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AIR TRAFFIC CONTROL

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This Department of the Air Force manual (DAFMAN) implements Air Force Policy Directive (AFPD) 13-2, *Air Traffic Control, Airfield, Airspace, and Range Management*. It applies to all civilian employees and uniformed members of the United States Space Force, Regular Air Force, Air Force Reserve, and Air National Guard organizations (to include contracted locations) who operate or administer functions and facilities for Air Traffic Control (ATC). At joint, shared use, and host nation airfields, this manual applies to the facilities controlled and used exclusively by the Department of the Air Force, as outlined in international agreements, real estate documents or other written agreements. This manual outlines key duties and responsibilities of ATC personnel. This manual also provides detailed guidance, procedures, and programs for managing ATC where the Air Force has functional oversight responsibility. This publication contains copyrighted

material. Compliance with the Attachments **2**, **3**, **4**, **5**, **6**, **7**, and **8** in this manual is mandatory. This publication requires the collection and or maintenance of information protected by the Privacy Act of 1974 authorized by 5 USC § 552a. The applicable System of Record Notice(s) (SORN) F036 AFFSA A, *USAF Air Traffic Control (ATC) Certification and Withdrawal Documentation*, is available at **http://dpclo.defense.gov/Privacy/SORNs.aspx**. This manual may be supplemented at any level; however, all major command (MAJCOM) supplements to include interim changes to previously approved supplements must be routed to Air Force Flight Standards Agency (AFFSA), Airfield Operations Division for coordination prior to certification and approval. References to MAJCOM within this publication refer to the MAJCOM office of primary responsibility (OPR) for airfield operations. Unit (wing or base) level supplements to this publication must be routed to the responsible MAJCOM OPR for airfield operations for coordination prior to certification and approval. The authorities to waive wing, unit, or delta level requirements in this publication are identified with a tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See DAFMAN 90-161, *Publishing Processes and Procedures*, for a description of the authorities associated with the tier numbers. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority, or alternately, to the publication OPR for non-tiered compliance items or requirements. Refer to **Chapter 1** for additional waiver requirements to this manual. Refer recommended changes and questions about this publication to the OPR using the DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is in the Air Force Records Information Management System.

(ACC) DAFMAN 13-204, Volume 3, *Air Traffic Control*, is supplemented as follows: This supplement establishes command management of ATC requirements. It applies to all Air Combat Command (ACC) Regular Air Force (RegAF) including the US Space Force until further notice, Air National Guard (ANG) and Air Force Reserve (AFR) organizations (to include contracted locations) who operate or administer functions and facilities for airfield operations. Forward recommended changes on Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*, to this instruction to ACC Airfield Operations and Procedures (ACC/A3AO), 205 Dodd Blvd, STE #121, Langley Air AFB VA 23665-2789 or **acc.a3ao@us.af.mil**. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of IAW Air Force Records Information Management System Records Disposition Schedule. Contact supporting records managers as required. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (T-2, T-3) number following the compliance statement. See DAF Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*, 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. Commanders may waive non-tiered compliance items or requirements in the ACC supplement. Subordinate units may supplement this publication. Unit (wing or base) level supplements to this instruction require MAJCOM approval and must be forwarded to ACC/A3AO. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the DAF.

SUMMARY OF CHANGES

This publication has been substantially revised and must be completely reviewed. Major changes include changing publication from an AFMAN to a DAFMAN. Incorporated guidance and procedures from, and rescinding, Air Force Guidance Memorandum (AFGM) 2023-01 (27 July 2023).

(ACC) This publication has been substantially revised and must be completely reviewed. Major changes include changes to the Simulated Flameout (SFO)/ Precautionary Flameout (PFO) Approach procedures.

Chapter 1

GENERAL

1.1. Overview. This manual provides guidance for managing ATC personnel, programs, facilities and airfields DAF wide. This manual is complemented by AFMAN 13-204, Volume 1, *Management of Airfield Operations.*

1.2. The Military and Civilian Aviation Integration Division. The military and civilian Aviation Integration Division Career Field Management is responsible for Air Force Specialty Codes (AFSCs): 13MX, Airfield Operations officer, 1C1X1, ATC, 1C7X1, Airfield Management (AM), and 1C8X3, Radar, Airfield and Weather Systems (RAWS). Career Field Manager (CFM) duties will be executed according to AFMAN 36-2100, *Military Utilization and Classification*, DAFI 36-2670, *Total Force Development*, and AFI 38-101, *Manpower and Organization*. This list is not all inclusive.

1.3. Headquarters Air Force Flight Standards Agency (HQ AFFSA). HQ AFFSA is responsible for terminal area airfield operations (i.e., ATC, AM and RAWS) matters. In this capacity, HQ AFFSA executes responsibilities as outlined in Air Force mission directive (AFMD) 27, *Air Force Flight Standards Agency (AFFSA)*, in keeping with policy guidance provided by the SAF. For the purpose of addressing specific procedural, training, standardization, architecture and integration issues directly related to airfield operations, HQ AFFSA may have cause to interact with the MAJCOMs, Federal Aviation Administration (FAA), and other military services.

1.4. Operations at Contingency Locations. Contingency is defined as a situation requiring military operations in response to natural disasters, terrorists, subversives, or as otherwise directed by appropriate authority to protect United States interests. At contingency locations, outside the United States, the senior airfield authority (SAA) may waive airfield operations procedures outlined in this manual to support tactical or combat operations. This authority must not be exercised below the SAA level. **(T-1)** Prior to issuance of such a waiver, the following actions must be accomplished:

1.4.1. Conduct a risk management assessment with the rationale for the waiver and explain (1) how complying with the requirement/compliance item impacts mission accomplishment, OR (2) cost of compliance (training, funds, equipment, facilities, guidance or manpower) creates unacceptable risk to a higher priority task; OR (3) expected cost of compliance outweighs the benefit; OR (4) personnel cannot comply with the requirement due to a lack of resources (training, funds, equipment, facilities, guidance or manpower). **Note:** SAA waiver period must not exceed requested waiver period or 30 calendar days after the approving commander's deployment length, whichever is shorter. **(T-1)** Because waivers are the expression of a specific commander's risk acceptance, approved waivers automatically expire 30 calendar days after a change in commander, unless the new commander renews the waiver.

1.4.2. Forward proposed waivers to the Headquarters Air Force (HAF) staff or equivalent for an operational review if time permits, or at the discretion of the SAA.

1.4.3. Refer to Air Force Tactics, Techniques, and Procedures (AFTTP) 3-4.13v2, *Contingency Airfield Operations* for additional information. This AFTTP outlines how Air Force forces open and operate a deployed or contingency airfield. This AFTTP volume also

contains planning considerations for airfield management, ATC, and deployable air traffic control and landing systems (ATCALS) capabilities, procedures, forces, and equipment.

1.5. Airfields Operated Pursuant to Contract. This manual applies to locations where Department of Defense (DoD) or Air Force access is pursuant to contract, to the extent specifically outlined in the contract statement of work (SOW) and/or performance work statement (PWS). Locations unable to comply with these criteria due to pre-existing SOWs are exempt until such time that the current contract expires. Locations that exclude this manual, will specifically state rationale for the exclusion in the SOW. **(T-2)**

1.6. Host Nation Locations. Any host nation procedures, or procedures based on otherwise inapplicable international regulations that are being implemented to fulfill basing or similar agreements should be implemented consistent with this manual to the extent possible. While agreed practices adopted for DAF use in foreign areas take precedence, every effort should be made to conform to this manual.

1.6.1. MAJCOMs must identify any special procedures agreed with host nations in their supplement to this manual. Refer conflicting procedures to HQ AFFSA prior to implementation.

1.6.2. Airfield operations personnel augmenting a facility operated by another branch of the United States (U.S.) military will comply with their regulations and procedures as applicable. **(T-0)**

1.7. Waivers.

1.7.1. Units will use the DAF Form 679, *Air Force Publication Compliance Item Waiver Request/Approval* to process waivers to this manual. **(T-1)**

1.7.2. Unit waiver request must include the following:

1.7.2.1. A paragraph reference or text of the specific requirement for which the commander/director is requesting a waiver. **(T-1)**

1.7.2.2. Rationale for the waiver. **(T-1)** Explain which one of the following reasons apply and why: (1) How complying with the requirement/compliance item impacts mission accomplishment; OR, (2) Cost of compliance (training, funds, equipment, facilities, guidance or manpower) creates unacceptable risk to a higher priority task; OR (3) Expected cost of compliance outweighs the benefit; OR (4) personnel cannot comply with the requirement due to a lack of resources (training, funds, equipment, facilities, guidance or manpower).

1.7.2.3. Time period or circumstance the waiver is needed. **(T-1)** **Note:** Tier 1, 2, and 3 waivers may be approved for a period not to exceed the requested waiver period or 30 calendar days after the approving commander's tour length, whichever is shorter. Because waivers are the expression of a specific commander's risk acceptance, approved waivers automatically expire 30 calendar days after a change in commander unless the new commander renews the waiver.

1.7.2.4. Risk mitigation measures to be implemented, if necessary, by the requesting commander during the waiver period. **(T-1)**

1.7.2.5. Impact if waiver is disapproved. **(T-1)**

1.7.3. If deemed necessary, submit additional data (e.g., local operating procedure, airspace maps, traffic patterns, airfield diagrams) to substantiate the waiver request.

1.7.4. Units must provide an informational copy of all Tier 3 approved waivers to MAJCOM OPR for airfield operations. **(T-2)**

1.7.5. Units will submit waivers for applicable FAA publications through their respective commander for coordination from the MAJCOM OPR for airfield operations, AFFSA/XA and the appropriate Air Force representative (AFREP). **(T-0)** The AFREP submits the request to FAA and notifies the requesting unit, MAJCOM OPR for airfield operations, and AFFSA/XA of the results. **Exception:** AFFSA/XA is the approval authority for any DAF procedures or minima that differ from those specified in Federal Aviation Administration Order (FAAO) Job Order (JO) 7110.65AA, *Air Traffic Control,* and that involve military aircraft only as outlined in FAAO JO 7110.65AA Table **1-1-3**. Units will submit change requests for FAAO JO 7110.65 procedures through their respective commander, for coordination from the MAJCOM OPR for airfield operations, and AFFSA/XA. HQ AFFSA is the authority over and signatory for DAF airfield operations procedures.

1.7.5.1. **(Added-ACC)** Wing Commanders (WG/CCs) will submit requests for waivers to FAA criteria to ACC/A3AO (**acc.a3ao@us.af.mil**) No Later Than (NLT) 6 months prior to requested implementation/expiration date. **(T-2)**

1.7.6. The requestor's unit commander must forward a copy of the approved waiver to the AFFSA/XA workflow at **hqaffsa.xa@us.af.mil** within 30 calendar days of approval for situational awareness and process improvement considerations. **(T-1)**

1.7.7. Approved waivers become part of the approvers and requestor's official records and are appropriately filed and maintained according to the Air Force Records Disposition Schedule.

1.8. Governing Directives. Airfield operations services are governed by AFIs, AFMANs, DAFIs, DAFMANs and, to the extent applicable, FAA orders, parts of the Code of Federal Regulations, and any host nation procedures which have been adopted for Air Force use, unless specifically exempted or waived. Unit commanders may contact HQ AFFSA through their respective MAJCOM OPR for assistance determining the applicability of directives. **Note:** Applicable portions of FAAO JO 7210.3, *Facility Operation and Administration* have been incorporated into this instruction.

1.9. Issuing New Air Force Airfield Operations Policy or Procedures. New policies or procedures are sent out via message and posted on the HQ AFFSA Airfield Operations SharePoint website. Airfield operations staff personnel are required to utilize the HQ AFFSA Airfield Operations SharePoint website to download and/or view messages.

1.10. Duty Titles. Duty Titles are determined by the unit manpower document (UMD) authorizations earned through the 13E1 Capabilities-Based Manpower Determinant. Failure to use authorizations as described and earned on the UMD could result in the reduction of authorizations or removal of personnel (not applicable to Air National Guard [ANG] and Air Force Reserve [AFR]). For ATC positions, only utilize standardized and approved duty titles, which are available via CFM policy letter(s) hosted on the HQ AFFSA SharePoint. Throughout this manual, interpret all references to military duty titles as including the civilian equivalents unless specifically stated otherwise. **Note:** Reference AFMAN 13-204 Volume 1 for civilian equivalents.

1.11. Qualifications. Refer to **Attachment 2** and/or associated CFM policy letter(s) hosted on the HQ AFFSA SharePoint for duty position minimum qualifications.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. HQ AFFSA.

2.1.1. Establishes Air Force policies and procedures for providing airfield operations services through publication of this manual and corresponding volumes.

2.1.2. Serves as the OPR for Air Force airfield operations policy, procedures and programs.

2.1.3. In coordination with airfield operations CFMs, develops and publishes standardized position certification guides and qualification guides; education and training plans for both officer and enlisted AFSCs.

2.1.4. Conducts the Air Force Terminal Instrument Procedures (TERPS) Fundamentals Course in order to train and certify qualified individuals as TERPS specialists according to DAFMAN 13-204, Volume 3 as well as applicable FAA, International Civil Aviation Organization (ICAO) and North Atlantic Treaty Organization (NATO) standards.

2.1.5. Evaluates Regular Air Force, Air National Guard, and Air Force Reserve unit requests for waivers and deviations to FAA JOs, cross-functional, airfield operations and instrument procedure policies and guidance.

2.1.6. Administers the Lt General Gordon A. Blake Aircraft Save/Assist Award Programs and tempers Awards Database Information System (guidance located in DAFMAN 36-2806, *Military Awards: Criteria & Procedures)*.

2.1.7. Conducts regular, periodic system and Air Force airfield operations data/trend analysis to monitor unit effectiveness, safety and compliance with established criteria or guidance.

2.1.8. Develops educational programs, publications, and bulletins to manage and actively promote airfield safety.

2.1.9. In coordination with Secretary of the Air Force, Inspections Directorate (SAF/IGI) and MAJCOM OPR for airfield operations, develops inspection guidance and criteria of airfield operations functional areas: AM, ATC, RAWS, and airfield operations management (AOM).

2.1.10. Develops HQ Air Force-level Self-Assessment Communicators for units to assess effectiveness, safety and compliance with applicable criteria (e.g., Air Force, FAA, Host Nation and ICAO). Guidance is located in DAFI 90-302, *The Inspection System of the Department of the Air Force*.

2.1.11. Validates HQ Air Force-level deficiencies with MAJCOM inspectors general and Functional Area Managers and provides corrective action replies for valid actionable deficiencies to the Air Force Inspection Agency. Augments MAJCOM IG inspection teams as required.

2.1.12. Coordinates on document change proposals (DCPs), and requests interpretation of FAA directives.

2.1.13. Manages policy, procedures and execution of the Air Force Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) Program.

2.1.14. Utilizes Air Force Safety Automated System (AFSAS) to review airfield operations related Hazardous Air Traffic Reports (HATRs), Controlled Movement Area Violations (CMAVs), mishaps and Bird/Wildlife Aircraft Strike Hazard (BASH) incidents for negative trends, root causes, observations and recommendations.

2.1.15. Authors Headquarters Air Force, Current Operations (AF/A3O) and HQ AFFSA command endorsements to airfield operations related mishaps as prescribed in DAFI 91-204, *Safety Investigations and Hazard Reporting*, and DAFMAN 91-223, *Aviation Safety Investigations and Reports*.

2.1.16. Serves as General Schedule (GS) GS-2150/2152/2154/0856 Career Field Advisors to address civilian AM, ATC and RAWS personnel issues. These positions will normally be a senior civilian in GS-2150/2152/2154 job series, reside at HQ AFFSA and be appointed in writing by the Operations Civilian CFM.

2.1.17. Develops standard core personnel documents (SCPD) and standard position descriptions (SPD) for civilian air traffic control and AM positions. **Note:** GS-2154 series are not applicable to Air Force Reserve Command (AFRC) AM personnel.

2.1.18. Ensures civilian hiring authorities use correct job series and SCPDs/SPDs to hire civilian airfield operations personnel. The GS-2152 job series will not be used for AM positions.

2.2. MAJCOM Airfield Operations.

2.2.1. Provides direct airfield operations functional oversight and assistance to facilitate activities/operations of subordinate unit airfield operations flights (AOFs).

2.2.2. Works with the appropriate CFM, major command manpower and personnel (MAJCOM/A1) OPR, and Air Force Personnel Center to ensure AOFs are staffed according to the Air Force Manpower Determinant to the maximum extent possible, while assigning units their equitable allocation of manpower resources as available. (Not applicable to ANG and AFR units).

2.2.3. Publishes MAJCOM-unique guidance and airfield operating hours in a supplement.

2.2.4. Reviews and provides endorsing comments on DAF Form 679 and on waiver requests to airfield design criteria, markings, signs, and lighting forwarded for coordination by the major command installation and mission support (MAJCOM/A7) OPR and/or Air Force Installation and Mission Support Center (AFIMSC).

2.2.5. Ensures appropriate airfield operations representation on aircraft mishap Safety Investigation Boards (SIBs), as prescribed in DAFMAN 91-223. If the MAJCOM is unable to provide appropriate representation to the SIB, contact AFFSA/XA to locate a qualified SIB representative.

2.2.6. Implements the Air Force Runway Safety Action Team (AFRSAT) Program.

2.2.7. Supplements requirements for host nation/local national personnel filling airfield operations duty positions as required.

2.2.8. Notifies HQ AFFSA of airfield operations related capability gaps.

2.2.9. Establishes a process for prioritizing and scheduling personnel identified by the units for career field supplemental courses (e.g., Advanced Airfield Managers Course, Military Airspace Management Course, Chief Controller Course and Air Traffic Control Systems Specialist Course).

2.2.10. Compiles and reports applicable unit data to HQ AFFSA (e.g., traffic count data calls).

2.3. Chief Controller (CCTLR) Key Responsibilities. CCTLRs are responsible for managing the overall ATC radar or tower facility operations, as well as directly supervising, leading, and deliberately developing assigned personnel. Each ATC facility must have a CCTLR appointed by the Airfield Operations Flight Commander (AOF/CC), except radar final control (RFC). Where manning dictates, the AOF/CC may authorize a single Complex CCTLR to manage both the tower and radar facility. When the complex CCTLR concept is used, no other personnel are authorized to carry the title or implement the duties of the CCTLR at the location. CCTLRs will:

2.3.1. Determine the minimum number of qualified controllers required for duty based on published facility hours, services required by assigned flying units, and scheduled flying activities. Refer to 13E1 Capabilities-Based Manpower Determinant for guidance on calculating manpower authorizations.

2.3.2. Validate and submit to the Unit Training Manager (UTM) upgrade training and Special Experience Identifier (SEI) information for inclusion in the individual's personnel record.

2.3.3. Implement approved ATC procedural changes in support of the wing flying mission, FAA, and host nation requirements.

2.3.4. Ensure all assigned controllers meet appropriate physical qualification requirements.

2.3.5. Document all trainer and facility watch supervisor (WS) qualifications on DAF Form 3622, *Air Traffic Control/Weather Certification and Rating Record*.

2.3.6. Ensure controller training is implemented in accordance with the training operating instruction (OI) and initiate corrective actions as necessary.

2.3.7. Develop a checklist for currency and accuracy of all items listed in paragraphs **3.2.3**, **3.2.4** and/or **3.2.5** as applicable, and document results. Review these products at a minimum annually and document completion of the review.

2.3.8. Manage unit ATC simulation resources to ensure facility personnel maximize the use of simulation to accomplish training.

2.3.9. Define procedures for opening and closing facilities who operate less than 24-hours a day. Include these procedures in a local operating procedure (LOP) coordinated with the ATC facility which has instrument flight rules (IFR) jurisdiction.

2.3.10. Ensure appropriate publications necessary to provide ATC services are available in each facility.

2.3.11. Coordinate with the installation security/anti-terrorism manager to remain current of installation security tasking and posture as applicable to ensure the security of controlled areas.

2.3.12. Establish procedures for personnel returning from temporary duty (TDY), duties not to include controlling (DNIC), and leave to receive training missed during the absences. Refer to **Attachment 7** for long-term DNIC procedures.

2.3.13. Establish and maintain a dual certification and qualification program at locations with multiple air traffic facilities to promote development.

2.3.13. **(ACC) Note:** Outline dual certification program procedures in writing (MOU between facilities).

2.3.14. Conduct a review with the Unit Deployment Manager and MAJCOM Functional Area Manager at least quarterly to ensure ATC personnel eligible to deploy are postured correctly.

2.4. Assistant Chief Controller (ACCTLR) Key Responsibilities. The CCTLR will establish specific ACCTLR key responsibilities in writing.

2.5. Watch Supervisor (WS) Key Responsibilities.

2.5.1. The WS is responsible for maintaining situational awareness of the overall flow of air traffic operations at the facility assigned, and when applicable, on the controlled movement area (CMA). The WS is responsible for all ATC facility operations and services during the shift and is required to ensure the effective execution of training plans.

2.5.2. If necessary, the WS limits operations based on existing traffic congestion or complexity, staffing, weather, or individual controller training and experience capabilities.

2.5.3. The term Senior Controller (SC) is used to indicate responsibility for duties at an operating position while simultaneously performing WS duties.

2.6. Trainer Key Responsibilities. Trainer key responsibilities are outlined in DAFMAN 36-2689, *Training Program*, and further defined in the training OI. Additionally, ATC Trainers will:

2.6.1. Ensure each trainee has access to the most current training program documents.

2.6.2. Provide constant feedback to the trainee on daily performance.

2.6.3. Develop a daily training plan including training objectives and requirements.

2.6.4. Document training evaluations, providing an accurate picture of the trainee's progression throughout the evaluation period.

2.6.5. Prior to submitting a trainee for certification, correctly complete all Career Field Education Training Plan (CFETP) documentation.

2.6.6. Report discrepancies in the training program to the non-commissioned officer-in-charge (NCOIC), ATC training (NATCT).

2.6.7. Determine each trainee's individual adult learning style and adapt training plan and execution to the trainee's style. Document in initial training evaluation or electronic equivalent.

2.7. NCOIC, Air Traffic Control Training (NATCT) Key Responsibilities . NATCT will:

2.7.1. Develop and manage the ATC Training Program, front load training (FLT) and facility continuation training (FCT). At those locations where the flight support element is authorized only one 1C1X1 for the AOF staff, the duty title must be NCOIC, ATC Training and Standardization (TSN).

2.7.2. Coordinate monthly controller knowledge training requirements with the ATC staff. Provide controllers with a monthly proficiency training requirement letter. As a minimum, include required review, recurring and supplemental training for the month.

2.7.3. Monitor facility-training effectiveness.

2.7.4. Inspect training record documentation for accuracy, completeness, and standardization. Provide the ATC staff with inspection results at least monthly.

2.7.5. Manage computer-based instructional/training (CBI/T) programs if applicable.

2.7.6. Organize and brief the AOF Training Review Board (TRB).

2.7.7. Develop and maintain facility master training record (e.g., DAF Form 623, *Individual Training Record Folder*).

2.7.8. Develop and maintain facility master training plans.

2.7.9. Supplement HQ AFFSA developed Qualification Training Package (QTP) with additional training items as required.

2.7.10. Coordinate and process annual formal school training requirements according to the Education and Training Course Announcement (ETCA) website: **https://usaf.dps.mil/teams/app10-etca/SitePages/Home.aspx**

2.7.11. Coordinate simulation administrator activities (e.g., development and maintenance of sector and scenario simulation products) with the respective CCTLRs, or Air Traffic Control Simulation Equipment (ATCSE) program specialist.

2.7.12. Coordinate with the UTM to ensure training status codes (TSC) reflect the accurate status of personnel assigned according to DAFMAN 36-2689, Attachment 2. **Note:** Not applicable to AFR.

2.7.13. Administer myLearning ATC 7-level Craftsman End-of-Course exam.

2.7.14. Manage the Air Traffic Control Trainer Course (ATCTC) program to include:

2.7.14.1. Track ATCTC instructor proficiency via the TRB.

2.7.14.2. Coordinate and schedule courses with AOF staff.

2.7.14.3. Forward graduate course completion certificates to the UTM for update in the Military Personnel Database System (MilPDS). Track submissions until reflected in MilPDS.

2.7.15. Assistant NATCT (ANATCT) appointment and key responsibilities will be coordinated with the respective CCTLR. The NATCT will establish responsibilities in writing.

2.7.16. **(Added-ACC)** Document Landing Zone (LZ) certifications during indoctrination and track proficiency on the TRB, refer to DAFMAN 13-217, *Drop Zone, Landing Zone, and Helicopter Landing Zone Operations*, for proficiency and unit Commander certification requirements.

2.7.17. **(Added-ACC)** Document withdrawal and Direct-to-Duty (DTD) status and conclusion on the TRB until separation or retraining action is complete or the member is returned to training.

2.17.18. **(Added-ACC)** Document long term duties not including controlling (LDNIC) date, phase, and action taken on the TRB and coordinate with the CCTLR and AOF/CC to include on the Airfield Operations Board (AOB) IAW paragraph **A7.2.**

2.8. NCOIC, Standardization and Evaluation (NSE) Key Responsibilities. The NSE administers the ATC certification and rating program and serves as the primary Designated Examiner (DE). The NSE may also serve as the Control Tower Operator (CTO) examiner at contract facilities but must be delegated these responsibilities by the FAA regional representative. NSEs must:

2.8.1. Perform position certifications, controller, special, and annual evaluations by evaluating performance against standards published in the applicable facility Position Certification Guide (PCG).

2.8.2. At a minimum, evaluate the training program, to include the ATCTC, annually to ensure the program meets mission, CCTLR, and NCOIC, Airfield Automation (NAAM) requirements. Evaluate components of the training program using guidance contained in Department of the Air Force Handbook (DAFH) 36-2675, *Information for Designers of Instructional Systems* and AFI 38-401, *Continuous Process Improvement*. Document evaluation results in a memorandum for record or TRB minutes. At locations with a TSN, a facility rated 7-level will evaluate the training program and should be selected in writing.

2.8.3. Develop and administer all controller testing and evaluation requirements.

2.8.4. Assistant NSE (ANSE) appointment and key responsibilities will be coordinated with the respective CCTLR and established in writing by the NSE.

2.9. NCOIC, ATC Training and Standardization (TSN) Key Responsibilities. TSN will:

2.9.1. Be responsible for the ATC training, and standardization and evaluation programs at locations where only one 1C1X1 position is authorized in the flight support element.

2.9.2. Assume the responsibilities of the NATCT and NSE as indicated in **paragraph 2.7** and

2.8. Throughout this manual, "ANATCT" and "ANSE" should be interpreted as "ATSN" at locations with TSNs.

2.9.3. Assistant NCOIC, ATC Training and Standardization (ATSN) appointment and key responsibilities will be coordinated with the respective CCTLR. The TSN will establish responsibilities in writing.

2.10. NCOIC, Airfield Automation Management (NAAM) Key Responsibilities. NAAM will work directly for the AOF/CC to manage/establish procedures for the airfield operations automation section(s). NAAMs must:

2.10.1. Develop monthly NAAM/Airfield Operations System Specialist (AOSS) duty schedule to ensure an adequate number of automation personnel are scheduled to support mission requirements to maintain airfield automation systems. Notify the AOF/CC, CCTLR(s) and WS if AOSS support is unavailable.

2.10.2. Define Continuous Data Recording (CDR) procedures in a LOP, to include procedures for reviewing, storing and securing CDR media.

2.10.3. Direct automation activities for system analysis, design, programming operations, maintenance, security, systems management, technical support, and resource management. Help users define requirements and recommend automation methods to enhance resource use.

2.10.4. Maintain configuration control over Standard Terminal Automation Replacement System (STARS) operational computer programs, ensuring compliance with FAA, Air Force local directives and specifications for the National Airspace System (NAS).

2.10.5. Evaluate and coordinate automated system updates and enhancements with the ATC staff and other supported remote tower facilities prior to implementation. After coordination, implement approved ATC automation programming and functional system changes in support of the wing flying mission and FAA requirements.

2.10.6. When system deficiencies are recognized, direct actions to ensure the adequacy of recovery and debugging procedures. Coordinate software problems with the ATC staff, MAJCOM, AFFSA/XA and appropriate FAA and/or DoD support personnel. Document and submit the appropriate automated system enhancement/deficiency reports as required.

2.10.7. Direct and plan testing of ATC automation computer software.

2.10.8. Maintain the automated ATC system administration, CDR, radar playback systems, and the implementation and maintenance of Low Altitude Alert Systems (LAAS). Coordinate with TERPS to obtain current MAJCOM-approved Minimum Vectoring Altitude (MVA) map data for inclusion in the STARS database.

2.10.9. Assign STARS user group and associated access privileges in accordance with FAAO 6191.2, *Standard Terminal Automation Replacement System (STARS) Sys Administration Security Handbook* and define procedures in a LOP.

2.10.10. Provide facility management guidance in development of all LOPs/memorandum of understandings (MOUs) that define roles, responsibilities, and restoration priorities for all NAS STARS/Micro Enroute Automated Radar Tracking System (MEARTS) equipment.

2.10.11. Provide facility management guidance in development of local contingency and disaster restoration plan in accordance with local directives and FAAO JO 1900.47F.

2.10.12. Perform and document STARS periodic security administration procedures. Retain documentation of daily, weekly, and bi-weekly security checks for six months. Retain documentation of monthly and quarterly security checks for one year.

2.10.13. Ensure completion of all required training as prescribed by guidance listed on the HQ AFFSA Airfield Operations SharePoint website as applicable to assigned location and scope of responsibility.

2.10.14. Establish Time Compliance Technical Order (TCTO) management process in writing with RAWS personnel, as appropriate.

2.10.15. Assume AOSS responsibilities when determined by the AOF/CC in writing.

2.10.16. Review and accomplish all TCTOs and document in Integrated Maintenance Data System (IMDS), and coordinate scheduling and closure of TCTO in IMDS with RAWS work center. Additionally, accomplish any other completion reporting instructions specified within the TCTO. For IMDS TCTO processing and procedures, review Air Force Computer Systems Manual (AFCSM) 21-568 Volume 2, *Time Compliance Technical Order (TCTO) Software User Manual*, found at **https://ceds.gunter.af.mil/Publications.aspx?AIS=35**. **Note**: Commanders are not authorized to waive the accomplishment of TCTOs but may waive the requirement of the NAAM from reviewing and accomplishing TCTOs if the Commander

designates another office (such as RAWS) to perform that function. All TCTOs need to be documented in IMDS, regardless of if they are applicable at location or not.

2.11. Airfield Operations System Specialist Key Responsibilities. AOSS will:

2.11.1. Monitor the operations of the facility's ATC automated systems during the shift.

2.11.2. Develop, modify, integrate and test computer software. Arrange test routines and prepare documentation.

2.11.3. Perform system updates. Provide NAAM feedback on the integration of automated ATC radar system's site adaptation, Minimum Safe Altitude Warning (MSAW) and digital map databases.

2.11.4. Recommend system enhancements and functional changes and identify system problems. Document and report enhancements and system problems as required.

2.11.5. Store, control, and safeguard automated systems operational computer software programs in accordance with LOP. Maintain the CDR storage library and administer CDR media changes.

2.11.6. Perform system playback, backup and restore functions in accordance with LOP.

2.11.7. Provide technical assistance to the NATCT on training and brief users on the operational use of supported computer systems as required.

2.11.8. Ensure compliance with directives governing security of automated ATC computer systems.

2.11.9. If appointed in writing by the AOF/CC, may accomplish NAAM duties during extended NAAM absences.

2.12. Terminal Instrument Procedures Specialist Key Responsibilities. Refer to AFMAN 11-230, *Instrument Procedures*.

2.13. AOF Staff Position Appointment. All primary AOF staff positions listed in **Chapter 2** should be appointed by the AOF/CC in writing.

Chapter 3

RECORDS MANAGEMENT, INQUIRIES AND DATA

3.1. ATC Forms. Unless otherwise indicated, maintain all forms as official facility records according to AFI 33-322. Publish proper documentation and management of forms in the appropriate LOP.

3.1.1. The CCTLR will ensure forms are ordered through the base publications office or nearest FAA facility as required. **(T-2)**

3.1.2. Flight Progress Strips. Use any FAA approved form, as determined by the type of printing system. Destroy after 6 months unless material is related to a mishap and is required to be maintained beyond 6 months.

