10-1703Vol 1 and this supplement. **(T-3)**.

1.3.7.2.3. **(Added-AFSPC)** Designates instructors and trainers (see Section 6). **(T-3)**.

1.3.7.2.4. **(Added-AFSPC)** Designates additional cybercrew instructors and trainers who are not assigned to Training Organization, when necessary, to meet unique unit requirements. **(T-3)**.

1.3.7.3. **(Added-AFSPC)** Training Organization. The training function will normally be administered from the unit level with the Chief of Training reporting directly to the Operations Officer. The 624 OC will administer the training function with the Chief of Training reporting directly to the OC/CC. The training function:

1.3.7.3.1. **(Added-AFSPC)** Consists of a Chief of Training and at least one instructor per cybercrew position identified in AFI 10-1703V2\_AFSPCSUP.

1.3.7.3.1.1. **(Added-AFSPC)** The Sq/CC may determine if a specific

instructor is not required based on unit requirements or personnel constraints.

1.3.7.3.1.2. **(Added-AFSPC)** The Chief of Training will maintain MR/CMR status in a unit Cyber Weapon System (CWS) and report directly to, and be rated by, the Operations Officer. **(T-3)**.

1.3.7.3.1.3. **(Added-AFSPC)** Select instructors from the most suitable, highest qualified and most experienced personnel. **(T-3)**.

1.3.7.4. **(Added-AFSPC)** The training function:

1.3.7.4.1. **(Added-AFSPC)** Establishes procedures to implement MAJCOM-mandated training software, as required. **(T-3)**.

1.3.7.4.2. **(Added-AFSPC)** Processes AF Form 4419, *Record of Training*. **(T-3)**.

1.3.7.4.3. **(Added-AFSPC)** Establishes procedures for review and quality control of training documentation. **(T-3)**.

1.3.7.4.4. **(Added-AFSPC)** Develops and documents the instructor training program, designed to train and certify instructors on the proper manner in which to correctly train cybercrew personnel as part of their role in the Instructional Systems Development (ISD) process. Instructor training programs must be reviewed and approved by the appropriate NAF training prior to implementation and meet the requirements of Section 6. **(T-3)**.

1.3.7.4.5. **(Added-AFSPC)** At least quarterly, advises unit leadership on unit cybercrew training status, requisite completion, and upcoming expiration dates. **(T-3)**.

**2. Qualification Training.** This section defines cybercrew operational status and specifies minimum training requirements for Initial Qualification Training (IQT) and Mission Qualification Training (MQT).

2.1. **Cybercrew Operational Status.** A cybercrew member may be assigned Basic Cyber Qualified (BCQ), Basic Mission Capable (BMC), or Mission Ready/Combat Mission Ready (MR/CMR) status.

2.1.1. Basic Cyber Qualified (BCQ). A cybercrew member who has satisfactorily completed IQT.

2.1.2. Basic Mission Capable (BMC). A cybercrew member who has satisfactorily completed IQT and MQT, but is not in fully-certified MR/CMR status. The cybercrew member must be able to attain MR/CMR status to meet operational taskings as specified in the applicable lead MAJCOM-provided guidance **(T-1)**. Identify BMC requirements in the applicable lead MAJCOM-provided guidance.

2.1.2.1. **(Added-AFSPC)** This status is primarily for individuals in units that perform CWS specific operational support functions (i.e., formal training units, operational test, and tactics development). **(T-2)**.

2.1.2.2. **(Added-AFSPC)** BMC personnel must attend IQT and MQT. **(T-2)**.

2.1.2.3. **(Added-AFSPC)** BMC qualified personnel will always perform crew duty with an MR/CMR certified cybercrew member in the same duty position.

2.1.3. Mission Ready (MR)/Combat Mission Ready (CMR). A cybercrew member who has satisfactorily completed IQT and MQT, and maintains certification, currency and proficiency in the command or unit operational mission is MR. A cybercrew member who has satisfactorily completed IQT and MQT, and maintains certification, currency and proficiency in the command or unit combat mission is CMR. Minimum requirements include:

2.1.3.1. Completion of IQT, MQT, and a formal Stan/Eval evaluation.

2.1.3.1.1. **(Added-AFSPC)** Operations officers are not required to attend IQT (or appropriate mission ready training) prior to reporting to their unit. They may attend IQT as schedules permit but will not be assigned B prefix, Squadron Operations/Operations Support Officer, until MR/CMR status is attained.

2.1.3.2. Certifying Official's (first operational commander in the member's chain of command, or his/her designee) certification as well as certification of completion of unit-designated crew force management requirements.

2.1.3.2.1. **(Added-AFSPC)** OG/CC will designate certifying officials for geographically separated units (e.g., 68 NWS OL C, 352 NWS Det 1, etc.). This applies to units below the squadron level. **(T-3)**.

2.1.3.3. Once a certifying official (or his/her designee) certifies an individual as MR/CMR, the individual maintains MR/CMR status based on Continuation Training (CT) requirements identified in paragraph 3.

2.1.4. **(Added-AFSPC)** When significant hardware, software, or procedural changes impact unit mission requirements; the certifying official who owns the mission will determine the requirements for recertification. **(T-3)**.

2.1.4.1. **(Added-AFSPC)** Guidance for what may be considered "significant" includes the following: major version changes (i.e., product upgrade from Version 1 to Version 2) and major enterprise and/or infrastructure upgrades or changes (i.e., change in the vendor for the technical capability in question). **(T-3)**.

2.1.5. **(Added-AFSPC)** Supervised Status. Personnel in supervised status will not perform unsupervised MR/CMR crew duties. Document supervised status entry and reason on the AF Form 4420, *Individual's Record of Duties and Qualifications*. As a minimum, the certifying official will place personnel in supervised status for the following: **(T-2)**.

2.1.5.1. **(Added-AFSPC)** Failure to complete continuation training. **(T-2)**.

2.1.5.2. **(Added-AFSPC)** Failure to perform at least one duty shift for 45 calendar days in the assigned MR/CMR duty position (90 days for Air Reserve Components (ARC)). Multi-position certified personnel are required to perform at least one duty shift in each position every 45 days (90 days for Air Reserve Components (ARC)). Supervised status will begin the 46th day (91st day for Air Reserve Components (ARC)) following the last duty shift. **(T-2)**.

2.1.5.2.1. **(Added-AFSPC)** The operations log will be the primary means to document the names of personnel conducting crew shift duties. **(T-2)**.

2.1.5.2.2. **(Added-AFSPC)** For units without a 24/7 mission or tasked on a non-routine basis, duty shifts may be accomplished in the context of real-world or simulated missions (i.e. exercises, simulations, etc.).

2.1.5.3. **(Added-AFSPC)** When the certifying official determines an individual no longer possesses the proficiency or professionalism required and decertification is inappropriate. **(T-3)**.