3.1.3. DAF Form 3616, *Daily Record of Facility Operation.* Use DAF Form 3616 or suitable substitute to document all abnormal conditions and occurrences during each shift in the airfield operations facilities. An ATC controller other than the WS must include the controller's operating initials when making entries to the DAF Form 3616 or suitable substitute. **(T-2)** **Note:** The operating initials of a controller performing WS training are not required following trainee entries. Facilities may initiate a new form at the beginning of each shift or use one form for a 24- hour period. CCTLRs must sign the DAF Form 3616 or suitable substitute to indicate a review for operationally relevant information. **(T-2)** This form may be computer generated, typed, or handwritten. Destroy after 6 months unless material is related to a mishap and is required to be maintained beyond 6 months.

3.1.3.1. The WS accepts responsibility for the facility by making an initial entry with the exact time and their operating initials in the remarks section. Document temporary absences during the shift unless the WS can immediately recall the controller to duty as determined by the CCTLR. Anytime a WS is relieved, enter the first name initial and last name and indicate the transfer of responsibility for the shift on DAF Form 3616 (e.g., "0901 H. DRAKE OFF, WT ON AS WS"). Entering the name of the relieved WS serves the same purpose as signing the certification statement at the top of the actual form. The WS responsible for the shift must sign the DAF Form 3616 or suitable substitute. **(T-2)** Individuals must not change the entries of a previous WS without the member's consent unless procedures are defined in the facility OI for administrative changes (e.g., acronyms, time sequence, and missed personnel absences). **(T-3)**

3.1.3.2. Use only authorized Air Force, FAA, and ICAO abbreviations and phrase contractions. **Exception:** In addition to Air Force, FAA, and ICAO abbreviations, facility CCTLRs may develop local abbreviations. Include these local abbreviations in the facility OI.

3.1.3.3. CCTLRs may authorize the use of this form to log position times instead of DAF Form 3626, *Position Log*. The CCTLR specifies which form to use and procedures for logging the position times in a facility OI. The CCTLR should ensure use of either form is consistent throughout the facility (i.e., use DAF Form 3616 all the time or DAF Form 3626 all the time).

3.1.4. DAF Form 3626, *Position Log*. Use DAF Form 3626 or a suitable substitute to record individuals responsible for each operating position. The controller being relieved must ensure

the relieving controller's operating initials are on the form at the time they assume responsibility for the position. **(T-2)** If assigning a trainee to a position, include the trainee's initials on the form followed by the relieving controller's operating initials. CCTLRs may specify multiple positions to use a single position log, each position using one side of the form (e.g., positions that are side by side, simulator positions) in a facility OI. The WS position does not require a position log. Destroy after 6 months unless material is related to a mishap and is required to be maintained beyond 6 months.

3.1.5. DAF Form 3624, *Equipment Outage Log.* Use DAF Form 3624, DAF Form 3616, or suitable substitute for recording equipment outages or malfunctions and maintenance notifications. Use one form until filled, or as directed by the CCTLR in a facility OI. Transfer open entries when starting a new log. Use will be consistent throughout the facility (e.g., use DAF Form 3624, DAF Form 3616, or suitable substitute all the time). Destroy after 6 months unless material is related to a mishap and is required to be maintained beyond 6 months.

3.1.6. DAF Form 3622, *Air Traffic Control/Weather Certification and Rating Record.* Use DAF Form 3622 to document weather certifications, operating position certifications, WS and trainer qualifications, and facility ratings, as defined in **paragraph 11.3**.

3.1.7. DAF Form 3623, *Daily Traffic Count*, reference details for use in **paragraph 3.1.9.2**.

3.1.8. ProTime. ProTime is a mandatory airfield operations data system for tracking and reporting air traffic controller proficiency times for AF ATC facilities. This program provides a centralized data storage and reporting tool for manning activity in all control, monitor, and training positions.

3.1.8.1. The CCTLR ensures the ProTime data system includes the following:

3.1.8.1.1. Facility specific configurations (tower, radar, and ground-controlled approach [GCA]).

3.1.8.1.1.1. All positions within a facility.

3.1.8.1.1.2. Airport Surveillance Radar (ASR) and Precision Approach Radar (PAR) configuration data, as required.

3.1.8.1.1.3. Qualification levels (e.g., staff, 5-level, dual rated).

3.1.8.1.1.4. Minimum proficiency time requirements for each qualification level as required in the facility operating instruction.

3.1.8.1.2. Editable crew assignments.

3.1.8.1.3. Capability of creating a single record for each controller performing ATC duties including the following personnel information, at a minimum:

3.1.8.1.3.1. Rank/grade, last name, first name, and operating initials.

3.1.8.1.3.2. Crew assignment.

3.1.8.1.3.3. Qualification level.

3.1.8.1.4. Position logs with the following minimum information:

3.1.8.1.4.1. Proficiency start time as required in facility operating instruction.

3.1.8.1.4.2. Controller operating initials.

3.1.8.1.4.3. Monitor operating initials.

3.1.8.1.4.4. ASR and PAR counts, as applicable.

3.1.8.1.4.5. Proficiency termination time as required in facility operating instruction (documented by placing closed "CLSD" in the "operating initials" column).

3.1.8.1.5. Reporting.

3.1.8.1.5.1. Ability to produce a read-only report.

3.1.8.1.5.2. Each report indicates where a controller did not meet minimum proficiency requirements (i.e., requirements not met are highlighted in red).

3.1.8.2. The CCTLR will coordinate corrections and/or recommendations to the ProTime data system through the appropriate MAJCOM ATC representative and then forwarded to the HQ AFFSA, Air Traffic Control Division (AFFSA/XAT) (**hqaffsa.xat@us.af.mil**). **(T-2)**

3.1.9. Air Traffic Activity Reporting System (ATARS).

3.1.9.1. Submitting reports and focal points**:**

3.1.9.1.1. Unit responsibilities. Serve as the focal point for initiating traffic count data and developing reports.

3.1.9.1.2. MAJCOM responsibilities.

3.1.9.1.2.1. Serve as the focal point for compiling unit reports and forwarding annual data submissions to AFFSA/XAT (**hqaffsa.xat@us.af.mil**).

3.1.9.1.2.2. Forward annual traffic count data inputs to AFFSA/XAT no later than 15 November, for the prior fiscal year.

3.1.9.1.2.3. Resolve unit traffic count information problems associated with ATARS.

3.1.9.1.2.4. Submit annual reports in XML format.

3.1.9.1.2.5. Coordinate with AFFSA/XAT to approve counting activities in the "special use" sub-category.

3.1.9.1.3. HQ AFFSA responsibilities.

3.1.9.1.3.1. Serve as the focal point for gathering, compiling, and disseminating ATARS reports.

3.1.9.1.3.2. Resolve MAJCOM traffic count information problems associated with ATARS.

3.1.9.1.3.3. Provide composite annual reports to the Air Staff, MAJCOMs, and other appropriate agencies upon request.

3.1.9.2. Traffic count documentation.

3.1.9.2.1. CCTLRs ensure daily documentation of air traffic activities using ATARS.

3.1.9.2.2. Retain DAF Form 3623, or suitable substitute, as a backup to the automated report program.

3.1.9.2.3. Retain current and previous fiscal year traffic count documentation.

3.1.9.2.4. Count air traffic activity in four, six-hour periods per day, beginning at 0000 local.

3.1.9.2.5. Control tower facilities record a count of one for each aircraft in the formation regardless of the category, type, or approach.

3.1.9.2.6. Radar facilities record a count of one for the flight for each category, type, or approach, when controlling a formation through instructions to a single aircraft within the flight. **Note:** Record a count of one for each formation or single aircraft for each category and type of approach, when formation flights split into smaller formations or single aircraft.

3.1.9.2.7. Count aircraft operations according to category, type of activity, and type of approach.

3.1.9.2.8. Do not count aircraft traversing special use airspace (SUA) (e.g., Military Operating Areas [MOAs]) as a separate operation for traffic count purposes.

3.1.9.3. ATARS consist of the following information:

3.1.9.3.1. Separate activity categories for: military, civil general aviation, air carrier or air taxi, helicopter, and other (tower and radar).

3.1.9.3.2. Separate sub-categories to count the type of activity in each main category.

3.1.9.3.3. IFR arrivals (tower and radar).

3.1.9.3.4. IFR departures (tower and radar, excluding Radar Final Control).

3.1.9.3.5. Visual Flight Rules (VFR) local and VFR itinerant (tower only).

3.1.9.3.6. VFR service, over-flights, PAR, ASR and Instrument Landing System (ILS).

3.1.9.3.7. Special use (tower and radar).

3.1.9.4. ATARS categories (defined):

3.1.9.4.1. Military – aircraft belonging to a nation's armed forces, including UAS operations requiring ATC coordination in controlled airspace (tower and radar).

3.1.9.4.2. General aviation – aircraft of any national registry operated by a private person, company, public company, government agency, or flying club not conducting air carrier or air taxi operations, including UAS operations requiring ATC coordination in controlled airspace (tower and radar).

3.1.9.4.3. Scheduled air carrier or air taxi – aircraft conducting operations for compensation or hire (e.g., World Air, Tower Air, Federal Express, U.S. commercial airlines, and charter services such as Tango Cessna TN4426E), including UAS operations requiring ATC coordination in controlled airspace (tower and radar).

3.1.9.4.4. Helicopter – military helicopter operations. This includes operations conducted under IFR and/or VFR.

3.1.9.4.5. Other – operations wherein a VFR tower receives a point-out for an IFR aircraft executing an instrument approach to an adjacent airport, or as otherwise coordinated and approved for use by the MAJCOM. This area constitutes a non-countable category and values tabulated in this area do not affect the "type of activity" sub-categories totals (e.g., IFR arrivals, IFR departures).

3.1.9.5. Type of activity (defined):

3.1.9.5.1. IFR departure – IFR or Special Visual Flight Rules (SVFR) departures and IFR, SVFR, or VFR aircraft flying an instrument approach which terminates in other than a full-stop landing and continues to receive IFR service.

3.1.9.5.2. IFR Arrival – IFR, SVFR, and VFR aircraft, that fly an instrument, visual, or contact approach to an airport or point-in-space.

3.1.9.5.3. VFR Local – VFR aircraft that arrive or depart an airport served by the control tower.

3.1.9.5.4. VFR Itinerant – VFR aircraft that originate outside the tower's designated airspace and fly through the airspace without making an approach.

3.1.9.5.5. VFR service – VFR aircraft that receive services but do not make an instrument approach.

3.1.9.5.6. Over-flight – IFR or SVFR aircraft that originate outside the area of jurisdiction and fly through the area without making an approach. "Area of jurisdiction" is defined as the total designated or depicted airspace (lateral and vertical) boundaries over which an ATC facility has authority, including all subdivided sectors for air traffic control reporting purposes. Do not count aircraft transitioning the area of jurisdiction as multiple over-flights and/or SUA activities when tabulating one aircraft or a flight's, route of flight.

3.1.9.5.7. Special use – Aircraft (including UAS) that conduct activities in airspace of defined dimensions identified by an area on the surface of the earth wherein activities are to be confined because of their nature or wherein limitations may be imposed upon aircraft operations that are not a part of those activities.

3.1.9.5.7.1. Count activities conducted in alert areas, controlled firing areas, MOAs, prohibited areas, restricted areas, and warning areas as special use operations.

3.1.9.5.7.2. Any other area or activity not listed requires MAJCOM approval.

3.1.9.5.7.3. Counting of SUA operations only occurs when an aircraft or flight employs the intended purpose of the SUA.

3.1.9.5.7.4. Use of multiple sectors within the same MOA by the same aircraft or flight is only counted as one SUA operation. This includes aircraft or flights authorized to work combined sectors within the same MOA, or those which transition from working one sector to working another sector within the same MOA. **Exception:** When elements of a flight operating in assigned SUA require separate ATC identification and services, count each operation as a separate SUA activity. For counting purposes, the key determinant is after flight split-up, each

element requires separate ATC identification and services apart from previous flight activities. In this case, count each operation as separate SUA activity using the provisions of this paragraph.

3.1.9.5.8. An aircraft or flight may be counted as either an over-flight or a SUA activity, but not both.

3.1.9.6. Type of approach (defined):

3.1.9.6.1. PAR – any aircraft which conducts a PAR approach.

3.1.9.6.2. ASR – any aircraft which conducts an ASR approach.

3.1.9.6.3. ILS – any aircraft which conducts an ILS approach.

3.1.9.6.4. Tactical Air Navigation – any aircraft which conducts a Tactical Air Navigation approach.

3.1.9.6.5. Area Navigation – any aircraft which conducts an Area Navigation approach.

3.1.9.6.6. Global Positioning System – any aircraft which conducts a Global Positioning System approach.

3.1.9.6.7. Non-Directional Beacon – any aircraft which conducts a Non-Directional Beacon approach.

3.2. Charts, Maps, Publications and Instruction Files.

3.2.1. CCTLRs must maintain current Flight Information Publications (FLIP) pertinent to their area of responsibility. **(T-2)** CCTLRs must ensure depictions of the area of control and the location (e.g., bearing and distance) and frequency of each Navigational Aid (NAVAID) are readily available. **(T-2)** Control towers and RFC facilities are exempt from maintaining a depiction of their area of control.

3.2.2. CCTLRs must provide a Recent Information File (RIF) and ensure review by all controllers. **(T-2)**

3.2.3. CCTLRs must develop a Ready Reference File (RRF) tailored to each operating position (e.g., Approach Control, Approach Assist) and should consider suitability for abnormal operations (e.g., power outage, facility evacuation). **(T-2)** Define, identify and maintain local procedures or instructions supplementing regulatory guidance pertinent to an operating position. **Note:** The intent of a RRF is to streamline information for rapid reference in time-sensitive situations using concise statements.

3.2.4. CCTLRs must ensure the control tower contains the following:

3.2.4.1. Current on-base emergency management grid map (i.e., crash grid map) (off-base, when available). **(T-2)** CCTLRs will ensure inclusion in Civil Engineering (CE) update notification procedures and verify the accuracy of grid maps with base CE annually. **(T-2)** The CCTLR should coordinate with CE for training materials on local mapping products as required.

3.2.4.2. Airport diagram (e.g., runways, ramps, barrier or arresting gear, blind spots, overrun information, precision approach critical areas, Precision Obstacle Free Zone (POFZ) markings). **(T-2)**

3.2.4.3. Visibility checkpoint chart(s) and/or visibility aids (day and night markers) developed in accordance with AFMAN 15-111, *Surface Weather Observations*, with assistance from the local weather station. **(T-2)** CCTLRs will ensure local weather personnel validate visibility checkpoint charts annually (not applicable to Morón AB). **(T-2)** **Note:** Limited Aviation Weather Reporting Stations (LAWRS) certified CCTLRs may certify visibility checkpoint charts.

3.2.4.4. Current sunrise and sunset tables. **(T-2)** Tables are accessible from the Air Force Weather Web services (AFW-WEBS) website at **https://weather.af.mil/AFW_WEBS/**. Log in to **https://weather.af.mil/AFW_WEBS/**. Mouse over the "interactive" tab along the top potion of the page, scroll down to "Point-Based Products," then select "Solar/Lunar Rise/Set Tool." Input the desired date, duration, and 4-letter ICAO identifier or "LAT/LONG" of your location then click "Get Product."

3.2.4.5. Intersection takeoff diagram (at locations that authorize intersection takeoffs). Show the remaining runway length from each authorized departure intersection. Show all unauthorized departure intersections on the diagram. For example: //NO TAKEOFF//. Combine the intersection takeoff diagram with the airport diagram, when possible. Acquire measurements from an official source and record them on the diagram, reduced to the lower 50-foot increment. **(T-1)**

3.2.4.6. Diagram (e.g., video display, chart) of the airfield lighting system. Quick reference checklist or table identifying the operation of the airfield lighting system and proper light settings. **(T-0)**

3.2.4.7. Consolidated wake turbulence chart if authorized for use. **(T-2)**

3.2.5. CCTLRs must ensure the radar facility contains the following:

3.2.5.1. A runway diagram for each airport served. As a minimum, include length and width, barrier or arresting gear, and overrun information. **(T-2)**

3.2.5.2. A Minimum Vectoring Altitude (MVA) chart developed in accordance with FAAO 8260.3E, *United States Standard for Terminal Instrument Procedures (TERPS)*. **(T-0)**

3.2.5.3. A minimum IFR altitude chart for each NAVAID required for non-radar operations. Develop in accordance with AFMAN 11-230 and AFMAN 13-215 Volume 2, *Airfield Operations Charts and Instrument Operations Procedures Support*. **(T-0)**

3.2.5.4. Recommended altitudes for surveillance approaches developed in accordance with AFMAN 11-230, if applicable. **(T-0)**

3.2.5.5. Consolidated wake turbulence chart if authorized for use. **(T-2)**

3.2.5.6. Diverse vector area chart if applicable. **(T-2)**

Chapter 4

ATC DEVELOPMENT/UPGRADE TRAINING (ENLISTED), FACILITY MANAGEMENT, AND OPERATING PROCEDURES

4.1. ATC Upgrade Training (UGT). Upgrade training is necessary to be awarded a higher skill level. Personnel are entered into 5-level UGT on the date arrived station (DAS) and 7-level UGT on the first day of the SSgt (E-5) promotion cycle. Individuals must meet DAFMAN 36-2689 training requirements and the following for award of the below skill levels:

4.1.1. ATC Apprentice (1C131). Primary Air Force Specialty Code (PAFSC) 1C131 is awarded upon completion of the *ATC Operations Apprentice Course* at Keesler AFB Technical Training Center or as a result of the recruiting process when an individual has successfully completed a formal DoD/FAA ATC course.

4.1.2. ATC Journeyman (1C151). PAFSC 1C151 is awarded after completing requirements for the 053, 056, or 364 SEI.

4.1.3. ATC Craftsman (1C171). For 7-skill level upgrade, individuals must satisfactorily complete all training requirements identified in the Craftsman Course Training Standard (CTS) and the Craftsman myLearning course. The waiver authority for 7-level training requirements is the CFM. **Note:** Trainees are automatically enrolled in ATC myLearning course E6ACS1C171 000, *Craftsman Course* by Air Force Personnel Center (AFPC) except for out-of-cycle promotees and cross trainees, request a Training Line Number (TLN) through your UTM. Your UTM will coordinate with base training and AFPC to obtain a TLN. Trainees must successfully pass the end of course test within 180 calendar days of the course start date. ANG will coordinate enrollment of their personnel in the myLearning course. The waiver authority for 7-level training requirements is the CFM, as identified in the DAFMAN 36-2689 5.2.1.9.

4.2. Special Experience Identifier (SEI). The official guide for SEI award/removal criteria, and the guidance used by AFPC, is the Air Force Enlisted Classification Directory (AFECD) located on the myFSS website at: **https://myfss.us.af.mil**. The CFM keeps applicable portions of the AFECD current and supplements the criteria with CFM policy letter(s), hosted on the HQ AFFSA SharePoint.

4.2.1. Some ATC positions/skill-levels defined in this publication have an associated SEI. ATC SEIs represent combat capabilities and are also used for assignment requirements. AOF leadership is expected to ensure personnel records for each assigned ATC Airman represents the most current experience an Airman possesses.

4.2.2. The CCTLR must ensure processing of an AF Form 2096, *Classification/On-The-Job Training Action*, to award the appropriate SEI. **(T-3)** This is done to award the appropriate SEI when the training requirements have been fulfilled for a special experience position. The process is completed according to qualifications listed in the AFECD, the Air Traffic Safety Oversight service (AOV) credentialing system, and **Attachment 2** of this publication and/or CFM policy letter(s) hosted on the HQ AFFSA SharePoint, as applicable. **Note:** The Airfield Operations Prioritization and Sequencing Guidance, located on the HQ AFFSA Airfield Operations SharePoint website, may contain additional instructions concerning the posturing of certain SEIs after initial award. Air and Space Expeditionary Force (AEF) posturing

guidance should be published at AEF Online or distributed electronically by higher headquarters (HHQ) if deemed necessary.

4.3. ATC Facility OI Construction. CCTLRs must ensure that each ATC facility has a facility OI that addresses the following at a minimum:

4.3.1. Responsibilities and functions of each operating position. **(T-2)**

4.3.1.1. Operating position that will have an operational aural alarm for weather alerts. **(T-2)**

4.3.1.2. Position responsible for collecting and disseminating weather data during equipment outages. **(T-2)**

4.3.1.3. Most complex operating position(s). **(T-2)**

4.3.2. Proficiency program requirements and procedures. **(T-2)**

4.3.3. Position consolidation procedures. **(T-2)**

4.3.4. Pre-duty familiarization procedures. **(T-2)**

4.3.5. Alternate communications. **(T-2)** Interim or alternate communications procedures to use if primary radios or landlines fail. **(T-2)**

4.3.6. Alternate ATC capabilities, as applicable. **(T-2)** Include transition procedures and any restrictions on flight operations and/or vehicle movement. **(T-2)**

4.3.7. Equipment checklist procedures. **(T-2)**

4.3.8. Form documentation instructions. **(T-2)**

4.3.9. RIF review/documentation requirements. **(T-2)**

4.3.10. Voice recorder operating procedures, to include tape change procedures if applicable. **(T-2)**

4.3.11. Facility evacuation procedures. **(T-2)**

4.3.12. Restricted runway operation procedures, as applicable. **(T-2)** Refer to **paragraph 6.11.1** for specific requirements.

4.3.13. Annual uninterruptible power supply (UPS) operational check procedures. **(T-2)**

4.3.14. Facility opening and closing procedures, if applicable. **(T-2)**

4.3.15. NAVAID monitoring procedures, if applicable. **(T-2)**

4.3.16. Normal workload conditions. Normal workload conditions are a period where normal traffic workload and conditions are expected to occur. **(T-2)**

4.4. Facility Staffing Requirements. CCTLRs must staff each ATC facility with the following minimums:

4.4.1. Control tower, GCA or RFC: One qualified WS and one qualified controller. **(T-2)** When an additional qualified controller is not assigned, or critical mission requirements do not allow the CCTLR to schedule an additional qualified controller, a control tower, GCA or RFC may operate with only one qualified WS during mid-shifts or other periods of low traffic

density (e.g., early dayshift, wing down days). **Note:** Thule AB operates as a Terminal Radar Approach Control in the tower cab with one qualified WS and one qualified controller.

4.4.1. **(ACC)** ACC defines low traffic density as, typically controlling no more than two simultaneous aircraft.

4.4.2. Radar Approach Control (RAPCON): One qualified WS and two qualified controllers. **(T-2)**

4.4.2.1. RAPCONs without the PAR function, only require one qualified WS and one qualified controller. **(T-2)**

4.4.2.2. CCTLRs must ensure additional controllers are on duty, as required, to cover periods of increased traffic activity. **(T-2)**

4.4.3. The published MAJCOM supplement or policy letter, serves as the manpower authorization source document as required by the 13E1 Capabilities-Based Manpower Determinant. The published operating hours per facility should be established according to the example in **Table 4.1**.

Table 4.1. Published Operating Hours per Facility Example.

Days	Facility	# Positions	# Hours
Weekdays	Tower	4	16
		2	8
	RAPCON	7	12
		5	6
		3	6
Weekends	Tower	3	8
		2	8
	RAPCON	5	12
		3	4

4.5. ATC Restrictions and Duty Limitations. To manage or operate a control position in an Air Force ATC facility, individuals must comply with Title 14, Code of Federal Regulations (CFR), Part 65, *Certification: Airmen Other Than Flight Crewmembers* as well as requirements identified in **paragraph 11.3**. **(T-0)** Applicable requirements have been incorporated into this manual. The CCTLR must develop local procedures to ensure compliance with the following. **(T-0)**

4.5.1. Medical Requirements:

4.5.1.1. Military controllers must meet physical qualifications according to DAFMAN 48-123, *Medical Examination and Standards*. **(T-1)** Civilian (GS-2152) controllers must obtain and maintain a valid Class II FAA physical examination and certificate. **(T-0)** The physical examination for GS-2152s must be performed by a designated aero medical

examiner (AME) or flight surgeon's office. **(T-2) Note:** Payment for the annual General Schedule (GS)-2152 Class II physical examination is a unit responsibility as a condition of employment. Per the Air Force Medical Support Agency, an AME-certified military doctor can perform duties of AME.

4.5.1.2. Personnel ordinarily assigned to an operating position, including those who directly supervise within the facility, must not use any drug likely to affect alertness, judgment, vision, or state of consciousness within a 24-hour period before assumption of duty unless a medical waiver is obtained. **(T-1) Note:** Controllers should contact the flight surgeon's office immediately for any prescriptions received from non-flight surgeon personnel.

4.5.1.3. Controllers must not be assigned ATC duties for at least 12 hours after donating blood (formal flight surgeon restriction not required). **(T-2)** Controllers must coordinate with the CCTLR prior to giving blood to minimize mission impact. **(T-2)**

4.5.1.4. Appropriate medical authority must clear controllers receiving unscheduled medical or dental treatment (e.g., emergency room) before the controller performs ATC duties. **(T-2)** If emergency medical care/treatment is required, notify the CCTLR as soon as possible. The appropriate Aero Medical Examiner must clear civilian (GS-2152) controllers. **(T-2)**

4.5.1.5. Controllers must coordinate with the CCTLR prior to scheduling and receiving non-emergency medical/dental treatment or immunizations which could affect duty performance capability. **(T-2) Note:** Controllers cannot perform ATC duties for at least eight hours after receiving a local or general anesthetic agent.

4.5.1.6. Controllers must coordinate elective medical procedures with the CCTLR to avoid unplanned loss of work due to DNIC status, which may result from the procedure. **(T-2)**

4.5.1.7. Controllers must neither perform ATC duties nor directly supervise other controllers, while under the influence of alcohol, (blood alcohol level of .04 or greater) or within 12 hours of consuming any amount of alcohol. **(T-1)** If alcohol is used during off-duty time, the usage should be conservative, so an individual's mental alertness and ability to perform are not reduced by the after-effects (hangover) of alcohol. Abstinence 12 hours before commencing ATC duties does not guarantee blood alcohol level below .04 at the start of duty when large amounts are consumed.

4.5.1.8. Remote or Isolated Duty. Controllers going to a base or location that does not have an Air Force medical treatment facility with a physical examination section, must complete a preventive health assessment (PHA) or periodic medical examination as required, if the exam is due during the tour or deployment. **(T-1)** Additional guidance is available in AFI 48-170, *Periodic Health Assessment*.

4.5.2. Hours of Duty in support of US or Host Nation (HN) NAS and/or civil traffic. To enhance flight safety, air traffic controllers' duty hours are restricted to ensure they are not fatigued while performing ATC duty. CCTLRs must comply with the following guidance when scheduling air traffic controllers for duty.

4.5.2.1. A normal shift should be eight hours and must not exceed ten hours. **(T-1)**

4.5.2.2. A scheduled off-duty period between shifts must occur. **(T-1)** The duration of the off-duty period will be at least 12 hours for military, DoD civilian controllers filling Unit Type Code (UTC) taskings, and civilian controllers assigned as a reservist to a deployable UTC. The duration of off-duty time will be at least 8 hours for Civilian DoD controllers. **(T-1)**

4.5.2.3. When unforeseen events prevent staffing a facility as scheduled (emergency leaves, controllers in DNIC status, or other short-notice unexpected loss of personnel), controllers may be recalled to ATC duty with only eight hours between shifts.

4.5.2.4. Duty time begins with the first scheduled duty, either ATC or non-ATC. Once duty time begins, it is continuous. After ten hours of continuous duty, controllers must not perform further ATC duty. **(T-1)** A 12-hour uninterrupted break (8 hours when unforeseen events occur and/or for non-UTC tasked DoD civilian controllers) must occur before the controller's next scheduled duty time requiring performance of ATC duties. **(T-1)** Controllers must have at least 24 hours of uninterrupted, off-duty time following 6 consecutive days of duty. **(T-1)**

4.5.2.5. MAJCOM and numbered air force commanders may direct 12-hour surge shifts only at locations outside the NAS, where required to support contingencies or exercises. When using surge shifts, controllers must have a 12-hour uninterrupted rest period between shifts. **(T-1)**

4.5.3. Hours of Duty for Operations not in support of US or HN NAS and/or civil traffic (e.g., Landing Zone [LZ] operations, military exercises within restricted airspace).

4.5.3.1. A normal shift will not exceed 12 hours. **(T-3)**

4.5.3.2. A scheduled off-duty period between shifts must occur. **(T-1)** The duration of the off-duty period will be at least 8 hours. **(T-3)**

4.6. Proficiency Program. CCTLRs must establish monthly position time requirements and track controller proficiency time in accordance with **paragraph 3.1.8**. **(T-2)** Track proficiency time requirements from the first to the last day of each calendar month, and outline additional actions for a controller who fails to meet monthly proficiency time requirements in a facility OI. **(T-2)**

4.6.1. Controllers must maintain proficiency, competency as well as required time minimums, in all positions in which they are certified. **(T-2)** When positions are combined, proficiency time may count for each position provided the controller performs ATC duties associated with each position under normal workload conditions. A controller must perform air traffic control duties under normal workload conditions in each operating position they are certified in no later than the end of the last day of each month. **(T-2)**

4.6.2. Only apprentice controllers, prior to receiving initial SEI, can receive proficiency time while being monitored by a trainer for the positions in which they are certified. Individuals may receive proficiency time while monitoring trainees as determined by the CCTLR. **Note:** 13Ms who have completed required certifications but do not have a facility rating may also receive proficiency time while being overseen by a trainer for the positions in which they are certified.

4.6.3. Simulation scenarios may be used to maintain controller proficiency; however, CCTLRs must ensure simulation does not exceed 50% of the overall time requirement. **(T-3)**

4.6.4. Qualified WS may count time worked while monitoring WS trainees for Special Duty Assignment Pay requirements.

4.7. Consolidating Positions. The WS must assign personnel to positions as required by activity, equipment and facility function. **(T-3)** The WS should consolidate positions only after considering activity and qualifications of the personnel involved (reference **paragraph 4.4** for facility staffing requirements). The WS will not combine local control with any other operating position, except during periods of authorized single-controller operations. **(T-1)**

4.8. Operating Initials. CCTLRs must assign unique two-letter operating initials to controllers to identify them for record purposes. **(T-0)** Unless signatures are specifically requested, controllers use assigned operating initials for all operating forms, interphone contacts, marking of recordable data media, and other records. CCTLRs must maintain a listing of controller initials. **(T-3)** Duty rosters with name and initials can meet this requirement. **Note:** ATC personnel will use payroll initials (i.e., HDD) on the DAF Form 1098, *Special Task Certification and Recurring Training,* CFETP, or DAF Form 797, *Job Qualification Standard Continuation/Command Job Qualification Standard*. **(T-2)**

4.9. Pre-Duty Familiarization. CCTLRs must establish pre-duty familiarization procedures that provide for a comprehensive and smooth transition from one crew to the next in a facility OI. **(T-0)** Procedures should allow for continuity of ATC services without interruption. CCTLRs may increase the number of items and/or the level of detail of the pre-duty briefing and the position relief checklist as deemed necessary.

4.9.1. CCTLRs must ensure the following areas to facility operations are in the pre-duty familiarization briefing, as applicable:

4.9.1.1. Status Information Areas/Boards. **(T-2)**

4.9.1.2. Equipment (e.g., NAVAIDs, radar, radios, weather dissemination systems). **(T-2)**

4.9.1.3. Airport Conditions/Status (e.g., runway surface condition (RSC), runway suspensions). **(T-2)**

4.9.1.4. Airport Activities (e.g., snow removal, vehicles on runway). **(T-2)**

4.9.1.5. Altimeter/Trends. **(T-2)**

4.9.1.6. Weather (current and forecasted). **(T-2)**

4.9.1.7. Special Activities (e.g., restricted or warning areas in use, UAS operations, flight checks). **(T-2)**

4.9.1.8. Special Instructions/Restrictions (e.g., due to adjacent position training, non-standard staffing/configuration). **(T-2)**

4.9.1.9. Facility Staffing/Training Assignments (e.g., current/proposed daily training plan). **(T-2)**

4.9.1.10. New procedures. **(T-2)**

4.9.1.11. Applicable Notice to Airmen (NOTAM). **(T-2)**

4.9.2. CCTLRs must ensure position relief briefings follow locally developed checklists and that briefings are being recorded. **(T-2)**

4.9.3. Controllers must read/sign off on operational procedure changes (e.g., RIF) prior to assignment to an operational position. **(T-2)**

4.10. Wind Information.

4.10.1. Select wind sensors for the approach end of runway unless an operational advantage will result from another setting. Advise pilots if reported wind is from other than the approach end of runway. Including this information on the Automatic terminal information service (ATIS) broadcast satisfies this requirement, if pilots advise they have current ATIS information. **Exception:** Locations where only one wind sensor is installed are not required to advise pilots the wind is not from the approach end.

4.10.2. Controllers will issue wind direction and speed from wind displays. **(T-2)** When wind displays are unavailable, issue wind information contained in the latest weather sequence, prefaced with the term "wind estimated." **Note:** Base Weather is the authority for determining if winds should be estimated at locations without LAWRS certified controllers. ***Example****: "WIND TWO-TWO-ZERO AT ONE-FIVE."*

4.10.2.1. Controllers will issue wind gusts when observed. **(T-3)** ***Example:*** *"WIND TWO-TWO-ZERO AT ONE- FIVE, GUST TWO-SEVEN."*

4.10.2.2. Controllers will issue variable wind information when observed. **(T-3)** Variable wind is defined as a wind direction change of 60 degrees or more in the preceding 2 minutes, when the wind speed is greater than 6 knots. For reasons of operational advantage or pattern efficiency, the Operations Group Commander (OG/CC) may waive the requirement to issue variable winds to wing aircraft. If waived, document procedures in the Airfield Operations Instruction (AOI). ***Example****: "WIND THREE-ONE-ZERO AT ONE-FIVE, VARIABLE BETWEEN TWO-SEVEN- ZERO AND THREE-FOUR-ZERO."*

4.10.2.3. Controllers should issue gust spread only if specifically requested by the pilot. Gust spread is defined as the difference between wind speed lull and wind speed peak during the preceding 10 minutes. ***Example****: "GUST SPREAD TWO-THREE."*

4.11. Use of Communications. Use ATC frequencies for the transmission authorized ATC instructions and information (guidance located in FAAO JO 7110.65AA, **Chapter 2**).

4.11.1. Controllers must not transmit or permit the transmission of:

4.11.1.1. Non-ATC instructions and information, except as in paragraph **4.11.2** and **4.11.3** below. **(T-0)**

4.11.1.2. Obscene, indecent or profane language. **(T-0)**

4.11.1.3. False or deceptive communications. **(T-0)**

4.11.1.4. Willful or malicious interference with other communications. **(T-0)**

4.11.1.5. Superfluous or unauthorized transmissions including remarks of a personal nature. **(T-0)**

4.11.2. Occasionally, it is necessary to transmit a message not directly associated with ATC but pertains to safety of aircraft operation or preserving life or property. In these situations,

controllers or non-ATC individuals may transmit such a message. A non-ATC person will only transmit this kind of message if:

4.11.2.1. The transmission is coordinated with ATC facilities prior to transmitting. **(T-0)**

4.11.2.2. ATC instructions are not issued. **(T-0)**

4.11.2.3. Controllers can interrupt transmissions to continue ATC services. **(T-0)**

4.11.3. ATC facilities relay essential non-ATC instructions to aircraft if no other source of communications is available and transmissions do not interfere with the controller's responsibility to prevent collision between aircraft.

4.11.3.1. Commanders must ensure maximum use of pilot-to-dispatch, operations center, or similar facilities to relay non-ATC information. **(T-2)**

4.11.3.2. Relaying distinguished visitor (DV) information is necessary for military protocol. An ATC facility with direct landline capability may relay DV information to a single agency (AM, operations center or command post). The use of automated notifications is authorized if procedures are contained in a LOP or AOI.

4.11.3.3. When an unauthorized agency uses an ATC frequency, the WS must make an entry on the DAF Form 3616. **(T-2)**

4.11.4. Unless safety of flight or necessity for the control of air traffic dictates otherwise, controllers should avoid transmitting to aircraft in the following critical phases of flight: short final, touchdown, landing roll, departure roll, and initial climb-out.

4.12. Landline Operations. CCTLRs must ensure ATC facilities have direct and reliable landline communications with adjacent terminal and enroute facilities and specified base agencies. **(T-0)** The CCTLR must ensure each telephone line and landline terminates in a communications key system in the facility, if possible. **(T-0)** A direct landline is a dedicated telephone circuit that terminates in two facilities only, with no access available by another facility. Two-digit ring lines between enroute and terminal facilities meet the above criteria. **Note:** The optimum configuration between ATC facilities is a direct ring line or a "shout" line.

4.13. Radar and Tower Coordination.

4.13.1. To ensure proper sequencing of all arriving radar traffic, define radar and tower coordination procedures in a LOP.

4.13.1.1. Establishing Local Procedures and Requirements:

4.13.1.1.1. Define inbound aircraft notification and coordination procedures to include distances from touchdown or end of runway for the coordination points listed in the LOP. Adjust distances outward, if necessary, to meet local operating conditions in a LOP.

4.13.1.1.2. Define multiple approach procedures, where required.

4.13.2. Coordinate all arriving radar traffic as follows:

4.13.2.1. Inbound Notification. When an arriving aircraft has reached a specified point from the runway (normally 15 flying miles):

4.13.2.1.1. Radar controller provides the tower controller with aircraft identification, type, position, type of approach, and type of landing. State range if other than specified in the LOP.

4.13.2.1.2. Tower controller acknowledges receipt of arrival information.

4.13.2.1.3. CCTLRs must develop procedures in a facility OI that stipulate when to transfer communications to tower, unless local procedures require radar monitoring using PAR equipment. **(T-2)**

4.13.2.2. Landing Clearance. When an aircraft is (minimum) four miles from touchdown or end of the runway, the radar controller should request tower clearance for landing, touch-and-go, stop and go, low approach or for the option.

4.13.2.2.1. Radar controller should, verbally state type landing and operating position. State range if other than specified in the LOP.

4.13.2.2.2. Tower controller acknowledges and issues a verbal landing, touch-and-go, stop and go, low approach or for the option clearance when the aircraft is no closer than 3 miles, from touchdown or end of runway. The clearance includes field and traffic information if appropriate, and altitude restrictions for a low approach, if required.

4.13.2.2.3. Radar controller relays the tower clearance verbatim (may simultaneously transmit the clearance to the aircraft and tower).

4.13.2.3. Establish procedures to cancel the clearance for aircraft on final approach to include go around/breakout instructions.

4.13.2.3.1. Tower controller will furnish a reason when denying or canceling a clearance. **(T-2)**

4.13.2.3.2. The radar controller must verbally advise the tower of a radar-initiated go-around for the first aircraft on final. **(T-2)** Tower acknowledgment indicates receipt of the radar-initiated go-around.

4.13.3. Minimum Distance Without Final Clearance. Do not continue a radar or radar-monitored approach closer than three miles from touchdown using PAR equipment or three miles from end of runway using ASR equipment without verbal clearance from the tower controller. These requirements must be contained in a LOP between the tower and the servicing radar facility. **(T-2)**

4.14. Automated Functions.

4.14.1. When automated functions are used to coordinate arrivals, the CCTLR must ensure the LOP governing tower/radar coordination procedures specifies:

4.14.1.1. Procedures for data transfer between the radar facility and tower. **(T-2)**

4.14.1.2. Communications changeover points. **(T-2)**

4.14.1.3. Hours or conditions under which facility policy prohibits use of these functions. **(T-2)**

4.14.1.4. Operating positions with the authority to determine whether use of automated functions is satisfactory or some other means of arrival coordination. **(T-2)**

4.14.2. Rolling/boundary notification. Automation is an authorized/approved method to establish nonverbal rolling/boundary notification for each departing aircraft. Nonverbal notification can be accomplished via a manual, electronic, or automation (e.g., Airfield Automation System (AFAS) notification).

4.14.3. Initial Departure Separation Authority (e.g., automatic releases). When the radar facility delegates automatic release authority, tower personnel must provide initial separation for arriving/departing aircraft provided these procedures are identified in a LOP. **(T-2)**

4.14.3.1. The CCTLR must ensure at a minimum, that the LOP covering procedures for Initial Departure Separation (automatic releases) include:

4.14.3.1.1. Arrival/Departure minimum cut-off distances. **(T-2)**

4.14.3.1.2. A statement mandating "automatic releases are not authorized when the official weather for the airport is reported as less than a 1000-foot ceiling and/or less than three miles official visibility or when the tower visibility is reported as less than three miles." **(T-2)**

4.14.3.1.3. Either facility may cancel automatic releases when deemed necessary. **(T-2)**

4.15. Opposite Direction Traffic. CCTLRs must develop and define Opposite Direction Operation (ODO) procedures in the AOI and in a Letter of Agreement (LOA) when the FAA provides radar services or the Tower/RAPCON coordination LOP where the Air Force provides approach and tower services. **(T-0)** Controllers must restrict same-runway opposite direction operations with opposing traffic inside the applicable cutoff points unless an emergency situation exists. **(T-0)** **Note:** The Air Force ATC definition for ODO is: IFR/VFR operations conducted to the same or parallel runway, greater than 135 degrees in a reciprocal direction of the runway being utilized for the ODO operation.

4.15.1. ODO procedures apply to all aircraft whether or not the aircraft is operating VFR or IFR. At locations that conduct ODOs for aircraft receiving separation services, the CCTLR must ensure facility directives define minimum cutoff points, distances or fixes for same runway operations. **(T-0)** Consider all airfield conditions and flight profiles (e.g., aircraft performance, runway configuration, type of approach, tactical procedures) which may affect ODOs.

4.15.2. For aircraft receiving IFR/VFR services that are conducting ODO to the same runway, CCTLRs must ensure facility directives define minimum cutoff points between:

4.15.2.1. An arrival and a departure. **(T-2)**

4.15.2.2. An arrival and an arrival. **(T-2)**

4.15.2.3. The cutoff points established must be in flying miles and ensure required lateral separation exists. **(T-1)** **Note:** Established cutoff points do not absolve the controller from the application of any applicable time-based wake turbulence criteria.

4.15.2.3.1. When a departing aircraft becomes airborne and has been issued a turn to avoid conflict or when the first aircraft has crossed the runway threshold for opposite direction arrivals. **(T-2)**

4.15.2.3.2. If the above conditions are not met, action must be taken to ensure control instructions are issued to protect the integrity of the cutoff points. **(T-2)**

4.15.2.4. For VFR aircraft which are conducting ODO to same or parallel runways, CCTLRs must ensure facility directives specify that VFR aircraft are issued a turn to avoid conflict with opposing IFR/VFR traffic. **(T-1)**

4.15.3. For aircraft receiving IFR services that are conducting ODO to parallel runways, regardless of distance between centerlines:

4.15.3.1. Ensure a turn away from opposing traffic is issued when opposing traffic is inside cutoff points.

4.15.3.2. Use of visual separation is authorized once a turn from opposing traffic is issued.

4.15.4. Controllers must conduct all coordination on a recorded line. **(T-1)** Controller's initial coordination must include the phrase below. **(T-1) PHRASEOLOGY***: "OPPOSITE DIRECTION DEPARTURE/ARRIVAL, (CALL SIGN) (TYPE AIRCRAFT), RUNWAY (number)."*

4.15.4.1. All coordination thereafter between controllers must include the phrase below. **(T-1) PHRASEOLOGY**: *"OPPOSITE DIRECTION DEPARTURE/ARRIVAL, RUNWAY (number)."*

4.15.5. CCTLRs must ensure facility directives require traffic advisories to participating opposite direction aircraft. **(T-0)** ***Example****: "OPPOSITE DIRECTION TRAFFIC (distance) MILE FINAL, (type aircraft) or OPPOSITE DIRECTION TRAFFIC DEPARTING RUNWAY (number), (type aircraft), OPPOSITE DIRECTION TRAFFIC, (position), (type aircraft)."*

4.15.6. CCTLRs must prescribe procedures for use of a memory aid for ODO (e.g., "ODO" strip, use of red-colored ink pen/marker, use of automation to bring attention to tag). **(T-0)**

4.16. Practice Approaches/Departures. Controllers must ensure VFR aircraft practicing instrument approaches at the approach control's primary airport are provided IFR separation. **(T-0)** The primary airport is the airport from which approach control service is provided. CCTLRs must ensure tactical approach/departure requirements are established in a LOP between participating agencies and aircraft. **(T-2)** CCTLRS must ensure guidance includes traffic patterns and procedures to ensure protection of non-participating aircraft. **(T-2)**

4.17. Clearance Delivery. The WS must ensure the clearance delivery function is performed by a controller not actively controlling airborne traffic, except during periods of authorized SC operations. **(T-2)** The CCTLR must ensure a clearance delivery position in a RAPCON has a discrete frequency dedicated to clearance delivery and must not be keyed simultaneously with other frequencies. **(T-0)**

4.18. Emergency Frequencies. CCTLRs must ensure ATC facilities, except GCA and RFC, have transmit and receive capability on emergency frequencies 121.5 and 243.0 Megahertz. **(T-0)** Continuously monitor the emergency frequencies during operational hours. When more than one Air Force ATC facility shares the emergency radio equipment, the tower CCTLR must ensure the control tower has override capability. **(T-0)** Tower should have override capability on emergency radio equipment shared with FAA ATC facilities. CCTLRs must ensure ATC facilities have an override capability on emergency radio equipment shared by non-ATC agencies. **(T-0)** **Note:** Check override capability at least once daily.

4.18.1. Controllers handle unscheduled personnel, emergency, or crash locator beacon signals, as an emergency, regardless of duration. The Wing Commander (WG/CC) may require a lesser level of notification and response and direct ATC not to activate the Primary Crash Alarm System (PCAS). The WG/CC must ensure notification and response procedures are established. **(T-2)** If controllers do not activate the PCAS, the ATC facility will notify a single named, base agency and the Air Route Traffic Control Center (ARTCC) or appropriate host nation equivalent. **(T-2)** CCTLRs must define procedures in the AOI. **(T-2)**

4.18.2. Operational testing of a personnel, emergency, or crash locator beacon may not require a response when the test is conducted within the first five minutes of the hour and is no longer than three audio sweeps.

4.19. Monitoring NAVAID Equipment. An internal monitor is an integral part of each NAVAID which automatically transfers transmitters or shuts down the NAVAID when its performance falls below established tolerances. CCTLRS must ensure each NAVAID used for instrument flight is monitored. **(T-1)**

4.19.1. When a Remote Status Indicator (RSI) is inoperative or the RSI monitoring facility is unmanned, controllers should continue to use NAVAIDs equipped with an internal monitor as long as pilot or maintenance reports show the NAVAID is operating normally.

4.19.2. At locations where NAVAIDs operate less than 24-hours daily, the CCTLR must ensure NAVAID operating hours are published in appropriate Flight Information Products (FLIPs). **(T-2)**

4.19.3. Refer to AFMAN 13-204 Volume 1 for facility monitoring, category downgrading, and snow effects on ILS glide slope requirements.

4.20. Alternate ATC Capabilities. The OG/CC determines if there is a need for alternate ATC capabilities to sustain ATC services during emergency conditions. Where a need has been established define transition procedures and any restrictions on flight operations or vehicle movement due to alternate ATC facility limitations in a LOP.

4.20.1. CCTLRs must ensure the following capabilities are available for fixed alternate ATC facility operations:

4.20.1.1. Ultra High Frequency (UHF)/Very High Frequency (VHF) transmitters/receivers. **(T-2)**

4.20.1.2. Landline communications. **(T-2)**

4.20.1.3. Land Mobile Radio (LMR) with transmit/receive capability. **(T-2)**

4.20.1.4. Control of airfield lighting. **(T-2)**

4.20.1.5. Applicable publications. **(T-2)**

4.20.1.6. NAVAID monitoring. **(T-2)**

4.20.1.7. Voice recording equipment (if capability exists). **(T-2)**

4.20.1.8. Access to pertinent airfield information (e.g., NOTAMs, weather). **(T-2)**

4.20.2. During emergency/contingency situations, OG/CCs must determine what minimum equipment is necessary for ATC operations to ensure flight safety. **(T-2)**

4.21. Precision Approach Critical Areas. Protect the precision approach critical areas according to the AOI and FAAO JO 7110.65AA.

4.21.1. Category (CAT) I and II ILS Localizer Critical Areas.

4.21.1.1. When the reported ceiling is less than 800 feet and/or the visibility is less than 2 miles, controllers must restrict all aircraft and vehicle operations in the localizer critical area. **(T-0)** Do not permit vehicles or aircraft to transit the localizer critical area when an aircraft on the ILS approach is inside the Final Approach Fix (FAF). **Exception:** A preceding aircraft, approaching the same runway or another runway, may pass through the area while landing, departing, or exiting the runway; do not allow aircraft to stop within the critical area.

4.21.1.2. When the reported ceiling is less than 200 feet and/or Runway Visual Range (RVR) 2,000 or less (1/2-mile visibility if no RVR), controllers must not authorize vehicle or aircraft operations in or over the area when an arriving aircraft is inside 1 Nautical Mile (NM) final approach. **(T-0)**

4.21.2. CAT I and II ILS Glide Slope Critical Areas.

4.21.2.1. When the reported ceiling is less than 800 feet and/or visibility less than 2 miles, but at or above 200 feet and/or visibility at or above 1/2 mile (RVR 2,400), controllers must restrict all aircraft larger than fighter type size. **(T-0)** Controllers will not permit these aircraft to taxi beyond the instrument hold line when an aircraft executing an ILS approach is inside the FAF. **(T-0)**

4.21.2.2. When the reported ceiling is less than 800 feet and/or visibility less than 2 miles, controllers must restrict all vehicles. **(T-0)** **Note:** Vehicles (e.g., launch essential vehicle, mission support vehicle, and end of runway vehicle) escorting the fighter type size aircraft under the conditions of **paragraph 4.21.2.1** are authorized to proceed into the glideslope/elevation critical area with the aircraft (aircraft tows are not authorized). Controllers will not permit vehicles to proceed beyond the instrument hold line when an aircraft executing an ILS approach is inside the FAF, unless the arriving aircraft has reported the runway in sight or is circling to land on another runway. **(T-0)**

4.21.2.3. When the reported ceiling is less than 200 feet and/or visibility less than 1/2 mile (RVR 2,400), controllers must restrict all aircraft and vehicles. **(T-0)** Controllers will not permit aircraft to taxi or vehicles to proceed beyond the instrument hold line when an aircraft executing an ILS approach is inside the FAF. **(T-0)**

4.21.3. PAR Touchdown Areas. When the reported ceiling is less than 200 feet and/or the RVR is 2,000 or less (1/2-mile visibility if no RVR), controllers will not authorize vehicles or aircraft in the PAR touchdown area when an aircraft conducting an approach or missed approach is inside the Middle Marker (MM) or 1 NM from touchdown if no MM. **(T-0)**

4.21.4. Criteria for Protecting Critical Area. The DoD is authorized to define criteria for protection of precision approach critical areas at military-controlled airports. The criteria apply to both military and civilian aircraft operating at military-controlled airports.

Chapter 5

ATC EQUIPMENT

5.1. Equipment Checks.

5.1.1. CCTLRs must ensure proper operations of all equipment, to include actions after a power failure and generator changeover. **(T-0)**

5.1.1.1. CCTLRs, with technical assistance from the NAAM or facility managing the equipment (e.g., remote Tower Display Workstation [TDW]) must:

5.1.1.1.1. Publish procedures and develop a detailed checklist ensuring operations of STARS automated equipment and all locally defined systems. **(T-0)**

5.1.1.1.2. Include procedures for periodic checks, system monitoring, and actions after a power failure and generator changeover. **(T-0)**

5.1.1.1.3. **(Added-ACC)** Notify ACC/A3AO (acc.a3ao@us.af.mil) of outages affecting the NAS.

5.1.1.2. The WS opening the facility must complete all equipment checks, as applicable, prior to officially opening the facility. **(T-3)** Additionally, each on-coming WS must initiate an equipment checklist at the beginning of each shift and complete the checklist as soon as possible. **(T-3)** ATC services and functions will not be performed prior to official facility opening. **(T-2)**

5.1.2. The WS must verify equipment outages daily with the appropriate base agency, and document completion of the equipment outage check on DAF Form 3616. **(T-3)** Locations must establish localized procedures in a LOP to verify outages. **(T-3)** **Note:** These procedures should account for days which RAWS personnel are on-call if on-call is authorized.

5.1.2.1. ATCALS equipment status must be classified as either in-service or out-of-service. **(T-1)** ATCALS equipment logged as out-of-service must not be used to provide ATC services. **(T-1)** When maintenance reports equipment as usable and indications are the equipment is usable, the equipment should be logged "in service" and, if necessary, an airborne check must be accomplished as soon as practical. **(T-3)** ATC should not solely delay closing work orders due to aircraft non-availability to conduct equipment checks.

5.1.3. For automated systems, verification of the accuracy of new or modified digital maps must be accomplished through the use of "targets of opportunity" flying over displayed fixes or navigational aids. **(T-1)** Document any observed discrepancies to indicate the observed direction and displacement. If any identified error cannot be corrected or if a facility is otherwise dissatisfied with the results from "targets of opportunity," request a flight check if necessary. **(T-0)**

5.1.4. For remotely maintained system outages, controllers will contact the Remote Maintenance Center at Defense Switch Network (DSN) 312-884-8651 or commercial 405-734-8651. **(T-2)**

5.2. Facility Clocks. A reliable clock showing hours, minutes and seconds must be visible from each control position. **(T-2)** Facilities without a direct coded time source must obtain a time check at the beginning of each shift. **(T-0)**

5.2.1. ATC facilities without coded time sources must acquire time checks from IFR facilities equipped with a coded time source, or the U.S. Naval Observatory (USNO) at DSN 312-762-1401, https://www.usno.navy.mil/USNO/time/displayclocks/simpletime, a radar facility which provides approach service, host nation ARTCC/area control center responsible for the terminal area, or a Global Positioning System (GPS)/Digital Audio Legal Recorder (DALR)/STARS source. **(T-0)**

5.2.2. Set non-direct coded clocks to within 15 seconds of the time source. Check clocks immediately after the facility goes on backup power and again 30 minutes after. If found to be inaccurate, check clocks hourly until restoring normal power. **Note:** Wind sensor equipment which provides a reliable clock must be checked at the beginning of each shift unless connected to a direct coded time source. **(T-0)**

5.2.3. A direct coded time source can be connected directly to the installation local area network (LAN). The LAN must provide a network time protocol in accordance with National Institute of Standards and Technology regulations to synchronize clocks with a local GPS receiver. **(T-0)**

5.3. Weather Equipment.

5.3.1. Warning Devices (not applicable to Morón AB). Current observations and pertinent severe weather warnings, advisories, and pilot reports must be available at all controller positions. **(T-0)** Where this is not possible, set up coordination procedures to ensure changes to the weather promptly reach each controller position. Equip automatic weather displays with a visual and aural alarm system suited to local operational needs. Facilities with multiple weather displays need only have the aural alarms operational at one position. Volume must be set loud enough for all positions to hear. **(T-2)**

5.3.1.1. Weather Equipment Display. Controllers will only issue/use the altimeter setting contained in the official weather observation. **(T-0)**

5.3.2. Radar Displayed Weather (STARS facilities only). There are no alarms to indicate to the controller or RAWS maintenance personnel when there is a significant signal loss within the weather channel. To mitigate this problem, the following procedures must supplement guidance located in FAAO JO 7110.65AA, **Chapter 2** Section 6. **(T-0)** CCTLRs and NAAMs must ensure these procedures are published in a LOP in accordance with **paragraph 3.1**. **(T-0)**

5.3.2.1. At the beginning of every shift check the accuracy of the digitized weather display using the best means available (e.g., Next-Generation Radar [NEXRAD]). **Note:** CCTLRs should develop a table to correlate STARS weather intensities with secondary weather displays (e.g., NEXRAD) when available. Reference **Table 5.1** as an example.

Table 5.1. Weather Levels Correlation Example.

STARS Displays	STARS Term	STARS Level	Weather Radar Level	Weather Radar Display
Light Blue	"Light"	Level 1	less than 30 dBZ	Green
Light Blue with Dots	"Moderate"	Level 2	30 to 40 dBZ	Yellow
Dark Blue with Dots	"Heavy"	Level 3	40 to 50 dBZ	Light brown orange to bright red
Light Brown	"Heavy"	Level 4	40 to 50 dBZ	Light brown orange to bright red
Light Brown with Dots	"Extreme"	Level 5	> 50 dBZ	Dark red
Dark Brown with Dots	"Extreme"	Level 6	> 50 dBZ	Dark red

5.3.2.2. Relay known weather channel status during position relief for all STARS display control/assist positions.

5.3.2.3. If a weather channel discrepancy is noted, document the problem and notify maintenance. Ensure appropriate NOTAM is issued.

5.4. Digital Audio Legal Recorder (DALR) Administration.

5.4.1. CCTLRs must ensure personnel performing DALR checks are trained on proper methods to be used and task certification is documented on the CFETP and local 797 (as applicable). **(T-3)** **Note:** 1C131 personnel may accomplish DALR checks when properly trained and certified on the CFETP and local 797 (as applicable).

5.4.2. Daily Check.

5.4.2.1. Validate the Simple Network Management Protocol software is operational (e.g., daily recording checks) and verify normal operations of equipment prior to opening the facility. **Note:** This function can be accomplished by either Air Traffic or Technical Operations personnel. Responsibilities and procedures should be captured in local agreements (guidance located in FAAO JO 6670.16B, *Maintenance of Digital Audio Legal Recorder Types 1, 2, and N (DALR1/DALR2/DALR-N))*.

5.4.2.2. CCTLRs must ensure personnel include an entry on the DAF Form 3616 identifying date, time, and the initials of the person accomplishing the check, at a minimum. **(T-3)**

5.4.3. Recordings.

5.4.3.1. Rewriteable Compact Discs, Digital Versatile Discs, or any type of flash media are NOT authorized for use on the DALR system. Recordings will be on a Compact Disc - Recordable (CD-R) or Digital Versatile Disc - Recordable (DVD-R) only. **(T-1)** CD-Rs/DVD-Rs will be marked with date extracted, date/time of incident, facility name, and rank/name of individual accomplishing recording. **(T-1)**

5.4.3.2. Recordings must adhere to the requirements of AFMAN 13-204 Volume 1, Chapter 5. **(T-1) Note:** The High Density Logger establishes a 45-day protection window on recorded data automatically.

5.4.3.3. Recordings will not be emailed. **(T-1) Note:** Consider DoD Safe as an alternative option when necessary to send documents to AFREPs and/or the FAA when geographically separated.

5.4.3.4. Where capabilities exist, record by operating position, individual frequency, and landlines as determined by CCTLR. At a minimum, the following will be recorded:

5.4.3.4.1. Local Control, PCAS, Arrival Control, Departure Control, Approach Control, Coordinator, Flight Data, Approach/Arrival Assistant, Clearance Delivery, Ground Control, Supervisor of Flying (SOF), LMR Nets, ATIS, Watch Supervisor, Tower Backup Radios, Administrative Telephones, Pilot-to-Dispatch/Pilot-to-Metro Frequencies. **(T-3)**

5.4.3.4.2. All DALR channels record individually. Prioritization of recordings should be established at locations that exceed current system capabilities; DALR1 is capable of recording up to 48 channels, while DALR2 is capable of recording 144 channels. **(T-3)**

5.4.4. System Access and Use.

5.4.4.1. DALR users are issued unique log-in passwords (e.g., LOG-IN: RT; PASSWORD: chosen by RT).

5.4.4.1.1. Log-in password information should not be shared among users (e.g., LOG-IN: A Crew; PASSWORD: shared by A Crew).

5.4.4.1.2. Delete/disable user accounts when a member is reassigned (e.g., Permanent Change of Station [PCS], Permanent Change of Assignment [PCA]).

5.4.4.2. The DALR should only be used for accessing and editing recordings made with the DALR equipment. The computer workstations should not be used for any other purpose.

5.4.4.3. No other programs and/or software packages are to be loaded and/or executed on any of the DALR system components.

5.4.4.4. Restrict profile access as follows:

5.4.4.4.1. System Administrator – Airfield operations staff and RAWS personnel only.

5.4.4.4.2. Organizer - 7-level airfield operations personnel or above.

5.4.4.4.3. Reconstruct – Any airfield operations personnel when properly trained and certified on the correlating CFETP and local 797 tasks (as applicable).

5.4.4.4.4. Monitor - All airfield operations personnel.

5.5. Primary Crash Alarm System (PCAS). Define procedures and conditions for activation in the AOI. Limit agencies with two-way telephones to the control tower, AM (or agency responsible for the secondary crash net as required), fire department, and the medical center. Additional agencies may have receive-only capability. The tower PCAS should have a visual indicator to

identify when each two-way party on the PCAS picks up the handset. During real-world emergencies, trainees may only activate the PCAS if the trainer/monitor has the capability to monitor and transmit over the PCAS.

5.5.1. When mobile/temporary facilities are operated, and circumstances make installation of a PCAS impractical, establish an alternate system and procedures for emergency response and notification. These procedures must be included in a LOP. **(T-2)**

5.5.2. The PCAS will be checked daily. **(T-1)** Results of the check must be annotated in the daily record of facility operations or listed as part of the facility equipment checklist. **(T-2)**

5.6. Land Mobile Radios (LMR). Each LMR system supporting ATC and aerodrome operations must terminate in the control tower console (e.g., Enhanced Terminal Voice Switch [ETVS]) if enough transmitter and receiver selection switches and speakers are available. **(T-3)**

5.6.1. Control towers with digital LMRs will establish an LMR net (e.g., Ramp Net, Tower net) dedicated for use between vehicle operators and ATC, solely for the purpose of operating on the CMA. **(T-3)**

5.6.2. If a Tower Talk Group cannot be established, CCTLRs must establish procedures to eliminate unnecessary transmissions (e.g., background noise) in a LOP. **(T-3)**

5.7. Airfield Lighting Systems. Equip the control tower with the capability to operate airport lighting systems and visual aids. Name an agency responsible and define procedures in a LOP for operating the airport lighting when the tower closes. **Note:** Where pilot controlled lighting systems are installed, establish a letter of agreement, as applicable.

5.8. ILS Equipment Requirements for Operation. Loss of transmitter or monitor redundancy of either subsystem does affect the category. Instructions concerning temporary RSI outages in **paragraph 4.21** also applies. If the localizer Far Field Monitor (FFM) becomes inoperative on a Category II system, ensure AM sends a NOTAM downgrading the ILS to Category until repair of the FFM. Temporary bypass of the FFM does not affect Category I systems.

5.9. Automated ATC Systems.

5.9.1. MAJCOM RAWS OPR is the authoritative source for the implementation, operation, and maintenance of the automated ATC systems they support and maintain. Operator manuals and version description documents (VDDs) are directive in nature.

5.9.1.1. CCTLRs must review each Flight Data System (FDS) VDD to determine any operational or procedural impact and, when necessary, issue a facility directive describing the functional or procedural changes. **(T-3)**

5.9.2. The FAA is the authoritative source for the security and software maintenance of the ATC systems they support (e.g., STARS, ETVS). System Technical Instructions are directive in nature. Prior to operational use of a new program update, the applicable test plan must be accomplished, indicating the date and individuals performing the tests. **(T-0)**

5.9.3. Computer hardware, software programs, and databases used to provide operational ATC services are mission and life-critical resources. Do not tamper with, alter, or use these resources for other than their intended purposes. Load only authorized software programs provided by the system software manager. All personnel share the responsibility for protecting these resources.