2.1.6. **(Added-AFSPC)** Removal from supervised status. The certifying official determines when to remove an individual from supervised status based on the circumstances of each case. Multi-position certified individuals must meet the requirements in each duty position for which they are in supervised status. Document removal from supervised status on the AF Form 4420 prior to removing an individual from supervised status. **(T-2)**:

2.1.6.1. **(Added-AFSPC)** Individuals who are delinquent on continuation training must complete the continuation training. **(T-2)**.

2.1.6.2. **(Added-AFSPC)** Individuals who have failed to perform the minimum crew duty shifts must complete necessary training (if required) and be observed performing crew duties (simulator or field) by an instructor or examiner or evaluated by an examiner, as determined by the certifying official. **(T-3)**.

2.1.6.3. **(Added-AFSPC)** Individuals placed in supervised status for substandard performance or due to a lack of professionalism must satisfy requirements established by the certifying official. **(T-3)**.

2.1.7. **(Added-AFSPC)** Decertification. Decertified personnel will not perform duties in the applicable duty position(s). Document decertification on AF Form 4420. Decertify personnel for any of the following: **(T-2)**.

2.1.7.1. **(Added-AFSPC)** When the certifying official determines an individual no longer possesses the proficiency or professionalism required and decertification is appropriate. **(T-3)**.

2.1.7.2. **(Added-AFSPC)** Non-performance of crew duties or shifts for 90 calendar days (150 days for Air Reserve Components (ARC)). Decertified status will begin the 91st day following the last duty shift (151st day for Air Reserve Components (ARC)). **(T-2)**.

2.1.7.3. **(Added-AFSPC)** Failure to maintain the appropriate security clearance. **(T-2)**.

2.1.7.4. **(Added-AFSPC)** Permanent Change of Station (PCS), Permanent Change of Assignment (PCA), separation, or retirement. **(T-3)**.

2.1.7.4.1. **(Added-AFSPC)** If the assignment is in the same CWS, decertification is not required. Retain only the individual's evaluation delinquency date and date of last duty shift. The gaining unit commander or operations officer must ensure the remainder of MR/CMR certification

requirements are accomplished. Additionally, the losing unit provides the individual with supporting documentation, with annotation of individual's evaluation delinquency date and date of last duty shift. The gaining unit may decertify incoming individuals and provide additional training prior to recertification **(T-3)**.

2.1.7.4.2. **(Added-AFSPC)** If the assignment is to a different CWS, decertify the individual and give the supporting documentation to the departing individual. **(T-3)**.

2.1.7.5. **(Added-AFSPC)** Change of duty position when the unit commander no longer desires the individual to be multi-position certified. **(T-3)**.

2.1.8. **(Added-AFSPC)** Recertification. Decertified crew members must complete unit requalification actions at the discretion of the certifying official. Document recertification on the AF Form 4420. **(T-2)**.

2.1.9. **(Added-AFSPC)** Assignment Availability Codes (AAC). AACs are intended to provide a stabilized crew force, a Trained Personnel Requirements validation tool and to ensure payback for training. **(T-2)**.

2.1.9.1. **(Added-AFSPC)** Officer Crew Tour Commitment Dates (Except ARC). Officer crew members in MR/CMR status (operations officers and above as well as NAF/MAJCOM MR/CMR members are excluded, where applicable) at CONUS non-isolated bases are placed on an AAC 55, CONUS Minimum Stabilized Tours. Personnel with an AAC 55 must perform duty in a MR/CMR position until an appropriate authority waives the AAC 55 or the AAC 55 expires. Individuals whose primary duties do not require MR/CMR certification (e.g., plans, executives, protocol) should not remain MR/CMR certified. Ideally, officers selected for these positions should be near or at the end of their crew tours. An AAC 55 starts from the month the member arrives at the organization or function in accordance with AFI 36-2110, *Assignments*, paragraph 2.15 and the AFPC Stabilized Tour Guide. The individual becomes available for reassignment during the assignment cycle when the AAC expires. Operational units performing weapon system upgrades or bringing new weapon systems online may request an AAC 39, Operational Continuity, not to exceed 3 years, for designated SMEs to support transition. **(T-2)**.

2.1.9.1.1. **(Added-AFSPC)** A waiver is required prior to removal of officers from duty in a MR/CMR status if the AAC 55 has not expired. HQ AFSPC/A2/3/6 is the AAC 55 waiver authority; however, this authority is delegated to 24 AF/CC for waivers of 7-12 months and wing commanders for waivers of 6 months or less. **(T-2)**.

2.1.9.1.2. **(Added-AFSPC)** 24 AF will submit a consolidated semi-annual roster to HQ AFSPC/A2/3/6TT (due 45 days after the end of the 1st and 3rd quarters) reflecting all crew members granted AAC 55 waivers and instances where AFPC has broken AAC 55 for an Air Force-level PCS requirement. See [Attachment 4](#). **(T-2)**.

2.1.9.2. **(Added-AFSPC)** Enlisted Crew Tour Commitment Dates (Except ARC). Based on assignment policy, most first term airmen will complete 2 years of crew

duty before PCS, all other enlisted crew members will complete 3 years without the need for an AAC. Units may request AAC 51, Operational Deferment, for enlisted crew members selected to fill NAF/Wing/Group and OSS staff positions not to exceed 4 years, 3 months' time on station. For enlisted crew members selected to fill NAF/Wing/Group or OSS Staff positions that PCS to the duty assignment, no AAC is required. Operational units performing weapon system upgrades or bringing new weapon systems online may request an AAC 39, Operational Continuity, not to exceed 3 years, for designated SMEs to support transition. **(T-3)**.

2.1.9.2.1. **(Added-AFSPC)** AFPC is the approving authority for enlisted AAC requests. Submit requests through HQ AFSPC/A1KK, 150 Vandenberg St. Ste 1105, Peterson AFB CO or [afspc.a1kk@us.af.mil](mailto:afspc.a1kk@us.af.mil). **(T-2)**.

**2.2. Initial Qualification Training (IQT).** One or more courses covering system specific and/or positional specific training as a prerequisite to Mission Qualification Training (MQT).

2.2.1. Method. Unless otherwise specified in applicable lead MAJCOM guidance, the primary method of IQT is to attend and complete the appropriate formal training course(s) listed in the Education and Training Course Announcement (ETCA) found at <https://etca.randolph.af.mil>, USAF Formal Schools. Completing the appropriate formal course(s) satisfies all IQT requirements.

2.2.2. In-Unit IQT. When formal course attendance is not practical or quotas are not available, units will request waivers to conduct in-unit IQT, using formal school courseware, as specified in the applicable lead MAJCOM- provided guidance **(T-2)**. Accomplish in-unit training IAW applicable formal school courseware and the following guidance: **(T-2)**:

2.2.2.1. Training lessons should be completed in order; however, if mission scheduling or student progress dictates otherwise, the unit commander or designee may change the order.