5.9.4. Immediately withdraw from service any ATC computer resource suspected of malfunctioning due to tampering, abuse or introduction of unauthorized programs (e.g., software viruses). Physically disconnect all interface connections to other computer systems and maintain the suspect computer or software for analysis. The FAA/DoD support personnel and AOF/CC must be notified for submittal to MAJCOM RAWS OPR. **(T-3)**

5.9.5. STARS.

5.9.5.1. Operational Use.

5.9.5.1.1. STARS data will not be used when the system is released to maintenance. **(T-0)**

5.9.5.1.2. Verify and document the operational status of all STARS sub-systems daily. Documentation must be retained in accordance with 2.10.12. above. **(T-0)**

5.9.5.1.3. Advise affected facilities when STARS equipment will not be operational at normal startup time, when the equipment fails, is shut down, resumes operation, or when inter-facility data transfer is lost/regained. **(T-3)**

5.9.5.2. Data Entries. Facility directives must prescribe the use of the scratch pad and the specific responsibility for System Status Area (SSA) entries to include current ATIS alpha character, current general system information and system altimeter setting. **(T-3)**

5.9.5.3. Display Data.

5.9.5.3.1. When a malfunction causes repeated discrepancies of 300 feet or more between the automatic altitude readouts and pilot reported altitudes, inhibit the automatic altitude report (Mode C) display until the malfunction has been corrected.

5.9.5.3.2. Display Mode C on untracked (unassociated) targets within each controller's area of responsibility by setting the altitude filters to encompass all altitudes within the controller's jurisdiction. Set the upper limits no lower than 1,000 feet above the highest altitude for which the controller is responsible. In those stratified positions, set the upper and lower limit to encompass at least 1,000 feet above and below the altitudes for which the controller is responsible. When the position's area of responsibility includes down to the airport field elevation, the facility must set the lower altitude filter limit to encompass the field elevation, to ensure provisions of FAAO JO 7110.65AA **Chapter 2**, and **Chapter 5** may be applied. **(T-0)** CCTLRs may authorize the temporary suspension of this requirement when target clutter is excessive.

5.9.5.4. Automation Program Changes.

5.9.5.4.1. NAAMs must review all applicable documentation issued by the FAA/DoD support facility pertaining to changes in their automated system and database to determine any operational or procedural impact. **(T-0)** NAAMs must notify facility CCTLRs and RAWS personnel of any changes which impact operations or procedures. **(T-0)**

5.9.5.4.1.1. When necessary, coordinate any procedural, and airspace change(s) with the ARTCC.

5.9.5.4.1.2. NAAMs must coordinate functional changes requiring modification of inter-facility adaptation with the host ARTCC. **(T-0)**

5.9.5.4.1.3. Facilities without a dedicated NAAM must establish procedures in a LOP for effectively managing automation program changes with the FAA, DoD, or Host Nation facilities. **(T-2)**

5.9.5.4.1.4. If the STARS facility CCTLR has determined the use of the satellite airport database feature containing emergency airport data be available for controller use, NAAMs must identify the following:

5.9.5.4.1.4.1. Airport/heliport elevation (in feet). **(T-3)**

5.9.5.4.1.4.2. Longest runway or helipad. **(T-3)**

5.9.5.4.1.4.3. Longest runway length (in feet) (n/a to heliports). **(T-3)**

5.9.5.4.1.4.4. Longest runway width (in feet) (n/a to heliports). **(T-3)**

5.9.5.4.1.4.5. Longest runway/heliport composition. **(T-3)**

5.9.5.4.1.4.6. Universal communications frequency. **(T-3)**

5.9.5.4.1.4.7. Pilot controlled lighting availability. **(T-3)**

5.9.5.4.1.4.8. NAAMs must verify the facilities STARS satellite airport database no later than the 10th of each month. **(T-3)** This verification may be accomplished in conjunction with STARS monthly checks but must be completed no later than the 10th of each month. **(T-3)** Incorporate appropriate procedures into NAAM OI and monthly checklists. If no discrepancies are noted, document the findings in a monthly report via memorandum or a log entry of DAF Form 3616. State the monthly airport/heliport information contained in the facility's STARS database has been verified and is accurate as of the date indicated. Include the radar facility CCTLR as an addressee for distribution and retain a copy on file for one year.

5.9.5.4.1.4.9. If the monthly database verification has noted discrepancies, NAAMs will submit an Adaptation Change Request (ACR) to the Operations Support Facility (OSF) no later than the 15th of the month. **(T-2)** Document in a monthly report that the monthly airport/heliport information contained in the facility's STARS database has been verified and inaccuracies have been identified as of the date indicated. Include details in the monthly report specifying when software updates are expected from the OSF. Include the radar facility CCTLR as an addressee for distribution and retain a copy on file for one year.

5.9.5.5. Automatic Acquisition/Termination Areas.

5.9.5.5.1. Facility CCTLRs must:

5.9.5.5.1.1. Establish automatic acquisition areas for arrivals and over-flights at ranges permitting auto-acquisition of targets prior to the ARTCC/STARS-to-STARS automatic handoff area when the center is in the radar data processing mode. **(T-0)**

5.9.5.5.1.2. Coordinate with adjacent automated facilities to ensure automated handoffs will be initiated only after the aircraft is within their facility's automatic

acquisition area. **(T-2)** Where this is not feasible due to airspace assignment facility directives must require the use of an appropriate procedure specified in FAAO JO 7110.65AA to confirm the identity of all aircraft handed off prior to auto-acquisition. **(T-0)** **Note:** Automatic acquisition does not constitute radar identification.

5.9.5.5.1.3. Establish automatic acquisition areas for departing aircraft one mile or less from the runway end. **(T-0)**

5.9.5.5.1.4. Establish automatic termination areas for arriving aircraft one mile or less from the runway threshold or, at satellite airports, the minimum radar coverage range/altitude, whichever is greater. **(T-0)**

5.9.5.5.1.5. Identify which operating position is responsible for determining if automatic acquisition of a departure track has occurred in a LOP. **(T-2)** **Note:** This is intended for operations where automatic acquisition responsibility could be confused (e.g., uncontrolled airports within a single sector or between different radar sectors that serve the same airport).

5.9.5.6. Minimum Safe Altitude Warning (MSAW) and Conflict Alert (CA).

5.9.5.6.1. MSAW/Low Altitude Alert System (LAAS). Radar facilities that have MSAW/LAAS capabilities must set MSAW/LAAS requirements in accordance with AFMAN 11-230. **(T-2)**

5.9.5.6.2. CCTLRs must ensure an aural test of the MSAW speakers located in the operational positions is included as part of the equipment checklist required during each shift. The purpose of this inspection is to ensure the aural alarm is functioning and audible to the appropriate operational personnel. **(T-3)**

5.9.5.6.3. When their continued use would adversely impact operational priorities, CCTLRs may temporarily inhibit the MSAW, the approach path monitor portion of MSAW, and/or the CA functions. Except when equipment or site adaptation problems preclude these functions from being used, a brief written report must be sent to the MAJCOM OPR for ATC, as well as AFFSA/XA, whenever they are inhibited. **(T-2)**

5.9.5.6.4. CCTLRs are authorized to inhibit CA at specific operating positions if an operational advantage exists.

5.9.5.6.5. The most current MSAW Database must be used. **(T-3)**

5.9.5.7. Magnetic Variation of Video Maps/GEO Maps at non-STARS facilities. CCTLRs, in coordination with TERPS and the NAAM, must ensure the magnetic variation of radar video maps/geo maps, MSAW, Digital Terrain Maps (DTM) and radar site settings coincide. **(T-2)** The magnetic variation must be verified annually, and a change of two degrees or more requires accomplishing/recompiling the affected map(s). **(T-3)** **Note:** The video map is the primary reference for maintaining radar antenna alignment.

5.9.5.8. MSAW DTM Updates. Updates to DTM maps will be provided for each site through their supporting Operations Support Facility (OSF). **(T-1)** **Note:** Requests for new or recompiled DTMs requires approximately 10-weeks to build and deliver.

5.9.5.9. Mode C Intruder (MCI) Alert Parameters. The nominal value of parameters specified in the appropriate NAS Configuration Management Document and Site Program Bulletins must be used for the MCI alert functions, except for the base altitude parameter, as specified in the paragraphs below. **(T-2)**

5.9.5.9.1. CCTLRs must set the MCI Alert base altitude at any value between ground level and 500 feet above ground level (AGL). **(T-2)** Any instance of base altitudes above 500 feet AGL must be documented and forwarded to the MAJCOM OPR for ATC. **(T-2)**

5.9.5.9.2. CCTLRs are authorized to temporarily adjust the MCI Alert base altitude at a sector(s)/position(s) when excessive MCI Alerts derogate the separation of IFR traffic. For the purpose of this section, temporary is considered to be of less than four hours duration, not necessarily continuous, during any calendar day. The following is required when MCI base altitude is adjusted:

5.9.5.9.2.1. Log each occurrence on DAF Form 3616 when this procedure is being used, including the sector/position and temporary altitude.

5.9.5.9.2.2. Documentation must be forwarded to the MAJCOM OPR for ATC if it is determined that a temporary adjustment of the MCI base altitude does not meet the needs of the sector/position. **(T-2)**

5.9.5.9.3. CCTLRs are authorized to inhibit the display of MCI Alert at specified sectors/position.

5.9.5.9.3.1. CCTLRs must develop and publish procedures for CA suppression and use of Military Alert Suppression Zones (MASZ) in a facility OI. **(T-2)**

5.9.5.10. Operational Mode Transition Procedures.

5.9.5.10.1. CCTLRs must develop and maintain current detailed procedures in a LOP for the transition to and from the various automated and non-automated modes of operation. **(T-2)** **Note:** The architecture of STARS allows for different operational modes during display component failures. For example, system component failure could result in positions within the same facility operating in a non-automated mode with reduced functionality. Another example, a system component failure could result in positions within the same facility operating in Emergency service level (ESL) or Full service level (FSL) mode. Facilities are encouraged to take advantage of this capability to minimize the impact of display system outages.

5.9.5.10.2. The transition plans must include as a minimum:

5.9.5.10.2.1. Transition decision authority (e.g., the individual responsible for making the transition decision). **(T-2)**

5.9.5.10.2.2. Specific transition procedures. **(T-2)**

5.9.5.10.2.3. Checklists specifying the duties and the responsibilities for the WS and other appropriate positions. **(T-2)** At a minimum, include the following information/procedures:

5.9.5.10.2.3.1. Transition decision authority. **(T-2)**

5.9.5.10.2.3.2. Coordination/notification procedures (intra- and inter-facility). **(T-2)**

5.9.5.10.2.3.3. Specific duties/responsibilities (including detection and resolution of potential conflicts). **(T-2)**

5.9.5.11. Radar Selection Procedures. CCTLRs must develop and maintain current detailed procedures for radar site selection in a LOP. **(T-0)** **Note:** The architecture of STARS allows for the selection of up to 16 different radars including short range and long-range radars at each display. This could result in positions within the same facility working and receiving radar information from different radars. Facilities are encouraged to take advantage of this capability to minimize the impact of radar outages, blind areas, limited radar coverage, or other unforeseen events.

5.9.5.11.1. The selection plans must include as a minimum:

5.9.5.11.1.1. Radar selection decision authority (e.g., the individual responsible for making the radar selection decision). **(T-0)**

5.9.5.11.1.2. Specific radar selection procedures. **(T-0)**

5.9.5.11.1.3. Detailed checklists specifying the duties and the responsibilities for the WS and other appropriate positions. **(T-0)** The checklist must include, as a minimum, the following information/procedures:

5.9.5.11.1.3.1. Radar selection decision authority. **(T-0)**

5.9.5.11.1.3.2. Coordination/notification procedures (intra- and inter-facility). Specific duties/responsibilities (e.g., including detection and resolution of potential conflicts). **(T-0)**

5.9.5.12. Multi-Sensor Radar Operations and FUSION operations. CCTLRs must develop detailed procedures for selection and use of multi-sensor radar operations and FUSION operations, as applicable, in a facility OI. **(T-0)** **Note:** The architecture of STARS allows for the use of multi-sensor radar coverage for the display presentation. This could result in positions within the same facility working in both single sensor slant range mode and multi-sensor mode or FUSION mode. Facilities are encouraged to take advantage of this capability to minimize the impact of radar outages, blind areas, limited radar coverage, or other unforeseen events.

5.9.5.12.1. Minimum procedures must include:

5.9.5.12.1.1. Decision authority to use multi-sensor coverage (e.g., the individual responsible for making the decision). **(T-0)**

5.9.5.12.1.2. Specific multi-sensor radar procedures. **(T-0)**

5.9.5.12.1.3. Detailed checklists specifying the duties and the responsibilities for the WS and other appropriate positions. **(T-0)** The checklist must include, as a minimum, the following information and procedures:

5.9.5.12.1.3.1. Decision authority to use multi-sensor radar coverage. **(T-0)**

5.9.5.12.1.3.2. Coordination/notification procedures (intra- and inter-facility). **(T-0)**

5.9.5.12.1.3.3. Specific duties/responsibilities including detection and resolution of potential conflicts such as transition from a three mile separation single-sensor environment, to a five mile separation multi-sensor environment. **(T-0)**

5.9.5.13. Single Site Coverage Operations. Facilities may adapt all sort boxes utilizing radar separation defined in FAAO JO 7110.65AA, **Chapter 5**, Section 5.

5.9.5.13.1. This adaptation may be used provided:

5.9.5.13.1.1. A significant operational advantage will be obtained using single site coverage. Consideration must be given to terminal interface and radar reliability aspects; and appropriate procedures are identified in a LOP. As a minimum the LOP must:

5.9.5.13.1.1.1. Define areas in which the adaptation has been modified. **(T-2)**

5.9.5.13.1.1.2. Permit 3 NM separation in the modified area. **(T-2)**

5.9.5.13.1.1.3. Accommodate local procedural changes. **(T-2)**

5.9.5.14. Single/Multi-sensor Mode Operation: To reduce the possibility of false targets when long-range radar is malfunctioning, released to maintenance, or out-of-service (OTS):

5.9.5.14.1. CCTLRs will designate facility WS to notify automation personnel and/or RAWS maintenance personnel to take offline any radar site that is out of service or released for maintenance in a facility OI. **(T-0)**

5.9.5.14.2. If automation personnel or RAWS maintenance are not immediately available to disable or take the radar site offline, the CCTLR may designate, in a facility OI, for the WS to use the STARS keyboard entry located in FAA TI 6191.409/TI 6191.410 to exclude the radar track data and real-time quality control reporting until automation or RAWS maintenance personnel arrive.

5.9.5.14.3. An entry will be made in the DAF Form 3616 stating that the sensor was taken offline/data was excluded and when returned to service. **(T-0)**

5.9.6. Simulation Equipment. Administration level access to simulation systems will be limited to the authorized system administrator and designated assistants. **(T-2)** Only authorized software may be loaded on ATCSE, as applicable.

5.9.6.1. Simulation and Integration of Ground, Network, and Air Links (SIGNAL) simulation program. Units may load additional software on the computers utilizing SIGNAL, with the approval of the Designated Approval Authority in coordination with the Network Control Center. For SIGNAL software technical support, contact AFFSA Cyber Operations (AFFSA/XC) at DSN 884-9074.

5.9.6.2. Radar simulator training system (STARS-based) refer to the NAAM and/or AOSS.

5.9.6.3. Radar simulator (PC Based) PAR simulators refer to the CCTLR and/or ATCSE Program Specialist.

5.9.6.4. For Tower Simulation System (TSS) support the Adacel Help Desk must be used as follows:

5.9.6.4.1. Report all TSS malfunctions, including those resolved by TSS users, through the TSS administrator to the Adacel Help Desk at 1-866-245-4239 or via the SimCare website at **http://usaf.simcare.biz**. **(T-3)**

5.9.6.4.2. Open Help Desk items will be followed-up via the SimCare website at least monthly, until closed. **(T-3)**

5.10. Radar Mapping Equipment. The minimum radar mapping capability for commissioning an approach control service is a dual video mapper, adequate map overlay (if available), or computer-generated display. **Note:** AN/GPA-134 video mapper meets the dual video mapper requirement.

5.10.1. Do not use grease pencil markings, plastic tape, compass rose grid lines, range marks or other innovations in place of an adequate map overlay, video map, or computer-generated display.

5.10.2. If map overlays are available and coincidental with a flight inspected video map presentation, they do not need to be flight-inspected.

5.10.3. STARS Maps.

5.10.3.1. The designated NAAM must coordinate with appropriate OSF to create and maintain video maps as directed by the CCTLR. **(T-2)** RAPCON facilities only, have the option to utilize color-coding with STARS video maps (e.g., colored fixes, approach courses, airspace boundaries, MVA maps). When opting to use color-coding, CCTLRs must use the standardized colors in **Table 5.2**. STARS Standardized Color Palette. **(T-1)**

5.10.3.2. CCTLRs must specify in a LOP procedures for using optional maps. **(T-0)**

5.10.4. AN/GPA-134. If applicable, CCTLRs must ensure designated representative has completed training and documentation outlined in the AN/GPA-134 QTP, prior to building official maps. **(T-0)**

5.10.4.1. Prior to installation, a designated representative must ensure current accurate data was used during the building process of digital video maps. **(T-0)** Quality checking and comparing the source document data with the map data print out sheet can accomplish this. Ensure the data used to build the map agrees with the data found on the source document. CCTLRs should certify completion of the quality measure by signing a file copy of the map data printout sheet.

5.10.4.2. The CCTLR must ensure video maps are created, uploaded, and maintained. **(T-2)** Ensure locally generated MVA maps are verified against the current MAJCOM-approved MVA chart before operational installation in the facility.

5.10.4.3. CCTLRs must coordinate video map source information annually. **(T-2)**

5.10.4.4. Procedures.

5.10.4.4.1. Ensure primary and backup designated airspace map and the unit's most critical maps are programmed and placed on separate slim line/circuits.

5.10.4.4.2. Designate one position on the slim line panel as the maintenance test map. This map acts as an internal system monitor for digital map accuracy.

5.10.4.4.3. Restrict access to the system. Do not load any software other than the system software provided with the map creation unit laptop.

5.10.5. Send all customer support inquiries to the STARS support email address at **hqaffsa.starssupport@us.af.mil**.

5.11. Battery-Powered Transceivers. Maintain radios in a state of readiness at facilities equipped with battery-powered transceivers. **(T-3)** Controllers must check transceivers at least once a month. **(T-3)**

5.12. Air Traffic Control Facility Modifications. CCTLRs should consult the *Unified Facilities Criteria Air Traffic Control and Air Operations Facilities Guide, UFC 4-133-01* for facility modification information.

5.13. Facility Security . CCTLRs must secure the ATC operating area at all times. **(T-3)** Install a cipher lock or other suitable locking device at initial entry points to control towers and radar facilities. Install similar devices at the main entry point to the control tower cab and the radar operations room. Secure other entry points to the tower cab and radar operations room with manual devices, such as deadbolts, locks, hasps. Secure mobile radar and tower facilities to the maximum extent possible.

5.14. Gas Mask Communication System Interface Equipment. OG/CCs determine whether to procure gas mask communication system interface equipment at their locations based on the type facility. Type of communication system interface is dependent upon host ATC equipment compatibility requirements. The communication system interface equipment is listed in the respective technical order (e.g., MCU-2A/P Technical Order 14P4-15-l, MCU-50 Technical Order (T.O.) 14P4-20-1, *Operator and Field Maintenance Manual for Mask, Chemical-Biological: Joint Service General Purpose, Field, M-50*).

5.15. Emergency Warning and Evacuation Alarms. Results of emergency warning and evacuation alarm tests must be documented on the DAF Form 3616 or suitable substitute. **(T-3)**

Table 5.2. STARS Standardized Color Palette.

Map A	View	Color	RGB	Type Airspace/Map
1		Standard Gray	140, 140, 140	Standard Map Color
2		Thunder Blue	79, 128, 176	Airspace Boundary
3		Flag Blue	38, 130, 253	MOA or Warning Area
4		Yellow	255, 255, 0	Tower Map Color
5		Yellow	255, 255, 0	Tower Map Color
6		Yellow	255, 255, 0	Tower Map Color
7		Yellow	255, 255, 0	Tower Map Color
8		Yellow	255, 255, 0	Tower Map Color
Map B	**View**	**Color**	**RGB**	**Type Airspace/Map**
1		Cyan	0, 255, 255	Fix Label/Sig Points/Multi Use
2		Beige	172, 193, 159	Airspace Shelf
3		Tomato Red	170, 62, 37	Restricted Area
4		Signal Green	49, 255, 23	Approach Course
5		Orange	254, 147, 13	Satellite Airport Approach Course
6		Dark Yellow	207, 193, 23	MVA
7		Yellow	255, 255, 0	Tower Map Color
8		Yellow	255, 255, 0	Tower Map Color
Geo Map	**View**	**Color**	**RGB**	**Type Airspace/Map**
1		Yellow	255, 255, 0	TFR/Geo Maps/Multi Use
2		Cyan	0, 255, 255	TFR/Geo Maps/Multi Use
3		Magenta	255, 0, 255	TFR/Geo Maps/Multi Use
4		Gold 1	238, 201, 0	TFR/Geo Maps/Multi Use
5		Coral 2	238, 106, 80	TFR/Geo Maps/Multi Use
6		Flag Blue	38, 130, 253	MOA/Warning Area
7		Tomato Red	170, 62, 37	Restricted Areas
8		Beige	172, 193, 159	Airspace Shelf

5.16. Certified Tower Radar Display (CTRD). Digital Bright Radar Indicator Tower Equipment (DBRITE) and TDW are certified radar displays in Air Force control tower. Radar displays must be certified for use by maintenance personnel according to Air Force and FAA guidance. **(T-0)**

5.17. Wireless Headsets. The use of the Plantronics wireless headset (CA12CD) is approved for operational positions within the control facilities that require only the monitoring of operations and/or to affect landline communication. These operational positions include WS and Coordinator (CI/CT). Wireless headsets will not be authorized for use in two-way communication with aircraft or any other function that includes over-the-air broadcasting. **(T-0)** When utilizing wireless headsets in operational positions, CCTLRs must ensure:

5.17.1. Operational personnel who utilize wireless headsets will be trained on the use, application, and limitations of the Plantronics CA12CD headset prior to operational use. **(T-1)** Training should be documented on the appropriate AF Form 797.

5.17.2. Guidance for wireless headset use is incorporated into the facility operating instruction to include procedures for equipment checks in **paragraph 5.1**. **(T-1)** Additionally, in the event of an urgent or emergency situation necessitating an immediate override or over-the-air broadcast, CCTLR's must establish procedures to have alternate communication equipment, such as wired headsets, available at operational positions where wireless headsets are being utilized. **(T-1)**

5.17.3. If wireless headsets are causing or receiving interference, CCTLR's must immediately remove wireless headset operations from service and notify the appropriate base Spectrum Managers office and MAJCOM functional manager of the suspected incident. **(T-1)** Wireless headset operations will not be continued until CCTLR's receive written approval from both the base Spectrum Managers office and MAJCOM functional manager. **(T-1)**

5.18. AFAS Requirements.

5.18.1. All information required to be available to controllers while operating in a control position may be maintained in AFAS.

5.18.2. All pages must have a link back to the status information area (SIA) or home page for instant access to current airfield/weather information. **(T-3)**

5.18.3. The color red will not be used in development of the AFAS pages (e.g., button, background, and font) except for emergency checklists, highlight runway occupied status, or stop signs used in ready reference file checklists. **(T-2)** The use of red for any other purpose is strictly forbidden. **Note:** This does not apply to the clock, which is a separate application from the AFAS pages.

5.18.4. The following information is required to be visible from every page:

5.18.4.1. ATIS code. **(T-3)**

5.18.4.2. Runway in use. **(T-3)**

5.18.4.3. Wind direction and speed. **(T-3)**

5.18.4.4. Current altimeter setting. **(T-3)**

5.18.5. CCTLRs must ensure the AFAS equipment is verified during each shift as part of the equipment checklist. **(T-3)** CCTLRs must incorporate procedures in an OI to notify the AFAS administrator when the system indicates a Flight Data Input Output (FDIO) or JET/New-Tactical Forecast System (N-TFS) failure. **(T-3)**

5.18.6. CCTLRs must establish procedures to back up the AFAS database to the backup folder on any AFAS machine no later than (NLT) the last day of each month in a facility OI. **(T-3)** Quarterly, the database backup must be transferred to an external storage device (e.g., Compact Disc or external hard drive). **(T-3)**

5.19. Portable Electronic Devices (PEDs). PEDs must not be stored or operated in radar control rooms or control tower cabs (e.g., smartphones or cellular phones, smartwatches, tablets, e-readers, gaming systems). **(T-0) Exception**: Government-owned PEDs operating only on 802.11 wireless frequency bands are authorized for use in radar control rooms and control tower cabs. PEDs without cellular modems are the recommended choice; however, if this option is unavailable, PEDs must only be used in operational radar control rooms and control tower cabs while operating in airplane mode or with cellular connections disabled. **(T-0)**

5.20. Wireless Local Area Networks (WLANs). Use of WLANs in ATC facilities is authorized for administrative and training purposes only. When establishing WLANs in ATC facilities, CCTLRs must complete the following:

5.20.1. Coordinate with the base communication squadron or equivalent, for guidance and local approval before implementing WLANs in ATC facilities. **(T-1)**

5.20.2. The appropriate base Spectrum Management office will conduct a spectrum analysis before implementing WLANs in ATC facilities. **(T-3)** A copy of the analysis must be maintained while WLANs are in use within the facility. **(T-3)**

5.20.3. WLAN routers will not be placed in operational radar control rooms and tower control cabs. **(T-0)**

5.21. Radios and Landlines. At a minimum, as part of the equipment checklist, facility radios and landlines will be checked daily or as determined by the facility CCTLR. **(T-3)**

Chapter 6

CONTROL TOWER OPERATIONS

6.1. Light Gun Operations.

6.1.1. The CCTLR will ensure a card listing the color codes and meanings contained in FAAO JO 7110.65AA, Chapter 3, Section 2 is attached to each light gun. **(T-0)**

6.1.2. If equipment allows, adjust each gun to give a red light when turned on.

6.1.3. Controllers will not beam signals through sunshades. **(T-0)**

6.1.4. CCTLRs must develop procedures to ensure light gun operational checks are accomplished at least once per day and when practical with aircraft or vehicles. **(T-0)**

6.2. Takeoff or Landing Direction Determination. According to FAAO JO 7110.65AA, Chapter 3, Section 5, control tower personnel determine the runway in use, unless procedures in a LOP delegate this function to another agency. Control tower personnel must:

6.2.1. Coordinate with terminal radar facilities before changing the runway in use. **(T-0)**

6.2.2. Notify the terminal radar facility, AM, base weather facility, and ARTCC (if appropriate) when the runway change is complete. **(T-0)**

6.3. Control of Ground Traffic in CMAs.

6.3.1. Specific ATC approval is required prior to entry into CMAs, as defined in the AOI.

6.3.2. Vehicles, equipment, and personnel in direct communications with ATC may be authorized to operate up to the edge of the runway surface while aircraft are arriving, departing, or taxiing along the runway. ***PHRASEOLOGY:*** *"PROCEED AS REQUESTED; (and if necessary, additional instructions or information)."*

6.4. Functional Use of CTRD. In addition to criteria established in FAAO JO 7110.65AA, MAJCOMs may authorize the use of the tower radar displays to ensure separation between successive departures, between arrivals and departures, and between over-flights and departures within the surface area for which the tower has responsibility only if:

6.4.1. There is no additional airspace delegated to the tower.

6.4.2. Tower local controllers receive training, and document in the CFETP, radar training and certification commensurate with their radar duties.

6.4.3. A LOP exists with the IFR facility having control jurisdiction, clarifying the additional functions tower is authorized to perform. CCTLRS must ensure the LOP outlines the following at a minimum:

6.4.3.1. The process for a transition to non-radar procedures or the suspension of separation authority in the event of a radar outage. Procedures must not impair the local controller's responsibilities regarding the aircraft operating on the runways. **(T-2)**

6.4.3.2. Procedures for radar handoffs or point-outs that do not impair the local controller's responsibilities regarding the aircraft operating on the runways. **(T-2)**

6.4.3.3. Procedures for ensuring radar separation do not require the tower to provide radar vectors. **(T-2)**

6.4.4. Operational applications of certified tower radar displays other than those outlined above require AFFSA/XA approval.

6.4.5. CCTLRs may determine, on a case-by-case basis, if the DBRITE maintenance indicator or the STARS supplemental display is adequate to support operations during short-term outages. Do not use the DBRITE maintenance indicator or the STARS supplemental display on a permanent basis.

6.5. Wear of Sunglasses in Control Towers. Controllers will not utilize polarizing or photochromic darkening system type sunglasses while performing ATC duties. **(T-0)**

6.6. Protection of 360 Overhead Pattern. At locations that use the overhead pattern, CCTLRs must develop local procedures and coordinate ATC/aircrew requirements to protect the overhead pattern. **(T-2)** Publish procedures and coordination requirements in an AOI. CCTLRs must ensure the following:

6.6.1. Such procedures do not restrict departing, missed approach, or go-around aircraft to a point or altitude that, once the aircraft crosses the departure end of the runway, compromises TERPS obstacle clearance or IFR clearance. **(T-2)**

6.6.2. Published (flight inspected) IFR TERPS procedures, including missed approach instructions, must not be restricted to protect the VFR/360 overhead pattern. **(T-2)**

6.6.3. Where the AOI contains specific climb-out instructions to protect the overhead pattern, controllers may use the phrase below, or other locally approved phraseology for locally assigned aircraft only. ***PHRASEOLOGY****: "EXECUTE LOCAL CLIMB OUT."*

6.7. Tower Equipment Requirements. Appropriate to assigned mission functions, CCTLRs must provide each control tower with the following equipment:

6.7.1. Headsets. **(T-2)**

6.7.2. Flight progress strip holders. **(T-2)**

6.7.3. A landline system that includes an intercom between positions within the facility. **(T-2)**

6.7.4. Radio receiver and transmitter controls, and consoles, to include a handset for backup radio (e.g., GRC-171/GRC-211). **(T-2)**

6.7.5. Tower radar display. **(T-2)**

6.7.6. Weather dissemination and display equipment. **(T-2)**

6.7.7. Two wind direction and speed indicators. **(T-2)**

6.7.8. NAVAID remote status indicators or remote-control status unit (where applicable). **(T-2)**

6.7.9. Two air traffic control light guns. **(T-2)**

6.7.10. Two pairs of binoculars. **(T-2)**

6.7.11. Airfield lighting control. **(T-2)**

6.7.12. Runway barrier controls and status indicators. **(T-2)**

6.7.13. Primary Crash Alarm System. **(T-2)**

6.7.14. Counters for recording traffic. **(T-2)**

6.7.15. UHF and VHF emergency/alternate radio systems. **(T-2)**

6.7.16. Voice recorders and an adequate supply of recordable data media. **(T-2)**

6.7.17. Battery-operated emergency lighting system or flashlights. **(T-2)**

6.7.18. Dedicated communications for tower/radar coordination. **(T-2)**

6.7.19. Flight Data System. **(T-2)**

6.7.20. Automatic terminal information service. **(T-2)**

6.7.21. RVR equipment for bases with CAT II/III ILS. **(T-2)**

6.8. Air Force VFR Tower Operations Within Class C Airspace.

6.8.1. When conditions require Air Force VFR towers to operate within Class C airspace, the following minimum provisions are required for providing VFR tower services. The CCTLR must ensure the following are covered in a LOP with the servicing radar agency:

6.8.1.1. Tower surface area must be defined. **(T-0)**

6.8.1.2. Tower controllers may provide transit authorization of the surface area in accordance with FAAO JO 7110.65AA. When approving surface area transit requests, tower controllers must use phraseology for operational requests in accordance with FAAO JO 7110.65AA. IFR surface area transitions will remain under the control of the servicing radar facility. **(T-0)**

6.8.1.3. Tower and radar coordination procedures for arrivals must be developed in accordance with **paragraph 4.13** of this manual. **(T-2)**

6.8.2. Air Force VFR towers, located within Class C airspace, are authorized and may provide the following services within their surface area:

6.8.2.1. Standard separation between successive departures and between arrivals and departures.

6.8.2.2. Visual separation, wake turbulence separation and traffic advisories/alerts between IFR and VFR aircraft.

6.8.2.3. Mandatory traffic advisories/alerts between aircraft in the tower's surface area.

6.9. Air Force VFR Tower Operations within Class D Airspace. When mixing aircraft operating in the tower's VFR traffic patterns (e.g., overhead, rectangular, tactical) and establishing a sequence to the runway with arriving aircraft receiving IFR services, tower controllers must ensure that their sequencing actions do not result in disruption of the IFR arrival's approach or required radar wake turbulence separation minima. **(T-2)**

6.10. Aircraft Arresting Systems. Where the Air Force is responsible for control tower services, the CCTLR must ensure a LOP defining the following is developed:

6.10.1. Coordination between agencies involved in operating the arresting systems. **Note:** Notify AM before releasing arresting systems to barrier maintenance for maintenance or configuration changes. **(T-2)**

6.10.2. Configuration of arresting systems. **(T-2)**

6.10.3. Intervals to use when sequencing aircraft for successive engagements. **(T-2)**

6.10.4. Procedures for remotely controlled arresting systems. **(T-2)**

6.10.5. Responsibilities concerning use of the aircraft arresting systems. **(T-2)**

6.10.6. A training program to include the location, capabilities, and procedures for all installed arresting systems. **(T-2)** **Note:** The OG/CC may establish multiple system priorities/configuration to meet local operational requirements.

6.11. Restricted Runway Operations.

6.11.1. CCTLRs must develop procedures to warn controllers (e.g., Obstruct view of wind indicators by physically placing signs over them, use automated methods such as Airfield Automation System [AFAS]) when:

6.11.1.1. Aircraft, vehicles, or personnel are on the runway/landing zone. **(T-0)**

6.11.1.2. Flight operations to a runway/landing zone are restricted. **(T-0)**

6.11.2. Ensure procedures in the facility OI required per **paragraph 4.3.12** include:

6.11.2.1. Procedures to identify and track all aircraft, vehicles, or personnel operating within the CMA or on runways/landing zones, and identify the position responsible for maintaining the current status of aircraft, vehicles, or personnel operations within the CMA or runways/landing zones. **(T-2)** Tracking is required for all aircraft operating on runways/landing zones when being used for any purpose other than departure or landing.

6.11.2.2. If the CCTLR authorizes the transfer of control for granting runway/landing zone access from local control to ground control in the policy then the ground controller has the authority to grant access to the runway/landing zone without additional coordination with local control. **(T-2)**

6.11.2.3. The use of specific phraseology between local and ground control to transfer control of the runway/landing zone to include:

6.11.2.3.1. Runway/landing zone designator. **(T-2)**

6.11.2.3.2. Accountability of any aircraft, vehicles, or personnel previously on the runway or landing zone. **(T-2)** ***Example:*** ***"****ALL VEHICLES OFF RUNWAY 17C, RUNWAY 17C YOUR CONTROL****."***

6.11.2.4. Identify the position responsible for activating and/or implementing memory aids in accordance with **paragraph 6.11.1**. **(T-2)**

6.12. Standardized Taxi Routes (STRs). Controllers may issue standardized taxi routes (STRs) to DoD base-assigned aircraft only, provided all of the following conditions are met:

6.12.1. The reduced instructions do not permit aircraft to cross any runway(s).

6.12.2. The required operational risk assessment has been accomplished.

6.12.3. The procedures are clearly defined in a base AOI and only in a LOP by exception.

6.12.4. The procedures are MAJCOM reviewed/coordinated prior to implementation.

6.12.5. ***PHRASEOLOGY:*** *"(AIRCRAFT IDENTIFICATION (ACID)) RUNWAY (NUMBER) TAXI VIA (STR NAME)."*

6.12.5.1. *Example 1: "ZORO01 RUNWAY THREE SIX LEFT TAXI VIA TEXAN ONE."*

6.12.5.2. *Example 2: "ZORO01 RUNWAY THREE SIX LEFT TAXI VIA TEXAN ONE, HOLD SHORT RUNWAY THREE SIX RIGHT."*

6.13. Visual Separation. As defined in the Aeronautical Information Manual, a pilot's acceptance of instructions to follow another aircraft or provide visual separation from it is an acknowledgment that the pilot will maneuver the aircraft as necessary to avoid the other aircraft or to maintain in−trail separation. Additionally, in operations conducted behind heavy aircraft, or a small aircraft behind a B757 or other large aircraft, it is also an acknowledgment that the pilot accepts the responsibility for wake turbulence separation. Visual separation is prohibited behind super aircraft. **Note:** When a pilot has been told to follow another aircraft or to provide visual separation from it, the pilot should promptly notify the controller if visual contact with the other aircraft is lost or cannot be maintained or if the pilot cannot accept the responsibility for the separation for any reason.

Chapter 7

RADAR OPERATIONS

7.1. Radar Use.

7.1.1. Air Force ATC radar systems may be used for:

7.1.1.1. Surveillance of aircraft to assure the effective use of airspace.

7.1.1.2. Vectoring aircraft to provide separation and radar navigation.

7.1.1.3. Vectoring aircraft to final approach.

7.1.1.4. Vectoring aircraft to the airport of intended landing.

7.1.1.5. Monitoring instrument approaches.

7.1.1.6. Providing assistance to pilots of aircraft in distress.

7.1.1.7. Conducting precision or surveillance approaches.

7.1.1.8. Air Base Defense. **Note:** If a requirement exists, terminal ATC radar facilities may perform radar surveillance functions to support early warning or ensure the safe passage of friendly aircraft. If the terminal ATC radar is used for this requirement, the CCTLR must describe controller priorities, procedures, coordination requirements, and areas of responsibilities in a LOP. **(T-2)**

7.1.1.9. STARS facility CCTLRs must determine the need to use or not use the satellite airport database feature containing emergency airport data. **(T-0)** If this feature is used, the NAAM or qualified automation personnel, must ensure validation to ensure correct data is contained in the STARS system**. (T-2)** The CCTLR must include applicable procedures in facility OI. **(T-2)** **Note:** Ready reference files (RRF) may be used as a supplement for the STARS satellite airport database.

7.1.1.9.1. STARS facility CCTLRs must develop alternate procedures to advise pilots the satellite airport database is unverified if the automation personnel have not completed the verification process by the 10th day of each month in a facility OI. **(T-0)** CCTLRs must ensure procedures include the phrase below. **(T-0)** **Note:** Due to the inability to verify or receive real-time airport data at uncontrolled airports, these airports should be considered unverified at all times. ***PHRASEOLOGY****: "AIRPORT DATA UNVERIFIED."*

7.1.1.9.2. If STARS facility CCTLR determines the STARS satellite airport database will not be used, state restrictions in facility OI. **(T-2)**

7.1.2. A facility may remote a radar operated by non-ATC agencies and use the radar for ATC purposes if the radar is satisfactorily flight checked according to AFMAN 11-225_IP, *U.S. Standard Flight Inspection Manual*. The CCTLR must ensure a LOA or MOU is in place to ensure the non-ATC agency does not alter radar information furnished to the ATC facility without prior notification. **(T-1)**

7.1.3. A controller provides radar service when they have a usable target and determine that presentation and equipment performance are satisfactory. STARS will only display a target if

the system determines the target to be usable. Additionally targets are not considered usable in the following scenarios at a minimum:

7.1.3.1. The data block displays "TRK II."

7.1.3.2. The data block displays "CST" for 15 seconds or more.

7.1.4. STARS Handoff Function.

7.1.4.1. STARS facilities must be adapted to retain aural CA/LA alarms for tracks at the sending position after handoff while the track remains in the "owned color." In this configuration, the aural alarms will stop when the track is slewed and changed to the "unowned color."

7.1.4.2. Radar CCTLRs will establish procedures in an OI specifying when controllers may slew a handed off track to ensure aural CA/LA alarms are received. **(T-2)**

7.2. Radar Reflectors for Precision Approach Radar (PAR).

7.2.1. The outage of one bracketing reflector, or the outage of the centerline reflector when a single centerline reflector is being used, does not make the PAR unusable provided a suitable alternate method of runway centerline reference is available (e.g., approach lights, runway lights, barrier poles). CCTLRs must determine which returns to use as a temporary replacement for the bracketing reflectors in a facility OI. **(T-2)** Verify accuracy of the alternate references through local or formal flight inspection. After flight check determines accuracy, the CCTLR must publish guidance for use in a facility directive. **(T-2)**

7.2.2. The outage of any one of the moving target indicator (MTI) reflectors (refer to the appropriate technical order for the minimum number required) makes the PAR unusable in the MTI mode.

7.2.3. The AN/GPN-22 and AN/TPN-25 do not use bracketing or touchdown reflectors; they rely on track reflectors to monitor track accuracy for each runway served. The PAR is unusable for a given runway if the system cannot track the corresponding reference reflector. If this condition occurs, the systems will flat-line the glideslope cursor. If the system can track the reference reflector, but the controller cannot view or manipulate track symbols, the system may still be used in the scan-only mode if the system is flight checked and procedures are detailed in local directives.

7.3. Radar Glide Path and Course Information. Use the center of the radar target (track symbol) for phased array PAR to determine when an aircraft exceeds the PAR safety limits. Use minimum gain to provide the most accurate position information.

7.3.1. The AN/GPN-22 and AN/TPN-25 use a computer tracking system. Local conditions and equipment performance may limit the use of this equipment to control aircraft without the aid of the tracking system (scan mode only). Commissioning and periodic flight inspections of these radar systems will identify their capabilities and limitations.

7.3.2. During temporary loss or non-availability of the tracking symbology, and the controller can verify the radar is otherwise operating normally, the controller may use scan-only video to conduct radar approaches provided limitations and procedures are published in a LOP.

7.4. PAR Safety Zones.

7.4.1. PAR Lower Safety Limit Zone. A PAR lower safety limit path ("B" cursor) originates between the end of the runway and a point not closer than 500 feet before the runway point of intercept (RPI) of the glide path. Where possible, "B" cursor origin should be at least 250 feet from the runway end. That area between the "B" cursor and the glide path is the safety zone.

7.4.1.1. The "B" cursor extends upward at an angle one-half (0.5) of a degree lower than the commissioned glide path angle, and ends at an altitude of 250 feet below the established glide path intercept altitude.

7.4.1.2. At some locations, the length of the “B” cursor differs because of differences in glide path angles or intercepts altitudes for the two runways. When this occurs, use the longer "B" cursor length (termination point below the glide path). Using the common "B" cursor expedites use of PAR by reducing maintenance adjustments after a runway change and equipment turnaround.

7.4.1.3. The AN/GPN-22 "B" cursor extends to the length of the "A" cursor. However, safety limits apply for go-around instructions only between the point on the "B" cursor 250 feet below the established glide path intercept altitude and the normal termination point of the approach.

7.4.1.4. A dashed electronic cursor displays the "B" cursor on the elevation portion of the PAR scope for each precision approach. If an equipment malfunction prevents display of the cursor, a suitable substitute may identify the lower safety limit zone.

7.4.2. PAR Upper Safety Limit Zone. This zone is above the glide path. Its dimensions are the same as those established for the lower zone. The upper safety limit path starts at a point in space above the glide path and has the same geometrical relationship to the glide path as the lower path. The upper path rises at an angle one-half (0.5) of a degree greater than the commissioned glide path angle. There is no requirement to display the upper path on the scope.

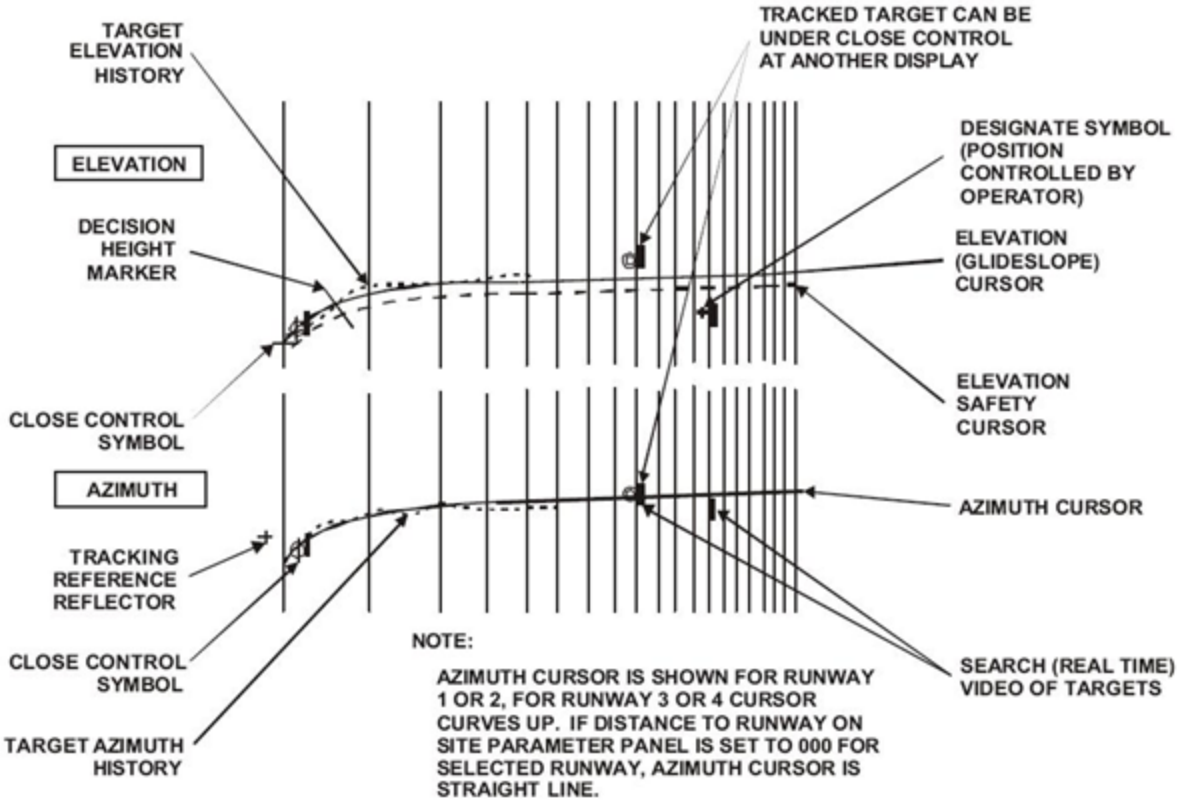
7.4.3. PAR Lateral Safety Limits. These limits refer to distances on the azimuth portion of the PAR scope. There is no requirement to display lateral safety zone limits on the radarscope; however, the CCTLR must ensure a drawing or table depicting lateral safe limits must be available at each PAR position. **(T-2)** **Table 7.1**. Specifies PAR lateral safety limits and approximate displacement distances. The displacement distances are averages and actual distances will vary. Displacement distances for scan type radar are based on a maximum display range of 9 miles. The displacement relationship remains constant for tracking type radar, regardless of the display range selected (8, 15, or 20 miles). Use these distances as a guide for interpreting the precision radar displays.

7.5. Decision Height (DH). Mark the DH on the PAR azimuth-elevation zone paths that represent the height above threshold elevation approved for the runway in use. Use grease pencil or fluorescent-gummed cellophane tape to display the DH if not electronically displayed (Not applicable to GPN-22). Display only the DH for the runway in use (reference **Figure 7.2**.).

Table 7.1. PAR Lateral Safety Limits and Approximate Displacement Distance.

Range	Lateral Limit	Scan Radars	Tracking Radars
6	1200	3/4 inch	1/2 inch
5	1000	3/4	1/2
4	800	1/2	3/8
3	600	1/2	3/8
2	400	1/4	1/4
1	200	1/4	1/4
1/2	100	1/4	1/4

Figure 7.1. Typical PAR Elevation Display.



7.6. Use of Precision Approach Radar (PAR).

7.6.1. A radar final controller must not accept more than one aircraft or flight conducting a PAR or ASR approach. **(T-1)** **Note:** A standard formation flight conducting a PAR or ASR approach will not exceed two aircraft. **(T-1)**

7.6.1. **(ACC)** CCTLRs must coordinate the use of any alternative PAR equipment by notifying ACC/A3AO (acc.a3ao@us.af.mil).

7.6.2. Monitor Instrument Final Approach Courses.

7.6.2.1. To use PAR to monitor non-radar instrument approach courses, the PAR RPI must be within 250 feet of the ILS, and the commissioned flight check angle of the PAR must be within two-tenths of a degree of the ILS commissioned glide slope angle. Additionally, the PAR final approach course must coincide with the NAVAID final approach course from the final approach fix to the runway. Where the capability exists, the OG/CC must determine if there is a requirement to monitor approaches at their locations in a LOP. **(T-3)**

7.6.2.2. A radar final controller must not monitor more than four aircraft. **(T-1)** If units choose to monitor approaches using the PAR equipment, one of the following conditions must exist:

7.6.2.2.1. The official weather is below basic VFR minima (1,000-foot ceiling and/or 3 miles visibility). **(T-3)**

7.6.2.2.2. At night. **(T-3)**

7.6.2.2.3. Upon request of the pilot. **(T-3)**

7.6.2.3. Where PAR serves a runway that has an ILS or visual glide slope indicator, the glide path, glide-slope angles RPIs should coincide. An official flight inspection must determine coincidence. Where PAR, ILS, and visual glide slope indicators are not coincident, publish the deviation in the IFR Supplement available at: **https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/**. For example: Runway (RWY) 30-PAR, ILS, and Precision Approach Path Indicator (PAPI) glide-slopes are not coincidental.

7.6.2.4. When the mission warrants simultaneous approach monitoring, the CCTLR must outline procedures in a LOP. **(T-3)**

7.6.2.5. PAR Associated Equipment Requirements. The CCTLR must ensure a readily observable and operational ASR display is available in the operations room at facilities providing PAR only service. **(T-3)** At locations where ASR displays are not available, a CTRD maintenance monitor or television slaved from the tower CTRD meets the requirement. The ASR display will aid controllers during radar hand-offs between approach control and PAR. When the ASR display is out of service, PAR services may continue if the CCTLR establishes procedures in a LOP. **(T-3)**

7.6.2.6. Turn-around procedures. CCTLRs must establish a LOP for notification of personnel working in or around radar units during turn-around operations. **(T-3)**

7.7. Airport Surveillance Radar (ASR) Approach Procedures.

7.7.1. The CCTLR must ensure an adequate reference to the runway centerline must be available on the ASR indicator. **(T-3)** The video map is an adequate reference when the commissioning flight check establishes permanent echoes or targets. CCTLRs must ensure facilities without a video map have alignment reflectors to verify course accuracy. **(T-3)** Use two runway bracket reflectors or a centerline runway reflector to verify alignment of an overlay (if available), cursor or compass grid line for ASR approaches. MTI reflectors must be operational when conducting ASR approaches using MTI radar when video maps are not available or when using MTI to determine runway centerline reference. **(T-3)**

7.7.2. CCTLRs must ensure facilities use a video map to depict the extended runway centerline. **(T-3)** A map overlay (if available) may be used during map outages.

7.7.3. There is no requirement for bracketing reflectors or a video map to provide ASR approaches using the AN/TPN-19. The systems fixed, displayed runway cursor is based on a set geographic location in relation to the ASR antenna and meets reflector, video map, and cursor requirements.

7.7.4. CCTLRs must ensure recommended altitudes for ASR approaches must be developed according to AFMAN 11-230 and be immediately available at each RFC position and ASR indicators. **(T-0)**

7.8. Standard Terminal Automation Replacement System (STARS).

7.8.1. CCTLRs at STARS locations will establish procedures in an LOP or Letter of Instruction (LOI) in the event of radar feed failures. **(T-2)** Guidance will include WS actions for maintenance notification and STARS keyboard entries located in FAA TI 6191.409/6191.410 (available on the STARS maintenance laptop) to exclude false radar track data to prevent false target returns. **(T-2)**

7.8.2. CCTLRs will establish coordination procedures with RAWS maintenance personnel to determine realistic response times and maintenance actions in a facility OI, LOP, or LOI. **(T-3)**

7.9. Radar Performance Checks. Each radar controller is responsible for determining, on a continuous basis, if the quality of their radar display and video fix accuracy is satisfactory for ATC purposes.

7.9.1. CCTLRs must develop procedures to ensure the radar performance check is accomplished at least once each shift for non-STARS locations. **(T-3)**

7.9.2. Radar quality and performance are determined by comparing identified targets against data obtained during the commissioning flight check. Minimum performance criteria may be determined jointly by maintenance and the CCTLR.

7.9.3. Targets used for comparison checks should be generated by small aircraft, similar in size to those used during the commissioning flight check.

7.9.4. CCTLRs, at locations that use multi-site sensors/radars, must ensure each radar sensor used provides adequate radar and altitude coverage for the type of operations the sensor will be used for. **(T-3)**

7.9.5. Automated ATC narrow-band radar systems must not be used for operational purposes unless they are operationally validated (certified) by RAWS maintenance personnel. **(T-3)** Non- validated radar sensors (e.g., failed or out of tolerance) must be inhibited from the system until validated for use. The WS must ensure an entry is made on DAF Form 3616 when the digitized radar system is validated for operational use and/or when a non-validated radar sensor is inhibited or restored to the operational system. **(T-3)** **Note:** These procedures are not intended to be used during normal opening/shift change checklists, but are used when certifying or re-entering into service a radar system that was removed from service.

7.9.6. Optimum Antenna Tilt. Operate deployable mobile radar systems, with variable antenna tilt capability, at the tilt angle prescribed by the commissioning flight check or data incorporated into the most recent ATCALS Evaluation Report.

7.10. Surveillance Antenna Operation in High Wind. Allow the antenna to free wheel whenever the forecasted/current wind exceeds the maximum defined in the system-specific

technical orders and ATC conditions permit. CCTLRs must define maintenance notification procedures, and define who is responsible for placing the antenna in the free-wheel mode in a LOP. **(T-3)**

7.11. Diverse Vector Area (DVA). The CCTLR must coordinate with TERPS and establish a DVA (reference FAAO JO 7110.65AA, **Chapter 5** and AFMAN 11-230) before aircraft may be vectored below the MVA or minimum IFR altitude (MIA) while aircraft are executing a departure and/or climb-out instructions. **(T-0)** A DVA provides separation from obstacles according to TERPS diverse departure criteria. **Note:** Free vector areas are areas within a DVA in which random vectoring below the MVA or MIA is authorized.

7.11.1. When a DVA is established, CCTLRs must include the following in the facility OI:

7.11.1.1. A complete description of the DVA, to include any restrictions and/or free vectoring areas. **(T-0)**

7.11.1.2. Procedures for radar vectoring IFR departures below the MVA/MIA and within 3-5 NM of an obstacle, as applicable. **(T-0)**

7.11.2. Depict sectors (areas) and/or radar routes/corridors within which radar vectors are provided. **(T-0)**

7.11.3. Restrictions to a DVA must be incorporated in accordance with AFMAN 11-230. **(T-1)**

7.11.4. For climb gradients in excess of 200 feet per nautical mile (FPNM), controllers must issue the specific climb gradient and obtain pilot concurrence prior to providing ATC navigational guidance on departure. **(T-2)** **Exception:** For Obstacle Departure Procedures (ODP) and Standard Instrument Departure (SID) procedures, ATC personnel are not required to issue climb gradients in excess of 200 FPNM when the required climb gradient is published.

7.12. Designation of Sectors. CCTLR develops airspace sectors based on predominant traffic flows, altitude strata, and controller workload. When sectorization is in a facility OI, the CCTLR must ensure no two controllers provide service or advisories in the same airspace. **(T-2)**

7.13. Radar Equipment Requirements. Appropriate to assigned mission functions, the CCTLR must ensure a radar approach control or other terminal radar ATC facility has the following equipment:

7.13.1. Flight Progress Boards. **(T-2)**

7.13.2. RVR equipment (for locations with CAT II/III ILS). **(T-2)**

7.13.3. A landline system that includes an intercom between positions within the facility. **(T-2)**

7.13.4. A radar display. **(T-2)** **Note:** Refer to **Attachment 8** for applicable radar alignment procedures.

7.13.5. Radio receiver and transmitter controls, and consoles. **(T-2)**

7.13.6. Weather dissemination and display equipment. **(T-2)**

7.13.7. NAVAID remote status indicators or remote control status unit (where applicable). **(T-2)**

7.13.8. Voice recorders and an adequate supply of recordable data media. **(T-2)**

7.13.9. Wind direction and speed indicators. **(T-2)**

7.13.10. Flight Data System (FDS), with a collocated clearance delivery position that has independent communications. **(T-2)**

7.13.11. Coordinator positions. Authorize independent Coordinator positions when necessary due to traffic complexity. **(T-2)**

7.13.12. Secondary radar system. **(T-2)**

7.13.13. Video mapper. **(T-2)**

7.13.14. Battery operated emergency lighting systems or flashlights. **(T-2)**

7.13.15. UHF and VHF emergency alternate radio system. **(T-2)**

7.13.16. Dedicated communications for tower/radar coordination (e.g., landline, shout line). **(T-2)**

7.13.17. Automated Radar Tracking System (e.g., STARS, MEARTS, ARTS 3/A). **(T-2)**

7.13.18. Headsets. **(T-2)**

7.14. Non-Radar Board. Not applicable to locations that do not provide non-radar services. The CCTLR must ensure each radar facility (RFC excluded) maintains and utilizes a current facility developed non-radar board. **(T-2)** CCTLRs must coordinate non-radar board information annually with TERPS personnel and develop the non-radar board. **(T-2)** The following items should be included, but are not limited to:

7.14.1. Transfer of control points.

7.14.2. GPS coordinates (Latitude/Longitude) for significant points.

7.14.3. Diverging radials table.

7.14.4. Holding patterns (include applicable altitudes and maximum holding airspeed).

7.14.5. Available NAVAIDS.

7.14.6. Minimum IFR Altitude Chart.

7.15. FAA/Air Force Contingency Plan Agreements. The purpose of an FAA Parent Facility Contingency Plan, developed according to FAAO JO 1900.47F, is to mitigate impact to the NAS in the event of an ATC facility's loss of ability to provide ATC services. In the event of a contingency involving equipment failure, the plan should address support between Air Force and FAA approach control facilities to assume services as much as feasible. These agreements should also address requirements for FAA assumption of Air Force facility airspace, in the event of a temporary facility closure or to temporarily curtail operating hours (e.g., deployments or critical staffing levels).

7.15.1. The Air Traffic services contingency plan authority is an agreement authorizing inter-facility cooperation to proceed with the contingency plan development. For Air Force locations, the OG/CC must sign these agreements in lieu of the Air Traffic (AT) manager. **(T-0)**

7.15.2. The support facility Operational Capability Level (OCL) procedures should encompass each support facility's OCL site-specific procedures, contain customized checklists and detailed data or procedures necessary to activate and support the parent facility contingency plan.

7.15.2.1. The information contained in section 3 of the OCL procedures should incorporate a checklist tailored to each individual facility. Include detailed procedures (including non-radar, if required) for departures, arrivals, and enroute operations to/from the terminal area, adjacent areas and inter-facility coordination required to accomplish these actions.

7.15.2.2. The section labeled *Information and/or Actions* common to all facilities may contain general guidance that all facilities need in case of the parent facility's OCL declaration. Outline procedures for reporting to the Air Traffic Control System Command Center when the transfer control of airspace has been stabilized.

7.15.2.3. Each procedures document contains administrative and operational data attachments needed to activate the contingency plan. Attachments include:

7.15.2.3.1. Map of Assets. The geographical depiction of physical assets and frequency service volumes and is used as a tool for developing airspace divestment charts.

7.15.2.3.2. Data Tables. Ensure this contains specific telephone, frequency, navigational facilities and other similar types of physical assets.

7.15.2.3.3. Airspace Divestment Charts. The geographical depiction of airspace delegation derived from parent and support facility map of assets.

7.15.2.4. Additional attachments including maps depicting departure and arrival routes are permitted, as long as detailed procedures are outlined within the actual plan (Section 3). Ensure requirements within Section 3 and the attachment match.

7.15.2.5. Other important areas to include are:

7.15.2.5.1. Facility Operating Hours (e.g., when will facilities not be available to participate in the contingency plan).

7.15.2.5.2. The number of days the facility can sustain continuous operations (24-hours, 7-days per week) before augmentation is required.

7.15.2.5.3. A statement that Air Force air traffic controllers are deployable assets and can be deployed at any time, affecting the terms of the agreement.

7.15.2.5.4. Limitations of equipment (e.g., radar and radio coverage, control positions available, if any, and options for parent facility controllers to augment Air Force staffing, and accepted impact on routine services).

7.15.2.5.5. Due to the uncertainties regarding automation capabilities, facilities should address the use of automated inter-facility handoff procedures and/or the use of manual handoff until automation capabilities are verified.

7.15.2.5.6. CCTLRs must forward proposed support facility authority and support facility OCL procedures to MAJCOM for approval prior to implementation. **(T-2)** The

request for approval must be signed by the OG/CC (or equivalent) and must contain one of the following statements:

7.15.2.5.6.1. Draft requirements (if approved) can be accomplished within existing resources. **(T-2)**

7.15.2.5.6.2. Additional (e.g., personnel, equipment, funds) resources that are necessary. **(T-2)**

7.15.2.5.6.3. A mission impact statement (e.g., operational efficiency, aircraft movement, aircraft training). **(T-2)**

7.15.3. Do not enter into the plan if:

7.15.3.1. The support facility agreement is not written to a level that stands alone and provides the tools to transition to/from the contingency plan.

7.15.3.2. Entering into an agreement requires additional equipment or manpower that the facility is not funded for or currently does not have available. Air Force units may support more than one parent facility (e.g., an approach control could support two separate ARTCC facilities, or two Air Force RAPCON facilities could mutually support a single ARTCC facility). Units must use caution when entering into more than one support facility agreement. The CCTLR must ensure support responsibilities do not overlap or override another plan in addition to units acting as a support facility. **(T-0)**

7.16. AN/TPX-42 Strapping. For use in deployed locations on applicable equipment. Normally strap the AN/TPX-42 1,000' higher than the transition altitude. The negative 1,000' altitude factor applied between the point of strapping and the point of applying local altimeter correction is an inherent part of the signal-processing chain. At locations with low transition altitudes (below 10,000'), strap the AN/TPX-42 2,000' above the transition altitude. This will reduce the number of incorrect altitude read-outs below the transition altitude during periods of low altimeter settings.

7.16.1. Do not use AN/TPX-42 altitude read-outs for separation between the transition altitude and the transition level. During periods of low altimeter settings (between 28.92 and 27.92), altitude read-outs may be unreliable at altitudes within 1,000’ below the transition altitude.

7.17. AN/TPX-49A Range Azimuth Beacon Monitor (RABM). For use in deployed locations on applicable equipment.

7.17.1. CCTLRs must provide written guidance for equipment checks and beacon range accuracy verification during:

7.17.1.1. Temporary primary radar outage conditions. **(T-3)**

7.17.1.2. Secondary radar service is provided outside the coverage of primary radar. **(T-3)**

7.17.2. Continually display the target to verify system accuracy whenever primary radar is inoperative and secondary radar is in use. If using a code other than 6666, controllers must ensure maintenance sets the displayed altitude to greater than 60,000 feet (Flight Level 600) to prevent erroneous traffic alert and collision avoidance system (TCAS) alerts to TCAS-equipped aircraft. **(T-3)**

7.17.3. Beacon targets may be displaced at a slightly greater range than their respective primary returns when desirable and equipment supports this function. Issue a facility directive

specifying the standard relationship between primary returns and the beacon control slash of secondary returns when beacon displacement is elected. The maximum allowable displacement is 1/2 mile applied in 1/4-mile increments.

7.17.4. Continually display the target to verify system accuracy when secondary radar service is provided outside the coverage of primary radar.

Chapter 8

SPECIAL OPERATIONS AND SUPPLEMENTAL PROCEDURES

8.1. Exercises. The WS must ensure ATC facility participation does not degrade services. **(T-3)** The WS may interrupt or discontinue facility participation in any exercise if flight safety is in question or participation interferes with the recovery of emergency aircraft. The WS may direct use of the simulator for inspection purposes. ATC personnel may wear gas masks in support of exercises and inspections consistent with wing requirements, provided a non-masked safety observer is present. The safety observer must be facility rated and cannot be assigned to any position other than WS. **(T-3)** The safety observer must have the authority to direct controllers to remove gas masks in the interest of flight safety. **(T-3)** When an aircraft declares an emergency or is in distress, controllers in direct communications with the aircraft must remove the gas mask. **(T-3)**

8.2. Supervisor of Flying (SOF). When the SOF performs duties in an ATC facility, the CCTLR must describe details in a LOP. **(T-3)** When advice is extremely technical, or when the SOF feels that relay of information by the controller could cause an unacceptable delay, the SOF must coordinate with the WS prior to using an ATC frequency to transmit directly to the affected aircraft. **(T-2)** Instructions should be limited to preventing a mishap. The SOF must not perform ATC functions or transmit ATC instructions or clearances to an aircraft. **(T-2)** A person who commandeers an ATC frequency assumes responsibility for separation of aircraft.