2.2.2.2. Training syllabi establish a maximum time period between training events. Failure to accomplish training as scheduled requires documentation and corrective action.

2.2.2.3. With operations group commander (OG/CC) (or equivalent) approval, IQT requirements may be completed during operational missions under the supervision of an instructor certified on the task of like specialty. Comply with restrictions in appropriate lead MAJCOM-provided guidance, MAJCOM directives, and applicable operation orders (OPORD).

2.2.2.4. Cybercrew members participating in in-unit IQT are dedicated to that training, which takes priority over non-training related duties. **EXCEPTION:** Supervisory personnel may continue their normal duties as time permits.

2.2.3. IQT Prerequisites. The Cyber Unit's Training OIC must ensure each cybercrew member complies with the appropriate formal course training prerequisites prescribed in the applicable syllabus, before entering qualification training **(T-2)**.

**2.3. Mission Qualification Training (MQT).** MQT prepares an individual for a successful formal evaluation. It focuses on filling training requirements not met at IQT, mastering local

procedures, and increasing proficiency as needed. MQT ensures a smooth transition from IQT to MR/CMR status.

2.3.1. Method. MQT is comprised of training at a Formal Training Unit (FTU), if applicable, and local training at the unit. Units determine MQT requirements IAW lead MAJCOM policy and guidance. Cybercrew members participating in in-unit MQT are dedicated to that training, which takes priority over non-training related duties. **EXCEPTION:** Supervisory personnel may continue their normal duties as time permits.

2.3.1.1. **(Added-AFSPC)** Units will determine MQT training requirements for each MR/CMR position by using the appropriate performance criteria and document these MQT requirements appropriately in the Plan of Instruction (POI). The POI contains the knowledge, tasks, method of training, and total training time (to include estimated and maximum training times). The time spent per task is optional. Schedule, conduct, and document MQT in accordance with the POI. **(T-3)**.

2.3.1.2. **(Added-AFSPC)** For MR/CMR programs having an IQT course, MQT focuses on filling training requirements not met at IQT and increasing proficiency, as needed. It also focuses on local procedures and orientation to ensure a smooth transition from IQT to MR/CMR status. MQT should not be designed as a substitute for available IQTs. **(T-2)**.

2.3.1.3. **(Added-AFSPC)** For MR/CMR programs not supported with an FTU-provided IQT course, units will conduct an in-unit IQT course in conjunction with MQT to provide the essential skills, knowledge and motivation required to attain MR/CMR status. AFSPC/A2/3/6 is waiver authority to change the in-unit IQT syllabus. Coordinate changes through AFSPC/A2/3/6TT. **(T-2)**.

2.3.1.4. **(Added-AFSPC)** Cybercrew members assigned to a weapon system and position with previous weapon system and position experience, but did not attend IQT for their present assignment, are required to complete IQT. **(T-3)**.

2.3.1.5. **(Added-AFSPC)** Cybercrew members previously assigned to a different weapon system or position will complete the appropriate IQT. **(T-3)**.

2.3.1.6. **(Added-AFSPC)** For personnel previously assigned to a weapon system and position and re-assigned to the same weapon system and position, having completed appropriate IQT within the last 24 months, may receive in-unit training. Units will assess the individual's knowledge and proficiency on the required MR/CMR tasks and MQT will be adjusted to reflect the necessary training. For those in excess of 24 months, IQT attendance is required. **(T-3)**.

2.3.2. MQT Prerequisites. Each cybercrew member must complete all applicable IQT requirements IAW para 2.2 before entering MQT **(T-2)**.

2.3.3. Time Limits. Training time limitations for MQT completion are contained in applicable lead MAJCOM-provided guidance. The AF member will begin In-unit MQT no later than 45 days (90 days for the Active Reserve Component) after reporting to a new duty station or unit, unless waived by the MAJCOM cybercrew training function **(T-2)**.

2.3.3.1. **(Added-AFSPC)** For individuals reporting to a new duty station or unit before attending IQT, MQT will begin no later than 45 days from completion of IQT.

2.4. **Requalification Training.** A cybercrew member is considered unqualified upon loss of currency exceeding 6 months, expiration of his or her qualification evaluation, or completion of a qualification evaluation in a different weapon system (unless multiple qualification has been approved prior to the evaluation), whichever occurs first. The duration of unqualified time is measured from the date the cybercrew member became unqualified until the specific retraining start date. An unqualified cybercrew member can requalify IAW the following:

2.4.1. Loss of currency 6-12 months: Completion of training in all delinquent items (as applicable), additional training as directed by the certifying official and a requalification evaluation IAW AFI 10-1703 Volume 2.

2.4.2. Loss of currency exceeding 12 months: Recompletion of MQT and a requalification evaluation IAW AFI 10-1703 Volume 2.

2.4.3. Expiration of qualification evaluation not exceeding 6 months: Completion of training in all delinquent items (as applicable), additional training as directed by the certifying official, and a requalification evaluation AFI 10-1703 Volume 2.

2.4.4. Expiration of qualification evaluation exceeding 6 months: Recompletion of MQT and a requalification evaluation IAW AFI 10-1703 Volume 2.

**3. Continuation Training (CT).** Training that provides crew members with the volume, frequency, and mix of training necessary to maintain proficiency in the assigned position and at the designated certification/qualification level. This training is identified within the respective lead MAJCOM-provided guidance.

3.1. **Currency.** Currency requirements for cybercrew members are identified within the respective lead MAJCOM-provided guidance.

3.2. **Recurrency Training.** A cybercrew member is considered not current upon loss of currency as specified in the applicable lead MAJCOM-provided guidance. If currency is lost for up to six months, the cybercrew member must demonstrate proficiency with an instructor in all delinquent items **(T-2)**.

3.2.1. **(Added-AFSPC)** Minimum currency requirements for all weapon systems are as follows: **(T-2)**.

3.2.1.1. **(Added-AFSPC)** At a minimum, crew members will complete training of each task in the MTTL at least once every 18 months. Only one subtask needs to be trained to satisfy the task requirement. **(T-2)**.

3.2.1.2. **(Added-AFSPC)** Crew members will complete a performance training event with stimuli every quarter. Each performance training event will include an operationally realistic scenario guided by a script (as applicable) and based upon NAF-approved evaluation criteria. The content and format of the scenario script is left for units to determine using guidance found in AFH 36-2235 Volume 12, *Information for Designers of Instructional Systems Test and Measurement Handbook*, standardizing to the extent practical. At a minimum, each performance training event should include inputs to measure crew coordination, prioritization and use of

approved tactics, techniques and procedures. Review and approval of training materials will be determined by Group or Unit Training Offices. (T-2).