8.3. Aircraft Priorities. CCTLRs must ensure that locally developed operational priorities do not take precedence over priorities listed in FAAO JO 7110.65AA, **Chapter 2**, Section 1. **(T-0)**

8.4. Reduced Same Runway Separation (RSRS). Headquarters Air Force Flight Standards Agency delegates responsibility for establishing RSRS criteria to major command operations (MAJCOM/A3) OPR's for their specific commands.

8.4. (ACC) Reduced Same Runway Separation (RSRS). ACC RSRS standards and procedures are contained in the AFMAN 11-202 Volume 3 ACCSUP, *Flight Operations*. The AOF/CC will ensure that RSRS is published in the DoD enroute supplement if applicable. The statement "ACC RSRS applied to ACC aircraft only" will suffice. **(T-2)**

8.4.1. RSRS criteria is based on aircraft characteristics, aircrew training requirements and the responsible air traffic controllers' ability to ensure application of established separation.

8.4.2. The CCTLR must ensure application of RSRS is outlined in either the base airfield operations instruction or a Wing operations letter, and approved by the MAJCOM prior to implementation. **(T-2)**

8.5. Radar-in-Trail Recovery. Radar-in-trail recovery procedures must be coordinated through the AOF/CC, Operations Group (and host nation, if required), reviewed/coordinated with the MAJCOM, and detailed in the AOI. **(T-2)** If the FAA provides approach control services, the CCTLR must ensure procedures are contained in an LOA and signed by all appropriate individuals. **(T-2)** CCTLRs must ensure procedures address the following:

8.5.1. Recovery procedures and notification requirements (to include flight lead coordination of trail recovery with ATC prior to taking spacing). **(T-2)**

8.5.2. Missed approach/break-out/go-around procedures. **(T-2)**

8.5.3. Lost communications procedures. **(T-2)**

8.5.4. Spacing requirement within/between flights. **(T-2)**

8.5.5. Radar-in-trail recoveries must not terminate in PAR or ASR approaches. **(T-2)**

8.5.6. Radar-in-trail recovery is limited to a maximum of four aircraft. **(T-2)**

8.5.7. Aircrews conducting radar-in-trail recoveries are responsible for their own separation between elements of their flight while on final for full-stop landings. To ensure appropriate departure separation, multiple practice radar in-trail approaches that do not terminate with a full-stop landing must be conducted only in visual meteorological conditions (VMC). During practice approaches in VMC conditions, after an executed low approach/landing, the flight is responsible for their own separation until ATC initiates flight split-ups for individual control. **(T-2)**

8.6. Unlawful Seizure of Aircraft. FAAO JO 7610.4W, *Special Operations*, and AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking)*, provide guidance regarding unlawful seizure of aircraft. CCTLRs must ensure a LOP defines the base response to hijack or theft attempts and coordinate with the AOF/CC to identify a single base agency to receive ATC notification. **(T-2)** In addition to procedures mandated in FAAO JO 7610.4W and host nation documents, and described in ICAO Annexes, tower controller responsibilities include, but are not limited to:

8.6.1. Immediately activating the primary crash alarm system, or notification via landline.

8.6.2. Issuing current position information to fire/crash, security police, and base rescue.

8.6.3. Assisting the on-scene commander by forwarding updated information and relaying any orders or instructions.

8.7. Min-Comm/Comm-Out. CCTLRs must ensure that departure/inbound procedures for minimum-communications and communications-out operations are established in the AOI and require MAJCOM review/coordination prior to implementation. **(T-2)** CCTLRS must ensure procedures that task or involve the FAA are defined in an LOA. **(T-2)**

8.8. Night Vision Device (NVD) Use in Terminal Airspace.

8.8.1. CCTLRs must develop procedures to ensure NVDs are only used as an aid for controllers to assist in maintaining air traffic situation awareness and airfield surveillance during periods of aircraft operations at airfields with reduced lighting configurations. **(T-2)**

8.8.2. CCTLRS must ensure NVD tasks are identified on AF Form 797, with applicable Technical References (TR). **(T-3)** Include tasks that reflect use of associated equipment.

8.9. Explosives Detection K-9 Teams.

8.9.1. CONUS Locations, Alaska, Hawaii and Guam. During emergency situations, and with the concurrence of base officials, military installations with explosives detection K-9 teams should advise the pilot that such service is available. CCTLRs will ensure procedures are outlined in a facility checklist. **(T-2)** Controllers must take the following action should they receive an aircraft request for the location of the nearest explosives detection K-9 team:

8.9.1.1. At military locations without an explosives detection K-9 tem, relay the pilot's request to the FAA Washington Operations Center, AEO-100, telephone: commercial (202) 267-3333 or DSN 851-3750 providing the aircraft's identification and position. **(T-1)**

8.9.1.2. Relay the nearest location to the pilot as directed by AEO-100 and keep AEO-100 on the line. **(T-1)**

8.9.1.3. After it has been determined that the aircraft wishes to divert to the airport location provided, the air traffic facility will ascertain estimated arrival time and advise AEO−100. **(T-1)** AEO−100 will then notify the appropriate airport authority at the diversion airport. **(T-1)** In the event the K−9 team is not available at this airport, AEO−100 will relay this information to the air traffic facility providing them with the secondary location. **(T-1)** ATC will then relay this to the pilot concerned for appropriate action. **(T-1)**

8.9.2. Host Nation Locations. Controllers receiving a request from a military or civil aircraft must take action according to local resource protection plans and guidance received from local military authorities in accordance with host nation agreements. **(T-0)**

8.10. Parachute Jump Operations.

8.10.1. CCTLRS must define operational/procedural needs to conduct parachute jump operations in a LOP with parachute jump organizations or responsible individuals. **(T-2)** CCTLRs must ensure at a minimum, the LOP should contain:

8.10.1.1. The description and the location of the drop zone(s) and the conditions of use. **(T-2)**

8.10.1.2. The activity schedules. **(T-2)**

8.10.1.3. The maximum jump altitudes (Mean Sea Level). **(T-2)**

8.10.1.4. Notification procedures. **(T-2)**

8.10.1.5. Any other items pertinent to the needs of the ATC system and the users. **(T-2)**

8.10.2. Areas designated as permanent jump sites in a LOP may be used repeatedly to minimize coordination. Specific authorization or notification is still required, but not necessarily for each jump.

8.10.3. To the max extent possible, advise parachute jumping organizations or responsible individuals of known high traffic density areas or other airspace where parachuting may adversely impact system efficiency, such as IFR departure/arrival routes, airways, VFR flyways, military training routes.

8.11. Prohibited or Restricted Areas. Application of the separation prescribed in FAAO JO 7110.65AA is not considered necessary whenever the prohibited or restricted airspace does not contain aircraft operations because these areas typically provide an internal buffer based upon the exact type of activity taking place. In addition, instrument procedures protected areas cannot violate or penetrate SUA without meeting criteria established in AFMAN 11-230. In making a determination to exempt specific areas, CCTLRs must be guided by the following:

8.11.1. Determine the exact nature of prohibited/restricted area utilization through direct liaison with the using agency. **(T-0)**

8.11.2. Coordinate with MAJCOM OPR for ATC during the analysis of area utilization. **(T-0)**

8.11.3. The following types of activity are examples of restricted area utilization which often will not require application of separation minima:

8.11.3.1. Explosives detonation. **(T-0)**

8.11.3.2. Ground firing of various types. **(T-0)**

8.11.3.3. Drone and other unmanned aircraft flight operations. **(T-0)**

8.11.3.4. Aircraft operations associated with the above in a safety, observer, or command and control capacity only; e.g., the aircraft is not directly engaging in activity for which the airspace was designated and is operating under VFR. **(T-0)**

8.11.4. If area utilization varies between aircraft operations and other types of activity as described above, do not exempt the area from separation requirements unless a significant operational advantage can be obtained. **(T-0)**

8.11.5. Restricted airspace with the same number but different letter suffixes is considered to be separate restricted areas. Units may treat these types as one restricted area for the purpose of identifying areas for exemption from separation requirements to simplify application of separation minima unless a significant operational advantage can be obtained. **(T-0)**

8.12. Domestic Events Network (DEN) Reporting Requirements.

8.12.1. Purpose. Elevated security-related issues mandate the need for all CONUS ATC facilities to report security incidents to the DEN. The purpose of the DEN is to provide timely notification to the appropriate authority that there is an emerging air or ground related problem or incident involving the NAS. The DEN is a 24/7 FAA sponsored telephonic conference call network (recorded) that includes all of the air route traffic control centers (ARTCC) in the United States. It also includes various other governmental agencies that monitor the DEN for situational awareness.

8.12.2. Participation on the DEN. There are specific times in which ARTCCs, ATC facilities in the National Capital Region (NCR), approach control facilities, and towers are automatically required to participate on the DEN. If the ATC facility is not actively monitoring the DEN or does not have a dedicated line to the DEN, immediately report activities on the DEN via 844-432-2962 (toll free). If this number is out of service, alternate numbers for the DEN are 405-225-2444 or 844-663-9723 (toll free). CCTLRs may coordinate with local RAWS teams to have the DEN programmed onto the ETVS, as necessary.

8.12.3. Military Specific (MILSPEC) Operations. The purpose of the DEN is to share information with all concerned parties, and this should be weighed against MILSPEC requirements. CCTLRs should conduct an annual review of local Operations Plans (OPLANS), Installation Emergency Management Plans (IEMPS), etc., and coordinate with installation law enforcement agencies (Security Forces (SF), Office of Special Investigations (OSI), etc.) and Command Post, to determine current installation reporting and, as applicable, when and/or what activities should NOT be reported via the DEN.

8.12.4. Procedures. The reporting of security issues that affect the NAS are contained in multiple FAAOs not listed here (i.e., FAAO JO 7110.65AA & FAAO JO 7610.4W). This compiled listing is not all-inclusive and ATC personnel should use good judgement and report any event that might be a security related issue. This document identifies many events which are mandatory to be reported to the DEN when operating within the NAS (follow Host Nation

policies and procedures when operating outside of the NAS). The WS will annotate all DEN notifications with pertinent details on the DAF Form 3616. **(T-2)**

8.12.4.1. Suspicious Activity. It is not possible to develop a comprehensive list of all possible suspicious activities, so it is incumbent upon ATC personnel to use good judgement in reporting possible security related events. A brief listing of examples of suspicious activity which must be reported to the DEN can be found in FAAO JO 7610.4W, para 7-3-1.

8.12.4.2. Hijack. Situations where a hijack or suspicious activity exists or is imminent, or is believed to exist or be imminent, must be reported to the DEN. **(T-0)**

8.12.4.3. Man-Portable Air Defense Systems (MANPADS). ATC facilities must report any MANPADS threat to the DEN. **(T-1)**

8.12.4.4. Unauthorized Laser Illumination. ATC must report unauthorized laser illumination to SF or Air Force Office of Special Investigations (AFOSI), and the DEN. **(T-1)** The following items will be included for each incident when reporting to the DEN and when inputting on DAF Form 3616:

8.12.4.4.1. UTC date and time of event. **(T-1)**

8.12.4.4.2. Call Sign, or aircraft registration number. **(T-1)**

8.12.4.4.3. Type of aircraft. **(T-1)**

8.12.4.4.4. Nearest major city. **(T-1)**

8.12.4.4.5. Altitude. **(T-1)**

8.12.4.4.6. Location of event (e.g., latitude and longitude and/or Fixed Radial Distance [FRD]). **(T-1)**

8.12.4.4.7. Brief description of the event. **(T-1)**

8.12.4.4.8. Any other pertinent information. **(T-1)**

8.12.4.4.9. Law enforcement contact information. **(T-1)**

8.12.4.5. GPS Interference Missions. The ATC facility directing a “Stop Buzzer” call will notify the DEN that the procedure was invoked. **(T-1)**

8.12.4.6. Reports of Suspected Human Trafficking. Reports of human trafficking, also referred to as “Blue Lightning” events, must be reported to the DEN. **(T-1)**

8.12.4.7. Special Interest Flights (SIFs). For all issues concerning any SIF operation in progress, ARTCC, Center Radar Approach Control (CERAP), Honolulu Control Facility (HCF), and ATCTs must contact the DEN. **(T-1)** Additionally, any SIFs identified by the FAA, DoD, or other national security agency, must be coordinated on the DEN in real-time. **(T-1)**

8.12.4.8. Special Interest Sites. ATC facilities must immediately notify SF of reports or information received for unusual activity in the vicinity of special interest sites such as nuclear power plants, power plants, dams, refineries, etc. **(T-1)** The DEN must be promptly notified of any actions taken in response to these procedures. **(T-1)**

8.12.4.9. Death, Illness, or Other Public Health Risk on Board an Aircraft. ATC facilities must forward information to the DEN when advised of a death, illness, and/or other public health risk onboard an aircraft. **(T-1)**

8.12.4.10. Divert Aircraft from International Locations. Any aircraft departing from an international location that diverts and lands at a U.S. airport different from the original U.S. destination airport or any diverted aircraft that ATC otherwise identifies as suspicious must be promptly reported to the DEN. **(T-1)**

8.12.4.11. ATC Security services for the DC Special Flight Rules Area (SFRA). Provide ATC security services at locations where procedures are required for tracking aircraft in security services airspace. All instances of loss of communication, intermittent transponder or transponder/Mode C failure, the inability to security track aircraft, other unusual IFR or VFR or suspicious flight must be reported to the DEN. **(T-1)**

8.12.4.12. Reporting Unauthorized, Hazardous, or Suspicious UAS Activities. ATC facilities must also take action for any reported or observed unauthorized, hazardous, or suspicious UAS activities. **(T-1)** If UAS activity is creating a hazard to air traffic, contact SF and provide location, description, and other pertinent information for the activity.

8.13. Unmanned Aircraft System (UAS) ATC Procedures. CCTLRs and controllers should refer to the UAS Info Share on the HQ AFFSA Airfield Operations SharePoint website for consolidated references to assist in management of Title 14 CFR Parts 91, *General Operating and Flight Rules*, 107 *Small Unmanned Aircraft Systems, and* 49 U.S. Code (USC) § 44809 *Exception for Limited Recreational Operations of Unmanned Aircraft*. Additionally, the UAS Info Share provides CCTLRs with documents and links for information regarding UAS facility mapping, capabilities and limitations by group, special security instruction requests, checklists adapted from outside agencies/services, etc.

8.13. (ACC) Unmanned Aerial System (UAS) ATC Procedures. Note: Notify ACC/A3AO (**acc.a3ao@us.af.mil**) of on/off installation UAS request(s) or operations that may impact aircraft safety. **(T-2)** CCTLRs must conduct and document an annual review of UAS Facility Maps, considering FAA JO 7210.3, *Facility Operation and Administration*, and input from other stakeholders (e.g., adjacent airports, base agencies, etc.). Submit changes through the AOF/CC to AF UAS Airspace Integration (AF/A3OJX (**AF.A3OJUAS.AirspaceIntegration@us.af.mil**) and courtesy copy ACC/A3AO (**acc.a3ao@us.af.mil**).

8.13.1. Controllers will describe UAS (small-UAS [sUAS] and/or Remotely Piloted Aircraft [RPA]) to other aircraft by stating "unmanned aircraft/unmanned [TYPE])". **(T-1)** ***PHRASEOLOGY: "****ACID, UNMANNED AIRCRAFT/UNMANNED RQ-4"*

8.13.2. Radio checks between UAS operators or pilots and ATC will be conducted prior to operations. **(T-3)** All communications between ATC and UAS operators/pilots will be accomplished on designated primary and/or alternate ATC frequencies. **(T-3)** Secondary or backup communications and/or telephone connectivity will be pre-coordinated. **(T-3)**

8.13.3. Aircraft Category: For the purpose of ATC separation and sequencing, UAS will be classified as "Category III", subject to change dependent on the Certificate of Authorization (COA) or appropriate guidance. **(T-1)**

8.13.4. Prior to commencing and at the conclusion of UAS operations, controllers will advise adjacent approach control facilities that UAS operations are being conducted or terminated. **(T-0)**

8.13.5. ATIS procedures. Controllers will update the ATIS to reflect when UAS operations are conducted within the terminal area and when they terminate. **(T-3)**

8.13.5.1. Controllers will include in the ATIS broadcast remarks that "unmanned aircraft operations are in progress." **(T-3)** This advisory is required once a UAS requests to taxi or launch, and 15 minutes prior to its estimated time of arrival.

8.13.5.2. Controllers will terminate advisory when UAS operations are complete, UAS is not returning for over one hour, or when the UAS lands, exits the runway, and no longer poses a potential impact to taxi operations. **(T-3)**

8.13.6. Separation and Sequencing. Controllers will adhere to the following requirements:

8.13.6.1. UAS cannot be instructed to follow another aircraft or UAS. **(T-0)**

8.13.6.2. Visual Separation. Use of visual separation between UAS and manned aircraft or UAS and UAS is not authorized. This does not restrict the tower controller's ability to visually separate aircraft. **(T-0)**

8.13.6.3. Special Visual Flight Rules (SVFR) is not authorized with UAS. **(T-0)**

8.13.6.4. Simultaneous Same Direction. All UAS will be treated in accordance with FAAO JO 7110.65AA. **(T-0)**

8.13.6.5. Issue cautionary wake turbulence advisories, and the position, altitude, and direction of flight to landing UAS operators or pilots, if in your opinion, wake turbulence may have an adverse effect on the aircraft. **(T-0)** Wake turbulence rules cannot be waived by the operator/pilot.

8.13.6.6. During UAS lost link, the control tower may activate the Primary Crash Activation System (PCAS). However, the UAS/RPA may not require the same level of rescue services provided for normal emergencies. Specify local procedures detailing the required rescue services for UAS lost link emergencies. **(T-1)**

8.13.6.6.1. If lost link occurs, UAS or RPA operators/pilots will immediately notify ATC with the following information, if applicable:

8.13.6.6.1.1. Time of lost link. **(T-1)**

8.13.6.6.1.2. Last known position. **(T-1)**

8.13.6.6.1.3. Altitude. **(T-1)**

8.13.6.6.1.4. Route of flight. **(T-1)**

8.13.6.6.1.5. Confirm execution of lost link procedures, to include orbit points. **(T-1)**

8.13.6.6.1.6. Confirm observer/pilot has visual contact with UAS/RPA. **(T-1)**

8.13.6.6.1.7. Communications procedures and preplanned flight termination points, if the recovery of the UAS is deemed unfeasible. **(T-1)**

8.13.6.6.2. Lost link procedures are dependent upon airframe and operations and will be outlined in accordance with local procedures and FAAO JO 7110.65AA. **(T-0)**

8.13.7. Suspicious UAS. Consistent with provisions of air traffic service, duty, and operational priorities, all facilities must report suspicious UAS. Suspicious UAS may include operating without authorization; operating in the vicinity of sensitive locations; or disrupting normal air traffic operations. Report of a UAS alone does not constitute suspicious activity. Development of a comprehensive list of suspicious activities is not possible due to the vast number of situations that could be considered suspicious. Controllers must exercise sound judgment when identifying situations that could constitute or indicate suspicious activity. CCTLRs will develop a localized checklist that provides guidance on reporting suspicious UAS activities. **(T-2)** CCTLRs should consider items on "Suspicious UAS Checklist" located within the UAS Info Share on the HQ AFFSA SharePoint site for inclusion on the checklist. The checklist can be found at the following location: **https://usaf.dps.mil/sites/affsa/SitePages/UAS_Info-Share.aspx**

8.14. Use of Emerging Technology in ATC Facilities. The MAJCOM OPR for ATC Operations must review locally developed CONOPs, policies, procedures, and training requirements for technologies requiring additional displays for control/assist positions (e.g., sUAS, counter UAS tracking systems, and Avian/bird radars). **(T-2) Note:** MACOMs will ensure AFFSA/XA is coordinated with prior to acquisition or implementation. **(T-1)**

8.15. Landing Zone (LZ) Operations. CCTLRs must ensure that the requirements of the ATC rulemaking authority (e.g., FAA, host nation, contingency environment/combatant commander), are met in order to provide ATC services to an LZ. **(T-0)** For example, FAA and Air Force requirements within the NAS require the establishment of required ATC airspace, facility equipment provisions, and mandatory personnel credentialing, training, and medical qualifications.

8.15. (ACC) Landing Zone (LZ) Operations. Note: Landing surfaces that do not meet Class A or B criteria as defined by the Unified Facilities Criteria (UFC) 3-260-01 shall be designated an LZ and use of any LZ by ACC controllers shall follow appropriate regulations.

8.15.1. CCTLRs must ensure LZ operations will be outlined in an LOP for LZs at locations with established ATC operations (CONUS and non-contingency host nation bases). **(T-2)**

8.15.2. When ATC services are being provided to the LZ and other associated runways, and the landing/departure operations to the LZ are contained within the Tower-controlled CMA, controllers are authorized to issue landing/departure clearance using the following example phraseology: **(T-2)** ***PHRASEOLOGY: "(ACID) RUNWAY/LANDING ZONE (NUMBER/NAME) WIND, CLEARED TO LAND/FOR THE OPTION/FOR TAKEOFF."*** **Note:** Controllers should not provide landing/takeoff clearances at LZs where there is not an established ATC-controlled CMA. In this instance controllers, should advise aircraft that operations are at their own risk.

8.15.3. When ATC services are being provided to an LZ, CCTLRS must ensure IFR departures, instrument approaches, and circling procedures are not authorized unless the LZ is certified for IFR operations in accordance with unified facilities criteria (UFC) requirements and the applicable IFR procedures are TERPS approved. **(T-0)**

8.15.4. **(Added-ACC)** CCTLRs will coordinate with the AOF/CC to include readiness status of LZ capabilities, including certified personnel (UTC requirements and proficiency) and necessary equipment on the AOB.

8.16. Advance Coordination for VIP Visits.

8.16.1. An advance survey group comprised of representatives of the Office of the Military Assistant to the President, the U.S. Secret Service (USSS), the White House Staff, and a Presidential Advance Agent may visit each location the Presidential aircraft will transit. The visit is normally made several days in advance of the trip to determine security aspects and the availability of supporting services. On this visit the group may meet with the airport operator, the CCTLR, and other interested parties. Based on the evaluation by this group, a decision is made on the use of the airport, and further coordination is planned for the advance group.

8.16.2. The advance group, comprised of representatives of the same organizations stated in **paragraph 8.16.1**, will meet with the same airport elements to complete security measures and supporting services and determine the necessary restrictions to air traffic operations before the arrival and the departure of the Presidential aircraft and while the Presidential entourage is on the airport. The security provisions may include stationing a guard in the tower cab or at the tower entrance and maintaining two-way communications between the control tower and agents on the ground. This meeting will be held several days in advance of the planned arrival of the Presidential aircraft.

8.16.3. In addition to the responsibilities described in this paragraph, additional advance coordination requirements and information are in FAAO JO 7610.4W.

8.17. (Added-ACC) Simulated Flameout (SFO)/ Precautionary Flameout (PFO) Approaches:

8.17.1. **(Added-ACC)** Unless specifically stated **within paragraph 8.17.**, SFO/PFO includes all of the following: Overhead SFO/PFO, Straight-In (SI)-SFO/SI-PFO, Alternate Entry SFO, and Random Entry PFO.

8.17.2. **(Added-ACC)** OG/CCs will develop and publish SFO/PFO pattern procedures in the base AOI for base-assigned aircraft, if applicable. **(T-2)**

8.17.3. **(Added-ACC)** SFO/PFO procedures for transient aircraft must be defined in a Letter of Agreement (LOA) and coordinated with ACC/A3AO 30 days prior to implementation. **(T-2)**

8.17.4. **(Added-ACC)** In addition to the applicable portions of FAAO JO 7610.14, *Non-Sensitive Procedures and Requirements for Special Operations*, the following items (as applicable) must be addressed in the base AOI and transient aircraft LOA:

8.17.4.1. **(Added-ACC)** SFO/PFO patterns and pattern limitations (e.g. altitude, weather, day/night, alignment, and instances when disallowed). **(T-2)**

8.17.4.2. **(Added-ACC)** Pictorial view of all standard SFO/PFO profiles and alternate entry limitations. **(T-2)**

8.17.5. **(Added-ACC)** Required SFO/PFO initial or revised pattern/procedures training. (i.e., new Mission Design Series airframe at unit where SFO/PFO patterns will be introduced). **(T-2)**

8.17.5.1. **(Added-ACC)** The OG/CC will provide all controllers with basic SFO/PFO Flight Manual procedures, pattern and procedures, potential traffic conflicts and breakout procedures, use of cutoff points, and hand-off/transfer of control procedures. **(T-2)**

8.17.5.2. **(Added-ACC)** The CCTLR will ensure initial SFO/PFO knowledge-based training is accomplished by the NATCT or NSE in conjunction with an instructor pilot (IP), or qualified pilot, as designated by the OG/CC as appropriate. **(T-3)**

8.17.5.3. **(Added-ACC)** An experienced Instructor Pilot (IP) or qualified pilot, preferably a Functional Check Flight (FCF) pilot, will be designated to fly SFO/PFO patterns for the tower controller initial SFO/PFO live procedures certification, of new or revised procedures. **(T-3)** **Note:** The tower pattern will be sanitized to minimize potential conflicts. **(T-3)**

8.17.5.4. **(Added-ACC)** The NSE and TSN will certify tower controllers for initial SFO/PFO live procedures of new/revised operations. New/revised SFO/PFO procedures require all tower controllers to be exposed to new profiles through live training to acquire a visual concept of all profiles and procedures. Tower controllers are not required to control all SFO/PFO profiles prior to the initial certification; however, they must have visually observed all profiles and procedures. **(T-2)**

8.17.5.5. **(Added-ACC)** The initial SFO/PFO live procedures certification must be completed for each tower controller and documented on the DAF Form 1098, local DAF Form 797, or AODMS-equivalent forms until incorporated into the MTP. **(T-2)**

Chapter 9

ATC TRAINING PROGRAM

9.1. Purpose. The purpose is to qualify air traffic controllers for position certifications, AOV facility ratings, and provide skill-level advancement and facility management positions to support wartime readiness and peacetime operations. ATC training programs consolidate and standardize common training tasks and doctrine while integrating Air Force, MAJCOM, and unit directives. Each unit must develop, implement, and administer each program as required in this manual, DAFI 36-2670, DAFMAN 36-2689, and DAFH 36-2675.

9.2. ATC Training Program Structure. ATC training program structure consists of four parts and is designed to standardize the flow of all ATC training.

9.2.1. Front load training (FLT).

9.2.1.1. Part I – Local area knowledge.

9.2.1.2. Part II – Facility equipment.

9.2.2. Facility continuation training (FCT).

9.2.2.1. Part III – Position certification.

9.2.2.2. Part IV – AF Job qualification standards.

9.3. Training OI (TOI) Construction. The TOI establishes policy and procedures for implementing and defining the responsibilities of all personnel involved in the program. The TOI expands those areas where further explanation is required and standardizes local training procedures and should not restate training requirements, procedures, or responsibilities already published. The TOI should be approved by the AOF/CC. The NATCT must ensure the TOI address all facets of ATC training to include, but not limited to:

9.3.1. Training Team responsibilities. **(T-2)**

9.3.2. Newcomer's Indoctrination. CCTLRs must ensure a Newcomer's Indoctrination Program is developed and completed within 60 calendar days of arrival. **(T-2)** Facility tours or visits, if required, should be accomplished prior to the first position certification.

9.3.3. Upgrade, position certification, or award of SEI and stop training circumstances. **(T-2)**

9.3.3.1. Requests for certification and processing channels. **(T-2)**

9.3.3.2. Local documentation requirements. **(T-2)**

9.3.4. Recurring, Review, and Supplemental training. **(T-2)**

9.3.5. Radar/tower simulator usage and non-radar training requirements. **(T-2)**

9.3.6. Training program review procedures and documentation requirements. **(T-2)**

9.3.7. Monthly training assessment procedures. **(T-2)**

9.3.8. Use of Airfield Operations Data Management System (AODMS). **(T-2)**

9.3.9. Dual certification program procedures (if applicable). **(T-2)**

9.4. Master Training Plan (MTP). The NATCT must ensure the MTP is developed and contain the following:

9.4.1. CFETP. **(T-2)**

9.4.2. Master Task List (MTL)/Master Task and Technical Reference (MTTR). AFFSA/XA develops, maintains and publishes the Air Force ATC MTTR. Each facility is required to maintain, publish and utilize a local MTTR. **(T-2)** Air Force/Local MTTR can serve as an MTL if the MTTR identifies which tasks coincide with each position. **(T-2)**

9.4.2.1. All core tasks references are mandatory for 1C131 personnel in upgrade training.

9.4.2.2. CCTLRs may defer Air Force ATC MTTR references for non-1C131 personnel. Deferred references must be accomplished in writing. **(T-2)**

9.4.3. Certification Guides (Part I, II, III and IV). **(T-2)**

9.4.4. QTP/DAF Form 797. **(T-2)** The DAF Form 797 is a continuation of the CFETP Part II, defining locally unique tasks.

9.5. Certification Guides (Part I, II, III and IV). NATCTs will ensure all ATC certification guides are developed in accordance with DAFH 36-2675. **(T-2)** Develop Part I and II guides along with separate PCGs for each position requiring certification (Part III). NATCTs will ensure Part IV training utilizes applicable QTPs, as required. **(T-2)**

9.5.1. The CCTLR, with the assistance of the NATCT, will review all locally developed guides, to include PCGs, annually to ensure complete task coverage. **(T-2)** Document annual review in TRB minutes.

9.5.2. A comprehensive task analysis is only required when a new task or position is introduced.

9.5.3. The NATCT will ensure Part I, II and III guides contain:

9.5.3.1. Objectives in accordance with DAFH 36-2675. **(T-2)**

9.5.3.2. Technical References (TR), MTTR line numbers, or Specialty training Standard (STS) items. **(T-2)**

9.5.3.3. Simulation requirements. **(T-2)**

9.5.3.4. Non-Radar training (if applicable). **(T-1)**

9.5.3.5. Time Limits. Time limits (e.g., days/hours) factoring in weekends, holidays and off- duty time, in which the trainee is authorized to complete the block. Time limits must be identified for apprentice, prior facility experienced and non-prior facility experienced controllers. **(T-2)** **Note:** Trainers should only use the minimum time necessary for the trainee to meet the required training objective or standard.

9.5.3.5.1. Training guide time limits must be reviewed annually or as needed, by the CCTLR and NATCT, and adjusted accordingly. **(T-2)** Base adjustments on the average time required to complete a training guide. Completion of the annual review should be included in the TRB.

9.5.3.5.2. Adjustments made to training times will be documented and maintained for a minimum of one year. **(T-2)**

9.5.4. Part IV AF Job Qualification Standards. Controllers must use the published QTP products. **(T-1)** As necessary, units should supplement QTPs with MAJCOM, local QTP, or other training requirements. NATCTs will ensure local guides contain the above **paragraph 9.5.3** requirements with the exception of simulation and non-radar training. **(T-1)**

9.5.5. After award of SEI or SEI equivalent, controllers can be classified as "with prior experience."

9.6. Records and Documentation.

9.6.1. Master Training Record (MTR). NATCTs must establish a standardized training record for each facility, updated monthly, as a minimum, to template and standardize the most current training requirements and documentation (e.g., monthly proficiency, recurring and review training items requiring documentation). **(T-2)** The NATCT must ensure the MTR contains examples for each duty position in the facility (e.g., TERPS, NAAM, and AOSS). **(T-2)** **Note**: Not applicable to units utilizing the AODMS program.

9.6.2. Individual Training Records. Controllers will use DAF Form 623, *Individual Training Record Folder*, or electronic equivalent. **(T-2)**

9.6.2.1. All 1C1X1, 13MX, and GS-2152 personnel who are position certified, facility rated, or in training must maintain a current DAF Form 623. **(T-1)** All other personnel (e.g., MAJCOM, HQ, and Air Operations Center) will retain DAF Form 623. **(T-2)** **Note:** All GS-2152 TERPS personnel who are not actively controlling traffic have the option to only maintain the DAF Form 797 and DAF Form 1098 to document TERPS training.

9.6.2.2. Training records of former active-duty controllers who are subsequently hired to work in the same facility, as a civilian controller, are transferable to the same GS-2152 duties. Individual facility certifications/ratings are also transferable from active duty to GS-2152 duties in the same facility, provided the individual meets the criteria in either paragraph **9.6.2.3** or **9.6.2.4** below.

9.6.2.3. At the discretion of the CCTLR, position certifications for prior military controllers who are re-hired and report for duty into the same facility within 30 calendar days as a civilian controller may be recognized as valid and current and have no requirement for a special evaluation. **Note:** In this case, the original annual certification date would be retained.

9.6.2.4. At the discretion of the CCTLR, position certifications for prior military controllers who are re-hired into the same facility more than 30 calendar days, but less than 270 calendar days since ratings and certifications were cancelled may be recognized as valid and current, contingent on the successful completion of a special evaluation to demonstrate proficiency.

9.6.2.5. For GS-2152 personnel who are experiencing difficulty in training (EDIT), CCTLRS must give consideration to existing terms of employment when considering initiating corrective actions. **(T-1)** Supervisors should, based on the term of employment, contact the Civilian Personnel Flight (CPF) for more guidance when determining proper actions required.

9.6.2.6. Controllers will document completion of all initial QTP training completions on the inside cover of the DAF Form 623 in Part II, or electronic equivalent. **(T-2)** Remove

the applicable DAF Form 797 from the associated QTP and insert into the appropriate tab of the DAF Form 623. Subsequent QTP revisions only require updates to the DAF Form 797 as identified in the release message. AODMS users will utilize the applicable QTP 797 within the program. **(T-2)**

9.6.3. CCTLRs will ensure all discrepancies, identified in the NATCT's training records inspection report, are corrected monthly. **(T-2)**

9.6.4. Format. Controllers will maintain the following items in each 1C1X1, 13MX and GS-2152 personnel training record in the prescribed tabular format (not applicable for units utilizing AODMS):

9.6.4.1. Tab A: All current DAF Form 1098s. **(T-2)**

9.6.4.2. Tab B: DAF Form 623a, *On-The-Job Training Record - Continuation Sheet,* or suitable substitute in the following order:

9.6.4.2.1. Training evaluations. **(T-2)**

9.6.4.2.2. Position certifications. **(T-2)**

9.6.4.2.3. Other documentation as required. **(T-3)**

9.6.4.3. Tab C: 1C1X1 CFETP Part I/II. **(T-2)**

9.6.4.4. Tab D: AFFSA DAF Form 797s. **(T-2)**

9.6.4.5. Tab E: MAJCOM and Unit DAF Form 797s. **(T-2)**

9.6.4.6. Tab F: DAF Form 3622. **(T-2)**

9.6.4.7. Tab G: Previous Year's DAF Form 1098, and any documents required by Higher Headquarters (HHQ) and facility management. **(T-2)**

9.6.5. Accomplish forms disposition and documentation according to DAFMAN 36-2689 and 1C1X1 CFETP.

9.6.6. CFETP/STS Third-Party Certification. DAFMAN 36-2689 provides third-party certification criteria. The 1C1 CFM has appointed the NSE as the third- party certifier during the position certification process. **Note:** This authority may be delegated to the ANSE positions upon successful completion of the NSE QTP.

9.6.6.1. The 1C1X1 CFETP, Part II, Section A, does not have a Certifying Official column due to the certification evaluation process and the NSE serving as the third-party certifier. Qualified task certifiers will initial the "Trainer" column to certify the completion of a training task. **(T-1)**

9.6.6.2. Controllers must ensure that STS tasks requiring training in multiple positions are opened in the CFETP for the first position and remain open until no further training is needed on the task and/or facility rating is achieved. **(T-3)** CCTLRs or NATCTs will document these procedures in either the facility PCGs or training OI. **(T-2)** **Note**: Not applicable to units utilizing AODMS. Controllers must document completion of the task in the appropriate training evaluation. **(T-3)**

9.6.7. Certification of AOSS knowledge/task items will only be accomplished by a qualified (SSgt 7-level or higher) AOSS or NAAM. **(T-1)** Certification of NAAM knowledge/task items

will only be accomplished by a qualified NAAM. **(T-1)** If unit personnel are not available to certify the items, MAJCOM or HQ AFFSA qualified personnel who have completed task certifier training may certify the tasks.

9.6.8. Only qualified TERPS civilian specialists or military personnel with a 357 SEI will provide TERPS upgrade training and certification. **(T-1)** Personnel other than the trainer, who are also a task certifier, must task certify the TERPS qualification training. **(T-1)** If unit TERPS personnel are not available to act as trainers or task certifiers, MAJCOM TERPS Managers in conjunction with the AOF/CC will delegate the responsibility in writing to another location, MAJCOM or AFFSA/XA. **(T-2)** A written copy of this delegation of training responsibility will be retained in the TERPS trainee's training record. **(T-2)**

9.6.9. Transcription. (For units utilizing paper records only).

9.6.9.1. Upon publication of a new CFETP, controllers must transcribe all qualifications within 120 calendar days of the CFETP revision date using the following procedures:

9.6.9.1.1. Tasks previously qualified/certified and required in the current duty position:

9.6.9.1.1.1. Circle the subparagraph number next to the task statement. **(T-2)**

9.6.9.1.1.2. Enter the date of transcription in the completion column only. **(T-2)**

9.6.9.1.1.3. Enter the trainee's initials and trainer's initials in the associated columns. **(T-2)**

9.6.9.1.2. For tasks previously certified but not required in the current duty position (do not circle):

9.6.9.1.2.1. Enter only the date of transcription in the completion date column (no initials). **(T-2)**

9.6.9.1.2.2. If the task later becomes required in the duty position, circle the subparagraph number and recertify using current dates and initials. **(T-2)**

9.6.9.1.3. For newly added CFETP tasks or task opened but not yet certified and required in the current duty position/location:

9.6.9.1.3.1. Circle the subparagraph number next to the task statement. **(T-2)**

9.6.9.1.3.2. Enter the original or start date of training in the start date column with an applicable completion date and initials. **(T-2)**

9.6.9.1.4. Locally developed DAF Form 797s are a continuation of the CFETP Part II and documentation will be completed in accordance with paragraphs **9.6.9.1.1 - 9.6.9.1.3**. **(T-2)**

9.6.9.2. Upon publication of a new QTP, controllers must transcribe DAF Form 797 qualifications as follows:

9.6.9.2.1. Individuals currently assigned to the associated duty position, or individuals currently in training for the associated position:

9.6.9.2.1.1. Tasks previously qualified/certified, circle the subparagraph number next to the task statement. **(T-2)**

9.6.9.2.1.2. Enter the date of transcription in the completion column only. **(T-2)**

9.6.9.2.1.3. Enter trainer and trainee's initials in the associated columns. **(T-2)**

9.6.9.2.1.4. All newly added tasks, or tasks not yet trained, circle the subparagraph number next to the task statement, then enter the original or start date of training in the start date column with an applicable completion date and initials. **(T-2)**

9.6.9.2.2. Individuals qualified using the rescinded QTP/DAF Form 797, not currently serving in the associated duty position, must transcribe qualifications as follows:

9.6.9.2.2.1. Tasks previously qualified/certified, enter only the date of transcription in the completion date column (no initials). **(T-2)**

9.6.9.2.2.2. All newly added tasks, or tasks not yet trained, enter the start date of training in the start date column with the applicable completion date and initials. **(T-2)**

9.6.9.2.2.3. If later assigned to the associated duty position, circle the task numbers and certify using current dates and initials. **(T-2)**

9.6.9.3. Trainers/Task Certifiers will document printed name and payroll initials on trainer and certifying official tracking page of the CFETP to certify tasks within the CFETP, Local DAF Form 797, and QTP DAF Form 797. **(T-2)**

9.6.9.4. Upon replacement of any lost documentation contained in the DAF Form 623 (e.g., DAF Form 3622, DAF Form 1098) controllers must transcribe training, qualifications, and/or certifications using date of transcription and enter applicable information in other fields as required. **(T-2)**

9.6.9.5. Transcription completion is not required to be annotated on an DAF Form 623a, or automated version.

9.7. Evaluations. Controllers must accomplish evaluations as required by DAFMAN 36-2689 and the following:

9.7.1. Supervisor Initial Evaluation. Supervisors must conduct initial evaluations on all trainees in accordance with DAFMAN 36-2689. **(T-2)**

9.7.1.1. CCTLRs may use the initial evaluation to determine where to place the individual in training. **(T-2)**

9.7.1.2. Initial evaluations are required on all personnel within 60 calendar days of initial assignment and prior to the start of qualification training. **(T-2)**

9.7.1.3. Retain the initial evaluation in the AF Form 623 or electronic equivalent until either PCS or PCA. **(T-2)**

9.7.2. Technical School Graduates. Use the Standardized Initial Task Evaluation (SITE) for all 1C131 initial task evaluations. **(T-1)** Access and download the most-current SITE and associated user guide from the HQ AFFSA Airfield Operations SharePoint website. Once a SITE has been completed:

9.7.2.1. E-mail the SITE to HQ AFFSA following the instructions in the user guide located on the HQ AFFSA Airfield Operations SharePoint website. **(T-1)**

9.7.2.2. Print the DAF Form 623a, *On-The-Job Training Record - Continuation Sheet*, generated by the SITE and place in the trainee's DAF Form 623 or electronic equivalent. Retain the DAF Form 623a until member is awarded the 5-skill level or upon PCS or PCA. **(T-2)**

9.7.3. Training evaluations:

9.7.3.1. Frequency. Complete evaluations on controllers in position training at least every 14 calendar days. Evaluations on other duty/management training (e.g., 7-level, trainer, and management positions) will be conducted at least once monthly. **(T-2)** **Note:** All qualification/upgrade training requires an initial training evaluation.

9.7.3.2. Trainers must complete an initial training evaluation on each trainee for every position within the facility, this evaluation does not count as a training day. **(T-1)**

9.7.3.3. NATCTs must ensure utilization of the standardized electronic training evaluation on AODMS, or ensure the following items are included on training evaluations:

9.7.3.3.1. Name. **(T-1)**

9.7.3.3.2. Inclusive dates of evaluation. **(T-1)**

9.7.3.3.3. Position. **(T-1)**

9.7.3.3.4. Position start date and total calendar days allowed for position. **(T-1)**

9.7.3.3.5. Specific STS tasks or PCG tasks numbers covered during the evaluation period. **(T-1)**

9.7.3.3.6. Time spent in each category of training (live, simulator, non- positional). **(T-1)**

9.7.3.3.7. A determination of satisfactory (SAT) or unsatisfactory (UNSAT) progress for the evaluation period. **(T-1)**

9.7.3.3.8. Corrective actions when applicable. **(T-1)**

9.7.3.3.9. Results of corrective actions when applicable. **(T-1)**

9.7.3.3.10. Include all interruptions to training (stop training days, to include reason). **(T-1)**

9.7.3.3.11. Trainee's comments. **(T-1)**

9.7.3.3.12. Signature blocks for trainee, trainer, WS, NATCT and CCTLR. **(T-1)**

9.7.4. EDIT Evaluations. CCTLRs must identify and document on DAF Form 623a or suitable substitutes, trainees who are not progressing satisfactorily as EDIT and in the training evaluation specify corrective actions to be taken. **(T-2)** CCTLRs must document on DAF Form 623a, or suitable substitute, when a controller is no longer in EDIT status. **(T-2)** CCTLRs will determine frequency of EDIT evaluations. **(T-3)** Additionally, AOF/CC signature is mandatory on EDIT evaluations.

9.7.4. **(ACC) Note:** CCTLRs will ensure Trainees in EDIT status are afforded de-combined training to the maximum extent possible. CCTLRs will ensure periods of combined training are documented in evaluations including the reason for combining positions.

9.7.5. Stop Training. CCTLRs should only consider the use of stop training when further training is not possible or is detrimental to the mission due to a failure to plan, organize, or achieve optimum training. CCTLRs will determine the need for placing an individual in stop training. **(T-3)**

9.7.6. Additional Training Time. Days not used in previous blocks will remain available for use in future blocks as part of the total position time available. **(T-2)** Document this use of days on an DAF Form 623a or suitable substitute. **(T-2)** CCTLRs may approve additional training time for trainees who exceed position/qualification time limits. CCTLR extensions may not exceed 50 percent of the total PCG time. CCTLR extensions may be granted for each block or for the entire position. CCTLR extensions must be documented on an DAF Form 623a or suitable substitute and maintained until the AOV facility rating, as defined in **paragraph 11.2**, is obtained. **(T-2)** If the trainee is not placed in EDIT status, the CCTLR must provide justification. **(T-2)** The MAJCOM OPR for ATC may approve additional training extensions after the CCTLR extension has been exhausted. The MAJCOM OPR for ATC must be coordinated with for individuals with extenuating circumstances who may be required to restart training.

9.7.7. Until a controller has obtained an AOV facility rating, controllers must maintain all position evaluations in the individual's training record. **(T-2)**

9.8. HQ AFFSA Airfield Operations SharePoint Website /Instructional Technology. AFFSA/XA maintains the HQ AFFSA Airfield Operations SharePoint website. This website hosts official Air Force level QTPs, IPs, HQ AFFSA messages, and example trackers, tools, and resources for individual duty position management.

9.9. Simulation. NATCTs must ensure simulation scenarios of appropriate traffic levels and complexity are incorporated into PCG objectives. **(T-2)** Scenarios may be used to supplement position certifications (not applicable to locations without simulation equipment).

9.10. Withdrawal from ATC Duty. Unit commanders initiate Air Force Specialty Code (AFSC) withdrawal and/or reclassification actions in conjunction with AOV credential revocation. APFC Military Classifications (AFPC/DPMSSM) is the final approval authority of AFSC withdrawal. AFMAN 36-2100, Chapter 2, delineates Air Force policy for withdrawing (disqualification from) or downgrading AFSCs and implements the AFECD. The AFECD is published four times per year and is the authoritative source for reporting identifiers (RI) and their applicability to Airmen. Additionally, DAFMAN 36-2689 provides further guidance. Criteria for RI are outlined in the Enlisted AFSC Disqualification Personnel Services Delivery Guide, DAFI 36-2110, *Total Force Assignments* and DAFMAN 36-2689. The latest disqualification guidance is located on the MyFSS website.

9.10.1. CCTLRs must identify controllers who demonstrate substandard performance to the squadron commander at the earliest time, to correct the substandard performance or obtain a suitable replacement. **(T-2)**

9.10.2. When withdrawal, disciplinary or other administrative actions are appropriate, do not allow one action to substitute for or delay the other. If more than one category of withdrawal is merited, the unit commander will make the final determination of the most appropriate category of withdrawal to expedite resolution of pending actions. **(T-2)**

9.10.3. AOV credential withdrawal applies to military personnel holding a 1C1X1 or 13M3 primary or secondary AFSC.

9.10.4. A controller returned to home station for failure to obtain or maintain an ATC rating at a contingency location is not qualified to perform further ATC duties unless approved by MAJCOM Functional Manager (MFM) that has functional oversight. The MFM will review contingency commander recommendations and provide home station unit commanders a recommendation to reinstate or withdraw an individual's AOV credential.

9.11. Withdrawal Categories. There are three categories of withdrawal action applicable to military controllers: 1) medical disqualification, 2) failure to maintain mandatory qualification standards other than medical, and 3) failure to obtain or maintain a rating. Sample memorandums and checklists associated with withdrawing ATC AFSCs are provided in Attachments **3-6**.

9.11.1. Criteria for each withdrawal category are outlined below:

9.11.1.1. Medical Disqualification. If a controller is diagnosed with a permanently disqualifying medical condition (i.e., DD Form 2992, *Medical Recommendations for Flying or Special Operational Duty*, Section 12, and Permanent Disqualification), the unit commander will revoke the individual's facility ratings and certifications, withdraw AOV credential, and initiate AFSC withdrawal within 60 calendar days of receiving disqualification paperwork from the Flight Surgeon (see **Attachment 3**). **(T-0)**

9.11.1.2. Failure to Maintain Mandatory Qualification Standards Other Than Medical (see **Attachment 4**). A determination that a condition exists which could affect flying safety and credentials. This includes for non-performance of primary duty. Military personnel assigned to an ATC UMD billet that do not perform their primary duty for 15 consecutive months must be withdrawn under this category. **(T-1)**

9.11.1.3. Failure to Obtain or Maintain a Rating (FTOR) (see **Attachment 4**). Use these procedures for controllers in upgrade and qualification training who fail to obtain or maintain a rating.

9.11.2. For GS-2152 personnel, failure to obtain or maintain position certifications or facility ratings for the duty position held or failure to maintain required medical standards, may be grounds for termination of employment.

9.11.2.1. Supervisors should carefully monitor GS-2152 controllers' progress in qualification training, to identify performance problems. Supervisors should contact the CPF for guidance if considering terminating a DoD employee.

9.11.2.2. If required by CPF, a supervisor must develop a Performance Improvement Plan (PIP) to facilitate correction of the employee's performance deficiencies. **(T-2)**

9.11.2.3. If deficiencies are not corrected within specified time limits, the PIP (rather than the employee's DAF Form 623) will be used to support termination of employment. **(T-2)** Reference **Chapter 3** of DoDI 1400.25V431_DAFI 36-1002, *Performance Management and Appraisal Program Administration in the Department of the Air Force*, and contact the CPF for additional guidance.

9.12. Withdrawal and Reinstatement Procedures and Notification. (see **Attachment 6**)

9.12.1. Units will notify MAJCOM OPR for ATC and Base Training Manager of any pending withdrawal actions for all categories including administrative and whether or not the withdrawal action should be “For Cause”. **(T-2)**

9.12.1. **(ACC) Withdrawal and Reinstatement Procedures and Notification.** Notify ACC/A3AO (**acc.a3ao@us.af.mil**) of any pending withdrawal actions for all categories including administrative and whether or not the withdrawal action should be “For Cause”. Include DTD intent and if the Airman meets selection criteria IAW Section 1 of the DTD IP in the notification e-mail. If the intent is to proceed with an On the Job (OJT) DTD request include a statement regarding the results of the records review by unit leadership confirming no unfavorable administrative actions exist. **Note:** OJT DTD request process should run concurrent with the 1C1X1 AFSC withdrawal procedures. The DTD process will never impede or delay the elimination package timeline. The career familiarization process will run concurrently with the ATC elimination package. To aid in this process, it is imperative that notifications are made to the UTM and BTM. This should reduce the risk of the disqualified Airman being placed into a 9A000 status prematurely. Once a member is placed in 9A000 status, this process is extremely difficult to complete by the CFM’s due to requiring AFPC approval for direct to duty in another career-field.

9.12.1.1. For withdrawals based on medical disqualification, flight surgeon and clinical representatives process packages directly with the MAJCOM Surgeon General. Forward medical withdrawals according to AFMAN 36-2100, and the Classification Enlisted AFSC Disqualifications Personnel Services Delivery (PSD) Guide located on the MyFSS website.

9.12.1.2. When the basis for withdrawing the AFSC is for conditions or actions over which the Airman had control, withdrawal action will be qualified as “For Cause". **(T-1)** Examples of “For Cause", include loss of security clearance due to misconduct, drug abuse, alcohol involvement, failure to progress in training (for reasons within their control), substandard duty performance or other acts that led to AFSC withdrawal.

9.12.2. MAJCOM OPR for ATC will:

9.12.2.1. For all withdrawal actions (other than medical), recommend AFSC withdrawal or reinstatement action to unit commander.

9.12.2.2. For all withdrawal actions (other than medical), inform unit commander whether or not the withdrawal action should be “For Cause" and, if appropriate, recommend termination and/or recoupment of the selective reenlistment bonus (SRB).

Chapter 10

ATC RECURRING, SUPPLEMENTAL AND MONTHLY TRAINING

10.1. Recurring Training. All controllers must accomplish recurring training during the month indicated and/or scheduled by the NATCT. **(T-2)** Conduct semi-annual training every 6 months, and annual training once every 12 months. NATCTs must ensure the following items, including technical references, are scheduled, trained and outlined in the training OI. **(T-2)** All items must be supplemented with any locally developed material pertinent to the unit's operations. **(T-2)**

10.1.1. CCTLRs must ensure the following items will have training conducted semi-annually.

10.1.1.1. Anti-Hijack Training. TR: FAAO JO 7110.65AA, FAAO JO 7610.4W, FAAO 7110.67L, *Air Traffic Management Security Procedures and Requirements for Special Operations,* and AFI 13-207. **(T-1)**

10.1.1.2. Wake Turbulence. TR: FAAO JO 7110.65AA. **(T-1)**

10.1.1.3. Alternate Facilities (if applicable at assigned duty location). TR: LOPs. **(T-2)**

10.1.1.4. Bird Aircraft Strike Hazard (BASH) Reduction Program. Conduct prior to the bird migratory seasons. TR: FAAO JO 7110.65AA, DAFI 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH) Management Program,* and LOPs. **(T-1)**

10.1.1.5. Simulated Flameout Procedures (SFO)/Precautionary Flameout Procedures (PFO) (if applicable at assigned duty location). TR: FAAO JO 7110.65AA, JO 7610.4W, LOPs. **(T-2)**

10.1.1.6. NVD procedures (if applicable at assigned duty location) for all tower controllers. TR: LOPs. **(T-2)**

10.1.2. The following items will have training conducted annually.

10.1.2.1. Electromagnetic Interference (EMI). TR: DAFI 17-221, *Spectrum Interference Resolution Program*, DoD FLIP General Planning Guide located at **https://aerodata.nga.mil/AeroDownload/**, FAAO JO 7110.65AA. **(T-1)**

10.1.2.2. Aircraft Characteristics and Performance. TR: FAAO JO 7360.1, and/or locally developed training material. At locations where exercises and aircraft deployments occur, ensure controllers are trained on aircraft characteristics prior to exercise/deployment date. Review annually and make adjustments as required. **(T-1)**

10.1.2.3. Tower Visibility Observations for all tower controllers. TR: FAAO JO 7110.65AA, AFMAN 15-111, and AFMAN 15-124 *Meteorological Codes*. **(T-1)**

10.1.2.4. Special Aircraft Operations by Law Enforcement Organizations (if applicable). TR: FAAO JO 7110.65AA and FAAO JO 7110.67L. **(T-1)**

10.1.2.5. Snow Control Operations (if applicable at assigned duty location). TR: LOPs. **(T-2)**

10.1.2.6. Crew Resource Management (CRM) TR: CRM IP. **(T-1)**

10.1.2.7. Vehicle Control for all tower controllers. TR: FAAO JO 7110.65AA, LOPs. **(T-1)**

10.1.2.8. Tactical Approach/Departure procedures (if applicable at assigned duty location). TR: LOP. **(T-2)**

10.1.2.9. Severe weather procedures (prior to storm season). TR: Local resources. **(T-1)**

10.1.2.10. ODO procedures. TR: DAFMAN 13-204 Volume 3, LOPs. **(T-1)**

10.1.2.11. Non-Radar Training (conduct monthly) (not applicable to locations that do not provide non-radar services). All controllers certified in a radar control and/or associated assist position, excluding RFC, must complete at least one non-radar scenario per month. **(T-2)** Conduct non-radar training using Air Traffic Control Simulation Equipment (ATCSE) and/or a facility developed non-radar board. TR: FAAO JO 7110.65AA. **Note:** At locations where the FAA or host nation assumes responsibility for the Air Force radar facility's airspace during radar malfunction, controllers must be trained to provide initial non-radar procedures until the airspace is transferred. **(T-1)** Units with radar UTC taskings must train on basic non-radar procedures. **(T-1)**

10.1.3. Review Training. NATCTs must solicit additional training from the ATC Staff (AOF/CC, CCTLR, NSE and NAAM). **(T-2)** AFFSA/XA and MAJCOMs may initiate review training.

10.1.4. Supplemental Training. This includes AFFSA/XA and MAJCOM messages, local procedural changes, and other matters applicable to airfield operations. CCTLRs must ensure these items are trained and documented accordingly. **(T-1)**

10.2. Monthly Training Requirements. These include AFFSA/XA and MAJCOM recurring training, HQ messages mandating training, and local requirements as determined by ATC Staff.

10.2.1. NATCTs must develop and publish monthly recurring/review/supplemental training requirements for all personnel in a monthly training letter. **(T-2)** Retain monthly training letters for one year.

10.2.2. Controllers must ensure all monthly recurring/review/supplemental training is documented on an DAF Form 1098. **(T-2)**

10.2.3. Individuals on leave, TDY, or other absences must accomplish all monthly training requirements within 30 calendar days after returning to duty. **(T-1)**

10.3. Monthly Proficiency Training Assessment. NSEs must conduct monthly proficiency training assessments based on monthly training requirements established by the ATC Staff against a quantified standard. **(T-2)** NSEs must ensure assessments are standardized, with each controller completing the same assessment for the given month. **(T-2)** Personnel may use references during the monthly proficiency training assessment. **Note:** Assessments are not controlled test materials or subject to test compromise restrictions (guidance located in DAFMAN 36-2664, *Personnel Assessment Program).*

10.3.1. Proficiency assessments may include but are not limited to: Simulator scenarios, written/oral assessments, training forums.

10.3.2. Controllers must document completion on DAF Form 1098. **(T-2)** Standard abbreviations for use on the DAF Form 1098 include: A-Annual, C-Classroom, M-Monthly, P-Practical, SA-Semi-Annual, SIM-Simulator, SS-Self Study, and W-Written. CCTLRs may supplement abbreviations as required.

Chapter 11

ATC QUALITY ASSURANCE REQUIREMENTS

11.1. Program Management.

11.1.1. Super Administrator.

11.1.1.1. AFFSA/XAT will assign personnel as Air Force AOV Super Administrators. **(T-0)**

11.1.1.2. Super Administrators develop processes to: ensure controllers are credentialed, manage ATC personnel involved in the FAA Credentialing Program, develop compliance standards for internal quality audits, develop standards for the issuance, maintenance, withdrawal, and removal of credentials, ratings and designations, and provide an annual audit to the FAA Director, Air Traffic Safety Oversight service (AOV-1).

11.1.1.3. AFFSA/XAT maintains the AOV Information Pamphlet for MAJCOM Administrators and unit Proficiency Managers (PMs), Co-PMs, and DEs to use with the AOV Credentialing System.

11.1.2. Administrator.

11.1.2.1. MAJCOM staff personnel will be designated as AOV Administrators. AOV Administrator responsibilities include the following:

11.1.2.2. Assign/rescind Proficiency Manager (PM)/Co-Proficiency Manager (Co-PM), and DE designations as applicable.

11.1.2.3. Ensure unit applications for credentials with ratings and/or designations are properly completed, authorized, and submitted.

11.1.2.4. Approve/disapprove unit withdrawal requests.

11.1.2.5. Monitor the accuracy of unit PMs, Co-PMs, and DEs use of the AOV Credentialing System using the AOV report generator (e.g., Administrator Summary Report, Expired Credential Report, Negative Action Reports).

11.1.2.6. Report any inaccuracies or problems with the AOV Credentialing System to a Super Administrator via the FAA AOV Credentialing website.

11.1.3. PM must:

11.1.3.1. Meet qualification requirements for AOF/CC or MAJCOM TERPS Manager, as applicable. **(T-1)** PMs will be limited to one per unit. **(T-1)**

11.1.3.2. Ensure DEs or TERPS specialists meet qualifications prior to appointment. **(T-1)**

11.1.3.3. Verify all individuals requesting a credential have successfully met all training and proficiency requirements. **(T-1)**

11.1.3.4. Ensure no person provides direct safety-related ATC services in an Air Force facility unless that person holds a current credential with an appropriate rating and/or designation for the duties assigned. **(T-1)**

11.1.3.5. The PM has the authority to request a complete credential withdrawal and withdraw of a designation from a credential in the AOV Credentialing System. Additionally, the PM or Co-PM will coordinate with the MAJCOM AOV admin when an individual meets any of the following:

11.1.3.5.1. Separated from service. **(T-1)**

11.1.3.5.2. Transferred out of ATC Staff Position. **(T-1)**

11.1.3.5.3. Transferred to a non-ATC assignment. **(T-1)**

11.1.3.5.4. Demonstrated a hazard to flight safety. **(T-1)**

11.1.3.5.5. Failure to obtain rating. **(T-1)**

11.1.3.5.6. Medically disqualified. **(T-1)**

11.1.3.5.7. Failure to maintain mandatory standards. **(T-1)**

11.1.3.5.8. ATC at other locations. **(T-1)**

11.1.3.6. Report any inaccuracies or problems with the AOV Credentialing System to the MAJCOM Administrator. **(T-1)**

11.1.4. Co-PM must:

11.1.4.1. Meet requirements for CCTLR/ACCTLR, or be appointed in writing, by a qualified AOF/CC or MAJCOM TERPS Manager. **(T-1)**

11.1.4.2. Complete all or part of the PM duties under **paragraph 11.1.3**, as assigned. **(T-1)**

11.1.4.3. Co-PMs will be limited to two per facility. **(T-1)**

11.1.5. DE must:

11.1.5.1. Meet requirements for NSE/ANSE and be appointed by the unit PM. **(T-1)**

11.1.5.2. Hold an Air Traffic Control Specialist (ATCS) credential. **(T-1)**

11.1.5.3. Have all required training completed in the facility they will be evaluating. **(T-1)**

11.1.5.4. Initiate requests to issue/reissue, renew, or transfer an ATCS credential or rating. **(T-1)**

11.1.5.5. Report any inaccuracies or problems with the AOV Credentialing System to PM. **(T-1)**

11.1.5.6. There is no limit to the number of DEs a unit may have.

11.1.6. TERPS Specialist Designation. Authorizes the holder to perform all duties associated with instrument procedures. This designation will be withdrawn from the credential when the person is no longer assigned those duties. **(T-1)**

11.2. AOV Credential.

11.2.1. The NSE/DE will issue an initial credential without a facility rating to all apprentice controllers in the AOV Credentialing System during indoctrination at their first ATC facility. **(T-1)**

11.2.2. An AOV Credential with a facility rating will be issued to previously qualified controllers, regardless of facility type, upon completion of their first radar scope position (e.g., Approach or Arrival) or tower Local Control. **(T-1)** **Note:** AOV facility ratings cannot be issued for initial position certification in Radar Assistant, Ground Control, Flight Data, and Clearance Delivery positions.

11.2.3. AOV credential replacement. The NSE, CCTLR, or AOF/CC can submit a request to replace lost, destroyed, or unserviceable certificates.

11.2.4. AOV credential reactivation. A DE will coordinate with the MAJCOM AOV admin to reactivate AOV credentials for 13MX, 1C1X1, or GS-2152 personnel provided they meet one of the following conditions:

11.2.4.1. An active duty controller returning from duty outside ATC. **(T-1)**

11.2.4.2. A discharged controller who re-enlists or joins the ANG or AFR as an air traffic controller. **(T-1)**

11.2.4.3. A previously certified FAA, DoD, or military controller who is hired as a GS-2152 (Terminal) at an Air Force active duty, ANG, or AFR location. **(T-1)**

11.2.4.4. An individual whose certifications were canceled and AOV credential set to "inactive" status for medical reasons, but the medical condition no longer exists and the major command surgeon general (MAJCOM/SG) medically certifies the controller. **(T-1)**

11.2.4.5. A DE will verify the individual meets the criteria of **paragraph 11.2,** before reactivating a credential. **(T-1)**

11.3. AOV Facility Ratings. To achieve an AOV Facility Rating a controller must receive the minimum position certifications for the designated facility in accordance with paragraphs **11.3.1, 11.3.2** **(T-1)** **Note:** AOV Facility Ratings are not to be confused with operating position certifications.

11.3.1. Tower Rating.

11.3.1.1. Authorizes the holder to perform tower ATC services at a specified facility in a position without a trainer/monitor. **Note:** For tower ratings outside the United States, the rating is identified in the AOV system as "Member has met all requirements-Tower".

11.3.1.2. Initial tower rating will be issued to Apprentice controllers who successfully complete SEI requirements per AFECD Section III. **(T-1)**

11.3.1.3. Prior-rated tower controllers may be issued a Tower facility rating in AOV upon successful completion of the Local Control position certification. **(T-1)** Prior-rated RAPCON or GCA controllers must complete all Tower SEI requirements before a Tower facility rating can be issued in AOV. **(T-1)** Additionally, prior to receiving a facility rating and upon initial position certification, all prior-rated controllers may work Tower positions independently (e.g., Flight Data, Ground Control) under the supervision on the WS.