3.2.1.3. (Added-AFSPC) Crew members will complete a written examination every quarter. (T-2).

3.2.1.4. (Added-AFSPC) Crew members must complete CT requirements to maintain currency. Crew members who fail to accomplish minimum CT requirements and subsequently lose currency are placed in supervised status. (T-2).

3.2.1.5. (Added-AFSPC) Crew members on supervised status for less than 90 days (150 days for ARC), may regain their currency by demonstrating proficiency with an instructor in all delinquent items/tasks. (T-2).

3.2.1.6. (Added-AFSPC) Document decisions to suspend or retain cybercrew member status following failure of the individual to meet required standards IAW this supplement and AFI 10-1703V2\_AFSPCSUP. (T-2).

3.2.1.7. (Added-AFSPC) Cybercrew members may update currency when performing a task, regardless of the venue, provided the event meets the training task requirements. The senior crew member (e.g., Crew Commander, Operations Controller, etc.), will verify task completion. This includes accomplishing the task in a classroom, on a part-task trainer, simulator, or during an exercise, training mission, or operational mission.

### 3.3. Responsibilities.

3.3.1. Squadron Commander. The squadron commander or designated representative will ensure individuals receive training to successfully attain/maintain required certifications/qualifications, complete unit missions and maintain individual proficiency (T-2).

3.3.2. Cybercrew Members. Each cybercrew member is responsible for monitoring and completing all training requirements.

### 3.4. Failure to Complete Continuation Training Requirements.

3.4.1. Report individuals in Status of Resources and Training System (SORTS) IAW AFI 10-201, *Status of Resources and Training System (SORTS)*, and/or IAW lead MAJCOM-provided guidance.

3.4.2. The training supervisors must ensure Individuals who fail to accomplish minimum CT requirements and subsequently lose currency are in a supervised status as specified in lead MAJCOM-provided guidance (T-2).

3.4.3. The training supervisor will document decisions to suspend, retain, or downgrade a cybercrew member's status if the individual fails to meet the standards established by this AFI, AFI 10-1703, Volume 2, or lead MAJCOM-provided guidance, citing all which apply (T-2).

**4. Upgrade Training.** Training needed to qualify to a cybercrew position of additional responsibility for a specific weapon system (e.g., from a crew member to a crew commander). See applicable lead MAJCOM-provided guidance for applicable positions, instructions, and additional requirements.

## 5. Multiple Qualification.

5.1. MAJCOMs may authorize qualification in more than one weapon system for crewmembers only when such action is directed by command mission requirements and is economically justifiable. This authority cannot be delegated below the MAJCOM level, except for the Lead MAJCOM, which may further delegate within its command, but not lower than wing commander.

5.2. Restriction on multiple qualification in para 5.1 does not apply to cybercrew members selected for reassignment to another weapon system who attend training prior to PCS.

**6. Instructor Training and Certification.** Instructors will complete appropriate training program and certification requirements, as specified in the appropriate lead MAJCOM-provided guidance (T-2). Instructor trainees will be observed and supervised by the Chief of Training (or equivalent or their designee) (T-2). Instructors will be current and certified in any task they instruct (T-2). Supervisors will ensure that Instructor training consists of, at a minimum:

6.1. Applicable equipment configuration and scheduling procedures (e.g., simulator and on-line equipment configuration, instruction scenario control procedures) (T-2).

6.2. Instructional System Development (ISD) process and procedures (T-2).

6.3. Construction, conduct, and administration of classroom training as appropriate for the weapon system (T-2).

6.4. Construction, conduct, and administration of simulator, ops floor, and field training as appropriate for the weapon system (T-2).

6.5. Observance, at a minimum, of one certified instructor conducting training in the classroom, in the simulator, on the ops floor, and in the field, as appropriate for the weapon system (T-2).

6.6. (Added-AFSPC) Instructors must maintain MR/CMR status; however, they need not be certified in the same MR/CMR duty positions that they instruct. (T-2).

6.6.1. (Added-AFSPC) Instructors may teach tasks/subjects of different duty positions so long as they are current, qualified, and certified to the same or greater proficiency level in the same tasks/subjects they instruct. (T-2).

6.6.2. (Added-AFSPC) Training may be conducted by non-instructor certified personnel (i.e., contractors) in a classroom or off-line environment if the training is validated by the Chief of Training and documented by certified MR/CMR instructors. (T-2).

6.6.3. (Added-AFSPC) FTU instructors that conduct training in a classroom or off-line environment are not required to maintain MR/CMR status. (T-2).

**7. Cybercrews Operating on Non-US Air Force Weapon Systems and/or with Non-US Air Force Units.** Air Force cybercrews performing appropriate duties on non-US Air Force systems, or on duty with or attached to non-US Air Force units for cyber operations, are only required to maintain their training records.

## 8. Documentation.

8.1. Cybercrew member training events are documented on the Air Force Form 4419, *Record of Training* (T-2). Software applications capturing the same information are authorized provided they comply with lead MAJCOM-provided policy and guidance (T-2).

8.2. Cybercrew member CT and additional training events are maintained in an Individual Qualification Folder (IQF). Electronic format IQFs are authorized provided proper security measures, backup capability, and sustainment plans are in place.

8.3. Dispose of IQFs and other related material according to the AF Records Disposition Schedule (RDS), and AF guidance concerning the protection of Personally Identifiable Information.

8.4. (Added-AFSPC) At a minimum the following items will be documented via approved AF Forms or software applications capturing the same information. (T-2).

8.4.1. (Added-AFSPC) Acknowledgement and documentation of task qualification/certification upon completion of training. (T-2).

8.4.2. (Added-AFSPC) Trainee strengths, weaknesses, attitude, and corrective action (if required). (T-2).

8.4.3. (Added-AFSPC) Explanation of delays in training requirements and/or completion, problems encountered with task certification (if any). (T-2).

8.4.4. (Added-AFSPC) Training plan to manage and execute training activities, to include milestone for task completion. (T-2).

8.4.5. (Added-AFSPC) Certification(s) and decertification(s) (e.g., MR/CMR, instructor, evaluator). Include reason for decertification entries. (T-2).

8.4.6. (Added-AFSPC) Placement in and removal from supervised status (e.g., MR/CMR, instructor, evaluator). (T-2).

## 9. (Added-AFSPC) Course Change Request.

### 9.1. (Added-AFSPC) AETC Course Change Process.

9.1.1. (Added-AFSPC) All AETC course change requests originating from AFSPC units will follow the process outlined in AETCI 36-2641, *Technical and Basic Military Training Development*. Submit major change requests through appropriate 24 AF channels to HQ AFSPC/A2/3/6TT for coordination with HQ AETC. (T-2).

### 9.2. (Added-AFSPC) FTU Course Change/Request Process.

9.2.1. (Added-AFSPC) All FTU course change requests will be routed through the appropriate OG/OSS to 39 IOS for coordination. 39 IOS will make determination if change request is a minor or major change. If 39 IOS determines the course change is major they will inform the Training Planning Team (TPT) which will determine the need for a Course Resource Estimate (CRE) (T-2).

9.2.2. (Added-AFSPC) Course Resource Estimate Process. Upon direction of the TPT chair, the 39 IOS will complete a CRE and forward to HQ AFSPC/A2/3/6TT for proper

staffing and execution. HQ AFSPC/A2/3/6TT will notify the originating agency of the results of the request. (T-2).

9.2.3. (Added-AFSPC) Request for course deletions must be forwarded from the appropriate group commander through 24 AF. Deletions of 39 IOS courses are reviewed and approved by HQ AFSPC/A2/3/6T. (T-2).

9.3. (Added-AFSPC) **Courseware Request Process.** (T-2).

9.3.1. (Added-AFSPC) If the 39 IOS has previous approval to build courseware for a unit, direct liaison is authorized for the 39 IOS for information exchange. This includes courseware built for other MAJCOMs (e.g. Cyberspace Warfare Operations Weapons Instructor Course (CWO WIC)). (T-2). For AFSPC units requesting courseware, submit courseware requests directly to the 39 IOS. (T-3).

9.3.2. (Added-AFSPC) All other courseware requests originating outside of AFSPC should be submitted to HQ AFSPC/A2/3/6TT who will forward the request to 39 IOS. (T-2).

10. (Added-AFSPC) **Formal Training Unit.**

10.1. (Added-AFSPC) The 39 IOS is designated as the AFSPC cyberspace FTU and provides cyber formal training not otherwise provided by other Training Commands. The 39 IOS also supports Air Combat Command's (ACC) Information Operations (IO) courses. This relationship is described in Memorandum of Agreement on AFSPC Information Support to ACC. (T-2).

10.2. (Added-AFSPC) **39 IOS Responsibilities.**

10.2.1. (Added-AFSPC) Provide formal training for Cyberspace career forces as requested. (T-2).

10.2.2. (Added-AFSPC) Support Training System Requirements Analysis for cyber weapon systems as required. (T-2).

10.2.3. (Added-AFSPC) Develop course resource estimates. (T-2).

10.2.4. (Added-AFSPC) Attend Training Planning Teams meetings as directed IAW AFI 36-2251, *Management of Air Force Training Systems*. (T-2).

10.2.5. (Added-AFSPC) Hosts Formal Course Reviews (FCRs) biennially or more frequently, as required. (T-2).

10.2.6. (Added-AFSPC) The FCR will review formal training programs and syllabi for currency, applicability, compliance, and effectiveness. (T-2).

10.3. (Added-AFSPC) **Courseware Development.** The 39 IOS will develop and maintain courseware for each course under their purview. The following documents illustrate some of the course core and administrative documents: Course Training Plans, Task Training Lists, syllabi, operational unit AF 797's, and lesson objectives. Ensure courseware complies with Air Force ISD specifications in AFMAN 36-2234, *Instructional System Development*; and AFH 36-2235V8, *Information for Designers of Instructional Systems Application to Aircrew Training* and other applicable volumes, *Information for Designers of Instructional Systems*

*Applications*, AFMAN 36-2236, *Guidebook for Air Force Instructors*. All course syllabi will be approved by HQ AFSPC/A2/3/6T or designated representative. (T-2).

10.4. (Added-AFSPC) **Course Administration.** The 39 IOS will develop and maintain products that are required for proper administration of courses. These products include, but are not limited to, assessment surveys, student critiques, course failures, and student registration processes. In addition to the procedures for slot allocation below, the 39 IOS may develop course administration procedures outlined in a unit Operating Instruction. (T-2).

10.4.1. (Added-AFSPC) The following guidance is provided for the prioritization and allocation of training slots for Cyberspace IQT and the Network Warfare Bridge Course (NWBC). (T-2).

10.4.1.1. (Added-AFSPC) IQT seats are reserved for personnel assigned to Cyber Mission Force (CMF) teams; and 24 AF, ANG, and AFRC MR/CMR positions identified in Attachment 7 of AFI 10-1703V2\_AFSPCSUP, *Cybercrew Standardization and Evaluation*. Allocations are prioritized using HQ AFSPC/A2/3/6TT ranking matrix. (T-2).

10.4.1.2. (Added-AFSPC) Prioritization for assignment of the remaining IQT class seats is based on seat availability and will be prioritized using the HQ AFSPC/A2/3/6TT ranking matrix. Course slots for personnel not assigned to CMF teams; and 24 AF, ANG, and AFRC MR/CMR positions identified in Attachment 7 of AFI 10-1703V2\_AFSPCSUP will be unit funded. (T-2).

10.4.1.3. (Added-AFSPC) NWBC seat prioritization will follow the same process as IQT based on the number of AFSPC funded seats. Remaining unfunded seats will be funded by the appropriate CFM/FM/unit and are prioritized using HQ AFSPC/A2/3/6TT ranking matrix. (T-2).

10.4.1.4. (Added-AFSPC) The 39 IOS will provide prioritized draft IQT and NWBC class rosters to HQ AFSPC/A2/3/6T prior to final seat assignment NLT 35 calendar days prior to class start. (T-2).

10.5. (Added-AFSPC) **Course Management.** The 39 IOS may develop and maintain processes that are required for course management. These processes include, but are not limited to, course change requests and CRE. (T-2).

10.6. (Added-AFSPC) **Instructor Qualifications and Currency.** The 39 IOS will develop procedures for instructor qualification and currency. A plan and guidance to address instructor selection, training, certification, and continuing training requirements may be outlined in a unit Operating Instruction. (T-2).

## 11. (Added-AFSPC) **Training for New or Upgraded System Requirements.**

11.1. (Added-AFSPC) Prior to system operational test activities and/or initial operations, the wing/group ensures operations, training, standardization, evaluation and crew force management programs are developed and managed to provide adequate support to the new or upgraded system operations. The unit commander will report this status using Status of Resources and Training System (SORTS) criteria (see AFI 10-201, *Status of Resources and*

*Training System*). See AFSPCI 10-205, *Operational Transition Process* and AFSPCI 36-283, *Space Training System Management* for additional requirements. (T-2).

11.2. **(Added-AFSPC)** When significant hardware, software or procedural changes impact unit mission requirements; the certifying official who owns the mission will determine whether supplemental training or requalification is warranted. If supplemental training is needed, units will develop and conduct training prior to implementing changes. If requalification training is deemed necessary, units will train, evaluate and certify affected personnel prior to implementing changes. (T-3).

11.3. **(Added-AFSPC)** To prepare for significant equipment or procedural changes, a limited number of subject matter experts (SMEs) in the unit may be designated certified (i.e. MR/CMR, Specialized, or AF OJT) by the certifying official who owns the mission. The primary duties of the SME are to develop technical documentation, training and evaluation materials and to conduct training and evaluations. SMEs appointed for new or upgraded systems are not required to accomplish the training they develop; however, they must accomplish contractor provided Type 1 training, if available and any training directed by the OG/CC. (T-3).

11.3.1. **(Added-AFSPC)** SME designation will be documented in individual training records. (T-2).

11.3.2. **(Added-AFSPC)** SMEs must accomplish the appropriate training for the duty position, such as contractor-provided Type 1 training, if available. If deemed more appropriate and cost effective, SME training may be accomplished by other training types defined in AFI 36-2201, *Air Force Training Program*. Document completion of SME training in individual training records. (T-2).

11.3.3. **(Added-AFSPC)** SMEs will validate training/evaluation programs through formative and summative evaluation methods IAW ISD processes. This will include delivery of training and evaluation to non-SME personnel to validate program effectiveness and to ensure sufficient numbers of personnel are certified to support system test activities and initial operations. (T-2).

11.3.4. **(Added-AFSPC)** SMEs who conduct MR/CMR training/evaluations or initial (post OA) systems operations are temporarily designated MR/CMR. To maintain MR/CMR status, they must be evaluated on all applicable tasks within 60 calendar days of removal from SME status or within 90 calendar days from system IOC; whichever is sooner. (T-2).

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DCS Operations, Plans & Requirements

**(AFSPC)**

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Director, Integrated Air, Space Cyberspace  
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**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

**AFDD 3-12**, *Cyber Operations*, 15 July 2010, with change 1, 30 November 2011

AF Doctrine Annex 3-12, *Cyberspace Operations*, 15 July 2010, with change 1, 30 November 2011

**AFPD 10-17**, *Cyberspace Operations*, 31 July 2012

**(Added-AFSPC) AFI 10-1703V1**, *Cybercrew Training*, 2 April 2014

**(Added-AFSPC) AFI 10-1703V2\_AFSPCSUP**, *Cybercrew Standardization and Evaluation Program*, 20 May 2015

AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, 8 May 2007

**AFI 10-201**, *Status of Resources and Training System (SORTS)*, 13 April 2006

AFI 10-201, *Status of Resources and Training System (SORTS)*, 19 April 2013

**AFI 14-2**, *Intelligence Rules and Procedures*, 29 November 2007

**AFI 33-150**, *Management of Cyberspace Support Activities*, 30 November 2011.

**(Added-AFSPC) AFI 36-2110**, *Assignments*, 22 September 2009

**AFI 36-2201**, *Air Force Training Program*, 15 September 2010

**AFI 36-2235**, Volume 1, *Information for Designers of Instructional Systems - ISD Executive Summary for Commanders and Managers*, 2 September 2002

**(Added-AFSPC) AFH 36-2235V8**, *Information for Designers of Instructional Systems Application to Aircrew Training*, 1 November 2002

**(Added-AFSPC) AFH 36-2235V12**, *Information for Designers of Instructional Systems Test and Measurement Handbook*, 1 November 2002

**AFMAN 33-363**, *Management of Records*, 1 March 2008

AFMAN 36-2234, *Instructional Systems Development*, 1 November 1993

**(Added-AFSPC) AFMAN 36-2236**, *Guidebook for Air Force Instructors*, 12 November 2003

**(Added-AFSPC) AFI 36-2251**, *Management of Air Force Training Systems*, 5 June 2009

**(Added-AFSPC) AFSPCI 36-283**, *Space Training System Management*, 1 August 2004

**(Added-AFSPC) AFSPCI 10-205**, *Operational Transition Process*, 10 December 2013

**(Added-AFSPC) AETCI 36-2641**, *Technical and Basic Military Training Development*, 26 June 2014

Privacy Act of 1974 (5 United States Code [U.S.C.] 552a)

**Privacy Act of 1974 (5 United States Code [U.S.C.] 552a)**

***Prescribed Forms***

**AF Form 4419**, *Record of Training*.

***Adopted Forms***

**AF Form 847**, *Recommendation for Change of Publication*

**(Added-AFSPC)** AF Form 4419, Record of Training

**(Added-AFSPC)** AF Form 4420, Individual's Record of Duties and Qualifications

***Abbreviations and Acronyms***

**(Added-AFSPC)** **AAC**—Assignment Availability Codes

**AFSC**—Air Force Specialty Code

**ANG**—Air National Guard

**ARC**—Air Reserve Component (AFRC and ANG)

**BCQ**—Basic Cyber Qualified

**BMC**—Basic Mission Capable

**CMR**—Combat Mission Ready

**CONOPS**—Concept of Operations

**(Added-AFSPC)** **CRE**—Course Resource Estimate

**CT**—Continuation Training

**CTP**—Cybercrew Training Program

**(Added-AFSPC)** **CWS**—Cyber Weapon System

**ETCA**—Education and Training Course Announcement

**FCR**—Formal Course Review

**FTU**—Formal Training Unit

**FYDP**—Future Years Defense Program

**(Added-AFSPC)** **IO**—Information Operations

**IQF**—Individual Qualification Folder

**IQT**—Initial Qualification Training

**ISR**—Intelligence, Surveillance, and Reconnaissance

**MAJCOM**—Major Command

**MET**—Mission Essential Tasks

**MQT**—Mission Qualification Training

**MR**—Mission Ready

**(Added-AFSPC)** **MTTL**—Master Training Task Lists

**NAF**—Numbered Air Force

(Added-AFSPC) NWBC—Network Warfare Bridge Course

PGL—Program Guidance Letter

(Added-AFSPC) POI—Plan of Instruction

PR—Progress Review

PRD—Program Requirements Document

(Added-AFSPC) SME—Subject Matter Expert

SORTS—Status of Resources and Training System

(Added-AFSPC) TPT—Training Planning Team

### *Terms*

**(UPDATED) Instructional System Development (ISD)**— Instructional system development is a deliberate and orderly, but flexible process for planning, developing, implementing, and managing instructional systems. It ensures that personnel are taught in a cost-efficient way the knowledge, skills, and attitudes essential for successful job performance. (AFMAN 36-2234)

**Basic Cyber Qualified**— A cybercrew member who has satisfactorily completed IQT.

**Basic Mission Capable**— A cybercrew member who has satisfactorily completed IQT and MQT, but is not in fully-certified MR/CMR status. The cybercrew member must be able to attain MR/CMR status to meet operational taskings as specified in the applicable instructional supplements. This status is primarily for individuals in units that perform weapon system-specific operational support functions (i.e., formal training units, operational test and tactics development). BMC requirements will be identified in the appropriate lead MAJCOM-provided guidance.

**Certification**— Designation of an individual by the certifying official (or his/her designee) as having completed required training and evaluation and being capable of performing a specific duty.

**Combat Mission Ready**— A cybercrew member who has satisfactorily completed IQT and MQT, and maintains certification, currency and proficiency in the command or unit combat mission.

**Continuation Training**— Training which provides crew members with the volume, frequency, and mix of training necessary to maintain currency and proficiency in the assigned qualification level.

**Currency**— A measure of how frequently and/or recently a task is completed. Currency requirements should ensure the average cybercrew member maintains a minimum level of proficiency in a given event.

**Cybercrew Members**— Cybercrew members consist of individuals who conduct cyberspace operations or computer network exploitation and are typically assigned to a specific weapon system.

**Cyber (adj.)**— Of or pertaining to the cyberspace environment, capabilities, plans, or operations.

**Cyberspace**— A global domain within the information environment consisting of the interdependent network of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers. (JP 1-02)

**Cyberspace Operations**— The employment of cyberspace capabilities where the primary purpose is to achieve objectives in or through cyberspace. (Joint Pub 3-12)

**Cyberspace Support**— Foundational, continuous or responsive operations in order to ensure information integrity and availability in, through, or from Air Force-controlled infrastructure and its interconnected analog and digital portion of the battlespace. (AFPD 10-17)

**Initial Qualification Training (IQT)**— One or more courses covering system specific and/or positional specific training as a prerequisite to Mission Qualification Training (MQT).

**Instructional System Development (ISD)**— A systematic, flexible, proven process for determining whether instruction is necessary in a given situation, for defining what instruction is needed, and for ensuring development of effective, cost-efficient instruction. (AFI 36-2235, Volume 1)

**Instructor**— An experienced individual qualified to instruct other individuals in mission area academics and positional duties. Instructors will be qualified appropriately to the level of the training they provide.

**Mission Ready**— A cybercrew member who has satisfactorily completed IQT and MQT, and maintains certification, currency and proficiency in the command or unit operational mission.

**Mission Qualification Training (MQT)**— Training needed to qualify for cybercrew duties in an assigned crew position for a specific weapon system.

**Requalification Training**— Academic and positional training required to requalify to MR/CMR status.

**Time Periods**— The following definitions are provided for interpretation of timing requirements specified in this instruction:

**Day**— Unless otherwise specified, "day" means calendar days. When "work days" are specified, count only duty days. Do not count scheduled unit "down" days against this time limit.

**Month**— The term "month" means calendar months, not 30-day periods.

**Unqualified**— Previously CMR crewmembers whose CMR status has lapsed due to any of the reasons contained in paragraph 2.4.

## Attachment 2

### TRAINING DEVELOPMENT

**A2.1. Training development:** Will define the special set of skills required for mission accomplishment (T-2). Applicable published training standards establish the minimum training task performance standards required and provide constraints for all performance scenarios. These will include all tasks/subtasks, along with associated performance standards, conditions, proficiency codes and applicable timing requirements (T-2). For standardization levels see AFI 10-1703v2, *Cyberspace Operations Standardization and Evaluation (Stan/Eval) Program*.

A2.1.1. Tasks Standard Level Descriptions. Three task standard levels will be used for each task: A, B, and C (T-2). All tasks/subtasks will be documented in a comprehensive task/sub-task list developed by the units, approved by the NAF, and coordinated through Lead MAJCOM/A3T (T-2).

A2.1.2. Level A/Critical task/sub-task. Critical tasks are tasks that could result in mission failure, endangerment of human life, serious injury or death. Critical tasks have the greatest potential for extreme mission or personnel impacts and drive the most stringent training and evaluation program requirements. Critical tasks apply to time-sensitive tasks or tasks that must be accomplished as expeditiously as possible without any intervening lower priority actions that would, in the normal sequence of events, adversely affect task performance/outcome.

A2.1.3. Level B/Essential task/sub-task. Essential tasks are tasks deemed integral to the performance of other tasks and required to sustain acceptable weapon system operations and mission execution. Essential tasks drive significant training requirements.

A2.1.4. Level C/Non-Essential task/sub-task. Non-Essential tasks are rudimentary or simple tasks related to weapons system operations that by themselves have little or no impact on mission execution. Non-Essential tasks require the least stringent training requirements.

A2.1.5. Ensure the requirements contain detailed givens/constraints, performance, and standards for all critical tasks/subtasks (T-2).

**A2.2. Use the sample Task/Subtask List:** and task requirements tables on the next pages as examples only.

**A2.3. Table A. 2.1 is an example only.** CCC is cyber crew commander, CA is Cyber Analyst, and CO is Cyber Operator.

Table A2.1. (Sample) Task/Subtask List

AREA & TASK	DESCRIPTION	33NWS					92IOS			
		Level	CCC	COC	CO	CA	COT	Level	CCC	CA
	MISSION SUPPORT OPERATIONS									
<b>A01</b>	<b>Perform Crew Actions</b>									
A01A	Perform Crew Changeover/Shift Actions	C	3c	3c	3b	1b	1b			
A01B	Perform Status of Manning Actions	B	3c	3c						
A01C	Log Operational Activities	B	3c	3c	3c	3c	3c			
<b>A02</b>	<b>Pre Mission Activities</b>									
A02A	Perform Tasking Coordination Activities							B	3c	
A02B	Perform Personnel Assignment Activities							B	3c	
A02C	Perform Equipment Preparation Activities							B	3c	3c
A02D	Perform Site Survey Activities							B	3c	3c
A02E	Perform Assessment Plan Activities							B	3c	3c
A02F	Perform Team Pre-Mission Activities							B	3c	3c
<b>A03</b>	<b>Post Mission Activities</b>									
A03A	Perform Reporting Activities							B	3c	3c
A03B	Perform Data Archival Activities							B	3c	3c
A03C	Perform Hot Wash Activities							B	3c	3c
A03D	Perform Equipment Return Activities							B	3c	3c
	<b>STATUS MONITORING</b>									
<b>B01</b>	<b>Perform Fault/Anomaly Resolution Procedures</b>									
B01A	Perform Mission System Outage Procedures	A	3c	3c	3c	3c	3c			

AREA & TASK  SUB-TASK	DESCRIPTION	33NWS					92IOS			
		Level	CCC	COC	CO	CA	COT	Level	CCC	CA
B01B	Perform Facility System Outage Procedures	A	3c	3c	3c	3c	3c			
B01C	Perform Sensor Outage Reporting	B					3c			
<b>B02</b>	<b>Monitor Communication Channels</b>									
B02A	Manage Internal Communication	B	3c	3c	2c	1b	3c			
B02B	Manage External Communication	B	3c	3c	2c	1b	3c			
	<b>MISSION PROCEDURES</b>									
<b>C01</b>	<b>Perform INFOCON Procedures</b>	B	3c	3c						
<b>C02</b>	<b>Perform In-Brief Activities</b>							B	3c	
<b>C03</b>	<b>Perform Equipment Setup Activities</b>							B	2b	3c
<b>C04</b>	<b>Perform Collection Activities</b>							B	2b	3c
<b>C05</b>	<b>Perform Analysis and Validation Activities</b>							B	2b	3c
<b>C06</b>	<b>Perform Daily Reporting Activities</b>							B	3c	3c
<b>C07</b>	<b>Perform Non-Technical Assessment Activities</b>							B	2b	3c
<b>C08</b>	<b>Perform Equipment Breakdown Activities</b>							B	2b	3c
<b>C09</b>	<b>Perform Out-Brief Activities</b>							B	3c	
<b>C10</b>	<b>Perform Platform Operations (PO)</b>									
<b>C10A</b>	Perform ArcSight Console Operations	B	2c	2c	3c	3c				
C10B	Perform Sensor Operations	B	2c	2c	3c	3c				
C10C	Apply Sensor Signature Update	B					3c			
<b>C11</b>	<b>Perform Analyst Operations</b>									
C11A	Perform Channel Monitoring	A	1c	1c	3c	3c				

AREA & TASK	DESCRIPTION	33NWS					92IOS			
		Level	CCC	COC	CO	CA	COT	Level	CCC	CA
C11B	Perform Basic Event Analysis	A	1c	1c	3c	3c				
C11C	Perform Packet Retrieval	A	1c	1c	3c	3c				
C11D	Perform Packet Analysis	A	1c	1c	3c	3c				
C11E	Perform IP Blocking	B	2d	2d	3c	3c				
C11F	Perform Event Categorization	B	3d	3d	3c	3c				
C11G	Coordinate / Deconflict External Assessments	B	3c	3c	3c	2c				
C11H	Perform Advanced WireShark Operation	B	1c	1c	3c	3c				
<b>C12</b>	<b>Apply Network Security Principles (NS)</b>									
C12A	Identify Network Protocols	C	2c	2c	3c	3c				
C12B	Identify Network Security Threats	C	2c	2c	3c	3c				
C12C	Resolution Tools	C	2c	2c	3c	3c				
<b>C13</b>	<b>Execute Contingency Operations</b>									
C13A	Execute Continuity of Operations Plan (COOP)	B	3d	3d	3c	3c	3c			
C13B	Transition to Alternate Operating Location (AOL)	A	3d	3d	3c	3c	3c			
<b>C14</b>	<b>Utilize Reporting Tools / Procedures</b>									
C14A	Open and Edit ArcSight Cases	B	2c	2c	3c	3c				
C14B	Annotate Events	B	2c	2c	3c	3c				
C14C	Operate historical information database	B	3c	3c	3c	3c				
C14D	Event Investigation Handling	A	3c	3c	3c					
C14E	Incident Handling	A	3c	3c	3c					
C14F	Coordinate TCNO/C4NOTAM	B	3c	3c			3c			
C14G	Coordinate OPREP 3 Information Requirements	B	3c	3c				B		3c
C14H	Coordinate Reporting Products	B	3c	3c						



**Attachment 3 (Added-AFSPC)**

**METRIC TEMPLATES**

**A3.1. (AFSPC) Units** will provide semiannual reports on training devices to HQ AFSPC/A2/3/6TT using the formats and instructions below. HQ AFSPC/A2/3/6TT will consolidate unit reports to present the overall status of command training systems. Submit unclassified reports to [a3tt.wf@us.af.mil](mailto:a3tt.wf@us.af.mil); reports are due by 31 January and 31 July each year. (T-2).

**A3.2. (AFSPC) Time to Train:** Average Time to MR/ CMR Units will report the number of calendar days to complete MQT and certification requirements to bring IQT graduates to MR/CMR status (see example in [Figure A3.1](#)). (T-2).

**Figure A3.1. Number of Calendar Days to Complete MQT/Certification Requirements Example.**

<b>Unit:</b>		
<b>Weapon System:</b>		
<b>Avg Time To Train = calendar days</b>		
<b>Crew Position</b>	<b>Avg Time</b>	

**A3.3. (AFSPC) Training Device Fidelity/Task Coverage.** Use the MTTL, IAW applicable instructions, to provide a subjective assessment of training device fidelity in a stoplight chart as shown in [Figure A3.2](#). Provide narrative to further explain the rationale for the rating assigned. Our goal is to have training devices that look, sound, and feel like the actual operational equipment to achieve and maintain required proficiency levels. These systems should emulate appropriate position console displays, messages and operational support equipment. (T-2).

A3.3.1. (AFSPC) Fidelity categories:

A3.3.1.1. (AFSPC) Physical (degree of physical representation, appearance, feel and function) Functional (data change rates, display response, system performance). In addition, use the MTTL and Proficiency Levels to indicate the percentage of the training system’s coverage of designated tasks at the specified level of learning. (See [Figure A3.2](#) below). (T-2).

**Figure A3.2. Training System Fidelity/Task Coverage**

Training Device	Physical	Functional	Task Coverage	Comments
CTE	R	Y	87%	Part-task emulator used for multiple systems, limited functional capability, physical characteristics do not compare to prime systems
X (example)	Y	R	65%	Software upgrade to prime system not replicated in training system. Functionality and task coverage does not match the prime system in several key areas.
MPT	G	G	92%	Fidelity and task coverage are adequate for training at the appropriate proficiency levels.

**A3.4. (AFSPC) Training device Performance.** Utilization: Report Available/Scheduled/Actual hours per month for each training device. **(T-2)**.

A3.4.1. **(AFSPC) Example:** 448 / 336 / 331 (device available 16 hours/day [not including scheduled maintenance] x 7 days x 4 weeks = 448 hours, scheduled for 12 hours/day = 336 hours, 5 hours of lost utilization = 331). Include an explanation for lost training time. The intent is to reflect utilization of available trainer time and lost training time due to unscheduled maintenance, equipment failure, etc.

A3.4.2. **(AFSPC) Reliability:** Mean Time Between Maintenance. Average time between maintenance events, based on operating hours. Tracked by month. **(T-2)**. See example below in [Figure A3.3](#)

**Figure A3.3. Reliability Example**

Reliability = % available						
Training Device	Jan	Feb	Mar	Apr	May	Jun

A3.4.3. **(AFSPC) Maintainability:** Mean Downtime. Average elapsed time between loss of mission capable status and system restoration to at least partial mission capable status. This includes maintenance and supply response, administrative delays, actual on-equipment repair and other activities such as training and preventive maintenance. Tracked by month. **(T-2)**. See Maintainability Example in [Figure A3.4](#)

**Figure A3.4. Maintainability Example**

<b>Maintainability = % available</b>						
<b>Training Device</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>