11.3.2. RAPCON/GCA Rating.

11.3.2.1. Authorizes the holder to perform radar control air traffic services at a specified facility in a position without a trainer/monitor. **Note:** The GCA rating is identified in the

AOV system as Radar Arrival Control. Additionally, for radar ratings outside the United States, the rating is identified as "Member has met all requirements-Radar".

11.3.2.2. Initial RAPCON/GCA rating will be issued to Apprentice controllers upon completion of SEI requirements per AFECD Section III. **(T-1)**

11.3.2.3. Prior-rated RAPCON controllers may be issued a Radar Approach Control facility rating in AOV upon successful completion of either the Approach Control or the Arrival Control position certification. **(T-1)** Prior-rated GCA controllers may be issued a Radar Arrival Control (GCA) facility rating in AOV upon successful completion of the Arrival Control position certification. **(T-1)** Both prior-rated GCA and Tower only controllers must complete all RAPCON SEI requirements before a Radar Approach Control facility rating can be issued in AOV. Additionally, prior to receiving a facility rating and upon initial position certification, all prior-rated controllers may work RAPCON positions independently (e.g., Clearance Delivery, Radar Assistant) under the supervision on the WS. **(T-1)**

11.4. ATC Certification Requirements.

11.4.1. Formal Training Requirements. Only personnel, to include host nation and Sister Services (i.e., United States Navy, United States Army, or United States Marine Corps), who have successfully completed a formal DoD or Department of Transportation (DoT) basic ATC course may issue control instructions to aircraft or be assigned to an operating position. **(T-0)** **Note:** Non-US personnel must complete an equivalent level basic ATC course in accordance with host nation Air Navigation Service Provider (ANSP) regulations, and this requirement must be documented and approved by the appropriate authority in an MOU or LOA. **(T-0)**

11.4.2. AFSC and Medical Requirements. Air Force ATC Enlisted Airmen must also possess Control Air Force Specialty Code (CAFSC) 1C1XX to issue control instructions to aircraft or be assigned to an operating position. **(T-1)** This applies to any issuance of air traffic control instructions to airborne aircraft and aircraft on the ground, except when an unqualified controller is under the direct supervision of a qualified air traffic controller. To obtain an AOV credential, an individual must also qualify physically according to DAFMAN 48-123 (for GS-2152 personnel, FAA medical standards) and satisfactorily complete a formal DoD or Department of Transportation basic ATC course. **(T-0)** **Note:** In accordance with Title 14 CFR, Part 65, Subchapter D, Subpart B, *Air Traffic Control Tower Operators*, control tower personnel in contract facilities must possess a valid AOV credential or CTO certificate. **(T-0)**

11.4.3. Special Tactics Combat Control Team (CCT) Training**.** CCT personnel (AFSC 1Z2X1) may require ATC qualification training in some USAF, United States Space Force (USSF), ANG, or AFR facilities. Each CCT member must meet medical qualifications for ATC duty and possess an AOV Credential. **(T-0)** Training of CCT personnel will follow the same local requirements and guidelines as 1C1X1 personnel. **(T-1)**

11.4.3.1. CCT personnel will not work without a trainer until after they have obtained a facility rating against the AOV credential. **(T-1)**

11.4.3.2. CCT personnel will not be used to train 1C1X1 personnel. **(T-1)**

11.5. Position Certification Requirements. The DE will ensure the trainee meets the requirements of CFETP/STS and local requirements. **(T-1)** Accomplish the knowledge evaluation

by using examiner-developed tests that ensure comprehensive CFETP/DAF Form 797 task coverage based on the objectives set in the PCG. The DE will observe the trainee's performance for a reasonable period under normal workload conditions as prescribed by the standards of the PCG. Simulation may be used to augment the evaluation. Tower personnel must be certified by a designated weather examiner per the local Cooperative Weather Watch (CWW) Program and document on DAF Form 3622 prior to receiving their initial position certification within a tower facility. **(T-1)**

11.5. (ACC) Position Certification Requirements. Note: Graded/scorable assessments (i.e., block and certification tests) shall comply with a minimum passing score of at least 80 percent. The DE will be plugged into the same position as the controller being evaluated and will not be signed on as the WS.

11.5.1. Position Certification Completion: “Pass”

11.5.1.1. DE must:

11.5.1.1.1. Document certification on DAF Form 623a, or electronic equivalent. **(T-2)** Retain position evaluations in DAF Form 623, or electronic equivalent, in accordance with this manual until award of facility rating. **(T-2)** Retain position certification documentation until completion of annual evaluation. **(T-2)**

11.5.1.1.2. Document position certifications and/or facility ratings on DAF Form 3622 or suitable substitute. **(T-2)**

11.5.1.1.3. When applicable, initiate the appropriate rating request in AOV. **(T-1)**

11.5.1.1.4. As applicable, issue temporary credential to controller. **(T-1)**

11.5.1.2. WS must document results on DAF Form 3616. **(T-2)**

11.5.2. Position Certification Completion: “Fail”

11.5.2.1. DE must document certification on DAF Form 623a, or suitable substitute. **(T-2)** Retain until award of position certification. **(T-2)**

11.5.2.2. WS must refer the individual to the CCTLR to determine whether to reenter the controller into position training, or initiate action to withdraw the individual from the career field. **(T-2)**

11.5.2.3. WS must document results on DAF Form 3616. **(T-2)**

11.6. Revocation of ATC Position Certification and Facility Rating.

11.6.1. When designated in AOV as a PM/Co-PM or Designated Examiner, the AOF/CC, CCTLR, NSE, and TSN have the independent authority to revoke the position certification(s) of a controller whose control practices demonstrate a hazard to flying safety. **(T-0)** The revoking authority must, at a minimum, (1) revoke the position certification of the position in which the hazardous discrepancy was identified, and (2) determine whether to limit the decertification of associated STS items to that position, or to decertify STS items across multiple positions, either of which are permitted but also carry much different implications. **(T-1)**

Note 1: Revocation of additional position certification(s) may be restricted to the facility in which the controller demonstrated a hazard to flying safety. The revocation authority may also

revoke all positions in all facilities where certifications are held, assuming that authority is so empowered (e.g., a RAPCON CCTLR would not be authorized to revoke certifications in the Tower; however, an AOF/CC would be). In any instance of revocation, the controller must not be allowed to work unmonitored in any position(s) until all required re-training in decertified STS items and re-certification have been completed in the position(s) where certifications were revoked. A Special evaluation is not required for subsequent positions in which ratings were not revoked.

Example: A controller's Approach and Arrival Control certifications are revoked, and re-training is required in a specific STS item. The controller will not work unmonitored at any position in which the de-certified STS item is trained until the controller has been re-certified in that task through third-party evaluation in the position(s) for which certifications were revoked. In this example, Approach and Arrival must both be evaluated prior to the controller performing further ATC duties unmonitored in any other position. The task re-certification for these positions, and by extension the demonstration of task knowledge and safe practical application, will extend to any other position which may have required training in the de-certified STS items but was not considered appropriate for full revocation.

Note 2: In weighing a decision to revoke certifications, authorities noted above will consider first and foremost the controller's explicit requirement to uphold DAF and FAA ATC standards, and thus to create and perpetuate an operating environment that facilitates safe, orderly, and expeditious movement of all air traffic.

11.6.1.1. The following discrepancies constitute clear departures from DAF and FAA ATC standards and must therefore be categorized as control practices that demonstrate a hazard to flying safety:

11.6.1.1.1. An event wherein a controller's loss of situational awareness, lack of knowledge or proficiency, or mindful disregard for air traffic within his/her assigned airspace led to or clearly contributed to the violation of ATC regulations and/or the loss of applicable separation standards. **(T-1)**

11.6.1.1.2. An event wherein a controller allowed an aircraft(s), vehicle(s), or personnel to operate on a runway/landing zone/helipad/aerodrome surface, or within the CMA, in a manner contrary to or in clear violation of operational regulations and/or restrictions. **(T-1)**

11.6.1.2. Furthermore, consider a controller's training, primary duty performance history, and the following circumstances when evaluating causality, the gravity of the discrepancy, and appropriate corrective actions:

11.6.1.2.1. Environmental factors (e.g., noise levels, traffic level, complexity, equipment status).

11.6.1.2.2. Crew resource management factors (e.g., decision making, workload management, communication, situational awareness, group dynamics).

11.6.1.2.3. Implication of hazardous operational deficiency(ies) on other operating positions and/or facilities (e.g., which STS item was decertified and how may it apply elsewhere? Or did the controller's inadequate position-relief briefing create an unsafe situation in adjacent airspace or within another controller's operating position or area of jurisdiction?).

11.6.1.3. Environmental factors (e.g., noise levels, traffic level, and complexity).

11.6.1.4. Crew resource management factors (e.g., decision making, workload management, communication, situational awareness, group dynamics).

11.6.2. Documentation: CCTLRs will enter the date of revocation into the 'Date Cancelled/Revoked' block next to each position certification on the controller's DAF Form 3622 and then annotate an "R" with the effective date of revocation in the same block in pen. **(T-1)**

11.6.3. Applicable STS items in CFETP will be decertified. **(T-1)**

11.6.4. All revocations will be documented on an DAF Form 623a and retained in the controller's DAF Form 623 for a minimum of one year with the following:

11.6.4.1. Controller's name. **(T-1)**

11.6.4.2. Effective date of revocation. **(T-1)**

11.6.4.3. All facility ratings and certifications affected. **(T-1)**

11.6.4.4. Reason for rating or position certification revocation. **(T-1)**

11.6.4.5. Recommended course of action and corrective actions as applicable. **(T-1)**

11.6.4.6. Signature of the affected controller and suspending authority. **(T-1)**

11.6.4.7. Specific STS decertified. **(T-1)**

11.6.5. In any instance of revocation, AOV-responsible parties (e.g., PM, CCTLR) must notify their respective MAJCOM POC NLT the next duty day following the certification(s) revocation action. **(T-2)** Upon receipt of said notification, the MAJCOM POC will amend the controller's status from Active to Inactive and provide pertinent details in the associated dialog box. At the time certifications are re-obtained, AOV-responsible parties must notify the MAJCOM POC to return the controller to Active status. **(T-1)**

Note: Rendering a controller's credential status as "Inactive" does not imply a controller is restricted from performing ATC duties in positions for which the controller still retains position certifications. The intent of changing from "Active" to "Inactive" status is two-fold: (1) It enables the MAJCOM to document within AOV the nature of the incident and other pertinent details, and (2) It ensures a controller's credential history is properly maintained and that the shift from "Inactive" to "Active" is handled at the system-dependent Administrator level.

11.6.6. Within 10 duty days of certification(s) revocation, the CCTLR must re-enter the controller into training or initiate AFSC withdrawal procedures in accordance with **Attachment 4**. **(T-1)** Upon re-entering a controller into training, the CCTLR will concurrently notify respective MAJCOM personnel of this action by providing a synopsis of all corrective action plans, including but not limited to all decertified STS items, remedial actions to ensure the event or the discrepancy is not repeated (e.g., "Lessons Learned" MFRs, Playback De-briefings, transcript drills, CCTLR Policy Letters, procedure modifications, etc.), and the estimated timeline for resolution and restoral to "Active" credential status. **(T-3)**

Note 1: Never erase or overwrite an "R" annotated on DAF Form 3622.

Note 2: Deployed CCTLRs must notify a controller's home-station CCTLR of revocation action. **(T-1)**

11.7. Suspension of Position Certifications. When a controller has not met CCTLR-established position proficiency requirements for one or more positions, certification for the position(s) is/are automatically suspended. No entry in the DAF Form 3622 will be made for suspension due to lack of proficiency and do not submit for AOV credential withdrawal. **(T-1)** The AOF/CC and the CCTLR have the authority to suspend position certifications for a lack of proficiency. CCTLRs must document all suspensions on an DAF Form 623a and retain in the controller's DAF Form 623 for a minimum of one year with the following:

11.7.1. Controller's name. **(T-1)**

11.7.2. Effective date of suspension. **(T-1)**

11.7.3. All facility ratings and certifications affected. **(T-1)**

11.7.4. Reason for rating or position certification suspension. **(T-1)**

11.7.5. Recommended course of action and corrective actions as applicable. **(T-1)**

11.7.6. Signature of the suspended controller and suspending authority. **(T-1)**

11.8. Cancellation of ATC Position Certifications. The CCTLR must cancel position certifications when a controller is separated from service, departs for a PCS, or transfers to a non-ATC assignment. **(T-1)**

11.8.1. The AOF/CC and CCTLR have the authority to cancel position certifications.

11.8.2. Documentation: cancel position certifications by entering a "C" and the effective date of cancellation in the Date Cancelled/Revoked block on the controller's DAF Form 3622 next to each position certification being canceled. **Note:** Refer to paragraphs **9.6.2.3** and **9.6.2.4** for procedures regarding controllers re-hired as civilians.

11.9. ATC Annual, Special, and Controller Evaluations.

11.9.1. Annual evaluations will be conducted NLT the last day of the 12th month from the anniversary of the AOV facility rating, or last annual evaluation at the current location. **(T-1)** Annual evaluation will be conducted in the most complex position held by the controller for each facility in which they hold an AOV credentialed position. **(T-1)** CCTLRs must rank the complexity of each position and establish procedures for overdue annual certifications in an LOP. **(T-1)** **Example 1**: SSgt Margeson received her approach rating on 17 Mar. Sergeant Margeson now holds the AOV facility rating Radar Approach Control. SSgt Margeson will have an annual evaluation in the most complex position held in the RAPCON no later than last day of the month she received her first facility rating, 31 Mar. **Example 2:** SrA Hoffman is a dual-rated controller. SrA Hoffman holds the AOV facility rating of Tower and Radar Approach Control. Since SrA Hoffman's tower rating was awarded first on 3 April, his annual evaluations in both tower and radar approach control must be complete in the most complex positions held no later than 30 April annually, regardless of when the radar certification was awarded. **Example 3:** MSgt Blodgett is TDY and goes overdue for his annual evaluation in August. Upon return to duty, the annual evaluation is accomplished on 7 October. MSgt Blodgett's next annual is due NLT 31 October of the following year.

11.9.1.1. When a controller has not had an annual evaluation conducted within the allotted time period, the CCTLR will suspend the position certifications via memorandum with corrective actions in accordance with **paragraph 11.7**. **(T-1)**

11.9.1.2. For an annual evaluation “pass”, facilities in the AOV system will renew the holder's rating. **(T-1)** Facilities not in the AOV system will document on DAF Form 623a and retain until the next annual evaluation is accomplished. **(T-1)**

11.9.1.3. For an annual evaluation “fail” for demonstrated hazard to flight safety, revoke certifications (reference **paragraph 11.6.**).

11.9.1.4. For an annual evaluation “fail” for reasons other than a demonstrated hazard to flight safety, refer the individual to the CCTLR for appropriate action.

11.9.1.5. Evaluators may choose to continue the evaluation at another time to observe normal workload conditions.

11.9.1.6. Document all annual evaluation results on DAF Form 3616.

11.9.2. Special evaluations are conducted on controllers who have had ratings revoked as a result of a demonstrated hazard to flying safety or suspended due to a lack of proficiency. Evaluators must maintain override capability while performing special evaluations until satisfactory results are achieved. **(T-1)**

11.9.2.1. Hazard to Flying Safety. Only the DE will conduct special evaluations on controller’s whose ratings were revoked as a result of flying safety. **(T-1)** **Note:** If a WS conducting a special evaluation believes the controller is a hazard to flight safety, the evaluation must be immediately terminated and the WS should immediately report the termination and reason to the NSE or CCTLR for action.

11.9.2.2. Lack of proficiency. A WS or DE may perform a special evaluation for certifications suspended due to a lack of proficiency.

11.9.2.3. A special evaluation may suffice for an annual evaluation if conducted during the renewal month by a DE. **Example:** TSgt Lopez returns from a TDY in April and did not meet her proficiency requirements for the month of March. TSgt Lopez requires special evaluations in all positions in which she did not meet proficiency requirements, and her annual is also due in April. If the special evaluation in the most complex position held by TSgt Lopez is accomplished by a DE, then the special may also suffice as TSgt Lopez’s annual evaluation.

11.9.2.4. For a special evaluation “pass,” document evaluation on DAF Form 623a or suitable substitute and retain in the individual’s training record until the next annual evaluation is accomplished. For individuals that are not facility rated, maintain all position evaluations in the individual’s training record until the facility rating is awarded.

11.9.2.5. For a special evaluation “fail” for demonstrated hazard to flight safety, revoke certifications (reference **paragraph 11.6.**).

11.9.2.6. For a special evaluation “fail” for reasons other than a demonstrated hazard to flight safety, refer the individual to the CCTLR for appropriate action.

11.9.2.7. Evaluator may choose to continue the evaluation at another time to observe normal workload conditions.

11.9.2.8. Document results of all special evaluations on DAF Form 3616.

11.9.3. A controller evaluation will be conducted on a position certified controller in any position deemed necessary when judgment, actual proficiency levels (based on the established PCG standards), or questionable practices warrant further evaluation. **(T-1)**

11.9.3.1. The AOF/CC, CCTLR, NSE, or CTO examiner (where applicable) have the authority to direct a controller evaluation.

11.9.3.2. The NSE/ANSE, or CTO examiner (where applicable) will conduct the controller evaluation during live traffic or a combination of live and simulated traffic. **(T-3)**

11.9.3.3. For a controller evaluation "pass," document evaluation on DAF Form 623a or suitable substitute and retain in the individual's training record until the next annual evaluation is accomplished. For individuals that are not facility rated, maintain all position evaluations in the individual's training record until the facility rating is awarded.

11.9.3.4. For a controller evaluation "fail" for a demonstrated hazard to flight safety, revoke certifications (reference **paragraph 11.6.**).

11.9.3.5. For a controller evaluation "fail" for lack of proficiency, suspend certifications (reference **paragraph 11.7.**).

11.9.3.6. Evaluator may choose to continue the evaluation at another time to observe normal workload conditions.

11.9.3.7. Document results of all controller evaluations on DAF Form 3616.

11.10. Temporary Control Locations. Do not withdraw or place credentials in inactive status for TDY/deployments with an expected duration of less than 270 calendar days. AOV credentials suspended for 270 calendar days or more should be placed in an inactive status with the reason "ATC at other locations" in the AOV system. Site-specific credentials, other than the controller's home facility credentials, are not required. However, the qualifications, knowledge, and skill requirements outlined in service-specific DoD requirements remain in effect. An ATCS must undergo skills checks and be certified on all locally established positions by a DE at the temporary air traffic control facility. **(T-3)**

11.11. ATC Facility Evaluations. The NSE/ANSE/TSN/ATSN will conduct periodic facility evaluations, on each crew, at least every 90 calendar days to ensure adherence to facility operating directives and standard application of procedures utilizing the Standardized Facility Evaluation Checklist available on the HQ AFFSA Airfield Operations SharePoint website. **(T-2) Note:** For facilities without established crews, conduct three random evaluations every 90 calendar days.

11.11.1. As a minimum, the NSE will observe:

11.11.1.1. Crew application of Crew Resource Management (CRM) principles:

11.11.1.1.1. Situational Awareness. **(T-2)**

11.11.1.1.2. Effective Communications. **(T-2)**

11.11.1.1.3. Risk Management. **(T-2)**

11.11.1.1.4. Workload Management. **(T-2)**

11.11.1.1.5. Group Dynamics. **(T-2)**

11.11.1.1.6. Stress Awareness and Management. **(T-2)**

11.11.1.2. Application of standard phraseology. **(T-2)**

11.11.1.3. Application of separation criteria. **(T-2)**

11.11.1.4. Inter/intra facility coordination. **(T-2)**

11.11.1.5. Position awareness. Performing position responsibilities in accordance with FAAO JO 7110.65AA and LOPs. **(T-2)**

11.11.1.6. Weather reporting procedures. **(T-2)**

11.11.1.7. Crew change/position relief procedures. **(T-2)**

11.11.1.8. Use of checklists. **(T-2)**

11.11.2. Document the results of each evaluation and forward to the AOF/CC and CCTLR for review and/or action. Facility evaluations will be retained for a minimum of one year. **(T-2)**

ADRIAN L. SPAIN, Lt Gen, AF
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(ACC)

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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DAF Form 2096, *Classification/On-The-Job Training Action*

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Abbreviations and Acronyms

AAA—Airport airspace analysis

(Added-ACC) ACC—Air Combat Command

ACCTLR—Assistant Chief Controller

ACR—Adaptation change request

AEF—Air and Space expeditionary force

AETC—Air education and training command

AF—Air Force

AFAS—Airfield automation system

AFCSM—Air Force computer systems manual

AFECD—Air Force enlisted classification directory

AFFSA—Air Force Flight Standards Agency

AFH—Air Force handbook

AFI—Air Force instruction

AFIMSC—Air Force installation and mission support center

AFMAN—Air Force manual

AFMD—Air Force mission directive

AFOSI—Air Force office of special investigations

AFPC—Air Force personnel center

AFPD—Air Force policy directive

AFR—Air Force Reserve

AFRC—Air Force Reserve command

AFREP—Air Force representative

AFRSAT—Air Force runway safety action team

AFSC—Air Force specialty code

AFTC—Air Force training course

AFTTP—Air Force tactics, techniques, and procedures

AFW—Air Force weather

AGL—Above ground level

AM—Airfield management

AME—Aero medical examiner

ANATCT—Assistant NCOIC, Air Traffic Control Training

ANG—Air National Guard

ANSE—Assistant NCOIC, Standardization and Evaluation

(Added-ACC) AOB—Air Operations Board

AODMS—Airfield operations data management system

AOF—Airfield operations flight

AOI—Airfield operations instruction

AOM—Airfield operations management

AOSS—Airfield operations system specialist

AOV—Air Traffic oversight

ARTCC—Air route traffic control center

ASR—Airport surveillance radar

ATARS—Air traffic activity reporting system

ATC—Air traffic control

ATCALS—Air traffic control and landing systems

ATCS—Air traffic control specialist

ATCSE—Air traffic control simulation equipment

ATCTC—Air traffic control trainer course

ATIS—Automatic terminal information service

ATSN—Assistant NCOIC, ATC Training and Standardization

BASH—Bird/wildlife aircraft strike hazard

BTM—Base training manager

CA—Conflict alert

CAFSC—Control Air Force specialty code

CAT—Category

CBI/T—Computer-based instructional/training

CCT—Combat control team

CCTLR—Chief Controller

CD-R—Compact disc – recordable

CDR—Continuous data recording

CE—Civil engineering

CERAP—Center radar approach control

CFETP—Career field education and training plan

CFR—Code of federal regulations

CI/CT—Coordinator

CLSD—Closed

CMA—Controlled movement area

CMAV—Controlled movement area violation

CMS—Case management system

COA—Certificate of authorization

Co-PM—Co-proficiency manager

CPF—Civilian personnel flight

CPME—Calibration performance monitor equipment

CRM—Crew resource management

CTO—Control tower operator (contract locations)

CTRD—Certified tower radar display

CTS—Course training standard

CUI—Controlled unclassified information

CWW—Cooperative weather watch

DAFH—Department of the Air Force handbook

DAFI—Department of the Air Force instruction

DAFMAN—Department of the Air Force manual

DALR—Digital audio legal recorder

DAS—Date arrived station

DBRITE—Digital bright radar indicator tower equipment

DCP—Document change proposal

DD Form—Department of Defense form

DE—Designated examiner

DEN—Domestic events network

DH—Decision height

DNIC—Duties not to include controlling

DoD—Department of Defense

DSN—Defense switched network

DTAS—Digital terminal automation systems

(Added-ACC) DTD—Direct-to-Duty

DTM—Digital terrain maps

DVA—Diverse vector area

DV—Distinguished visitor

DVD-R—Digital versatile disc – recordable

EDIT—Experiencing difficulty in training

EMI—Electromagnetic interference

ESL—Emergency service level

ETCA—Education and training course announcement

ETVS—Enhanced terminal voice switch

FAA—Federal Aviation Administration

FAAO—Federal Aviation Administration order

FAF—Final approach fix

FAM—Functional area manager

FCT—Facility continuation training

FDIO—Flight data input output

FDS—Flight data system

FFM—Far field monitor

FLIP—Flight information publication

FLT—Front load training

FPNM—Feet per nautical mile

FRD—Fixed radial distance

FSL—Full service level

FSS—Flight service station

FTOR—Failure to obtain (or maintain) a rating

GCA—Ground controlled approach

GPS—Global positioning system

GS—General schedule

HATh—Height above threshold

HATR—Hazardous air traffic report

HCF—Honolulu Control Facility

HHQ—Higher Headquarters

HN—Host nation

HQ AFFSA—Headquarters Air Force Flight Standards Agency

ICAO—International Civil Aviation Organization

IEMPS—Installation emergency management plans

IFR—Instrument flight rules

ILS—Instrument landing system

(Added-ACC) IP—Instructor Pilot

JO—Job order

LAAS—Low altitude alert system

LA—Low altitude

LAN—Local area network

LAWRS—Limited aviation weather reporting stations

LDNIC—Long-term duties not to include controlling

LMR—Land mobile radio

LOA—Letter of agreement

LOI—Local operating instruction

LOP—Local operating procedure

LZ—Landing zone

(Added-ACC) LZSO—Landing Zone Safety Officer

MAJCOM—Major command

MANPADS—Man-portable air defense systems

MASZ—Military alert suppression zones

MCI—Mode C intruder

MEARTS—Micro enroute automated radar tracking system

MFM—MAJCOM functional manager

MFR—Memorandum for record

MIA—Minimum IFR altitude

MilPDS—Military personnel database system

MILSPEC—Military specific

MM—Middle marker

MOA—Military operating area

MOU—Memorandum of understanding

MSAW—Minimum safe altitude warning

MTI—Moving target indicator

MTL—Master task listing

MTP—Master training plan

MTTR—Master task and technical reference

MVA—Minimum vectoring altitude

NAAM—NCOIC, Airfield Automation Manager

NAS—National airspace system

NATCT—NCOIC, Air Traffic Control Training

NATO—North Atlantic Treaty Organization

NAVAID—Navigational aid

NCOIC—Non-commissioned officer-in-charge

(Added-ACC) NCO—Non-Commissioned Officer

NCR—National capital region

NEXRAD—Next-generation radar

NGB—National Guard Bureau

NLT—No later than

NM—Nautical mile

NOTAM—Notice to Airmen (ICAO/DoD) / Notice to air missions (FAA)

NSE—NCOIC, ATC Standardization and Evaluation

N-TFS—New-tactical forecast system

NVD—Night vision device

OCL—Operational capability level

ODO—Opposite direction operations

ODP—Obstacle departure procedures

OE—Obstruction evaluation

OG—Operations group

OI—Operating instruction

OJT—On-the-job training

OPLANS—Operations plans

OPR—Office of primary responsibility

OSF—Operations support facility

PAFSC—Primary Air Force specialty code

PAPI—Precision approach path indicator

PAR—Precision approach radar

PCA—Permanent change of assignment

PCAS—Primary crash alarm system

PCG—Position certification guide

PCS—Permanent change of station

PED—Portable electronic device

PFO—Precautionary flameout

PHA—Preventive health assessment

PM—Proficiency manager

POFZ—Precision obstacle free zone

PSD—Personnel services delivery

PWS—Performance work statement

QTP—Qualification training package

RABM—Range azimuth beacon monitor

RAPCON—Radar approach control

RAWS—Radar, airfield, and weather systems

RDS—Records disposition schedule

RFC—Radar final control

RIF—Recent information file

RPA—Remotely piloted aircraft

RPI—Runway point of intercept

RRF—Ready reference file

RSC—Runway surface condition

RSI—Remote status indicator

RSRS—Reduced same runway separation

RTQC—real-time quality control

RVR—Runway visual range

RWY—Runway

SCPD—Standard core personnel documents

SC—Senior Controller

SEI—Specialty experience identifier

SFO—Simulated flameout

SFRA—Special flight rules area

SF—Security Forces

SIA—Status information area

SIB—Safety investigation board

SID—Standard instrument departure

SIF—Special interest flights

SIGNAL—Simulation and integration of ground, network, and air links

SITE—Standardized initial task evaluation

SOF—Supervisor of flying

SOW—Statement of work

SPD—Stadard position descriptions

SRB—Selective re-enlistment bonus

SSA—System status area

SSGT—Staff Sergeant

STARS—Standard terminal automation replacement system

STS—Specialty training standard

SUA—Special use airspace

sUAS—Small unmanned aircraft system

SVFR—Special visual flight rules

TAFMS—Total active federal military service

TCAS—Traffic alert and collision avoidance system

TCTO—Time compliance technical order

TDW—Tower display workstation

TDY—Temporary duty

TERPS—Terminal instrument procedures

TLN—Training line number

TOI—Training operating instruction

TO—Technical order

TRB—Training review board

TR—Technical reference

TSC—Training status codes

TSN—NCOIC, ATC Training and Standardization

TSS—Tower simulation system

UAS—Unmanned aircraft system

UDM—Unit deployment manager

UFC—Unified facilities criteria

UGT—Upgrade training

UHF—Ultra high frequency

UMD—Unit manpower document

UPS—Uninterruptible power supply

USNO—United States naval observatory

US—United States

UTC—Unit type code

UTM—Unit training manager

VDD—Version description documents

VFR—Visual flight rules

VHF—Very high frequency

VMC—Visual meteorological conditions

WEBS—Web services

WG—Wing

WLAN—Wireless local access network

WS—Watch Supervisor

Office Symbols

ACC/A3—ACC Director of Operations

ACC/A3A—ACC Airspace, Ranges and Airfields Operations Division

ACC/A3AO—ACC Operations and Procedures

AF/A3O—Headquarters Air Force, Current Operations

AF/DA3O—Headquarters Air Force, Deputy Director of Operations

AFFSA/XA—Headquarters Air Force Flight Standards Agency, Director of Airfield Operations

AFFSA/XAT—Headquarters Air Force Flights Standards Agency, Air Traffic Control Division

AFFSA/XC—Headquarters Air Force Flight Standards Agency, Cyber Operations

AFFSA/XOS—Headquarters Air Force Flight Standards Agency, Terminal Instrument Procedures Division

AFPC/DPMSSM—Air Force Personnel Center Military Classifications

AFRC/A3—Air Force Reserve Command, Operations

AOF/CC—Airfield Operations Flight Commander

AOF/DO—Airfield Operations Director of Operations

FSS/CC—Force Support Squadron Commander

MAJCOM/A1—Major Command, Manpower and Personnel

MAJCOM/A3—Major Command, Operations

MAJCOM/A3A—Major Command, Airfield Operations and Airspace

MAJCOM/A7—Major Command, Installations and Mission Support

MAJCOM/SG—Major Command Surgeon General

MAJCOM IG—Major Command Inspector Generial

OG/CC—Operations Group Commander

OSS/CC—Operations Support Squadron Commander

SAF/IGI—Secretary of the Air Force, Inspections Directorate

WG/CC—Wing Commander

Terms

Aerodrome—A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure, and movement of aircraft.

Airfield Operations Instruction (AOI)—Formerly known as the base flying regulation. Defines local procedures for AM and ATC.

Air Traffic Control and Landing Systems (ATCALS)—Department of Defense facilities, personnel, and equipment (fixed, mobile, and seaborne) with associated avionics to provide safe, orderly, and expeditious aerospace vehicle movements worldwide.

Air Traffic Control (ATC) Duty—ATC duty is defined as controlling live or simulated traffic, monitoring a trainee controlling live or simulated traffic, issuing ATC movement and control messages, monitoring a trainee issuing ATC movement and control messages, or conducting duties as a WS.

Air Traffic Control (ATC) Experience—Compute ATC experience using the graduation date from an approved DoD ATC Technical School (e.g., USA, USMC, USN).

Approach End of Runway—The end of a runway nearest to the direction from which the final approach is made.

Career Field Education and Training Plan (CFETP)—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. This document is the formal training contract between the Career Field Manager (CFM) and Air Education and Training Command (AETC) for formal accession and life-cycle skills training.

Closed—An airfield is "closed" when no flying activity is permitted. If the closure is for a particular type of aircraft or operation, it must be so stated. For example: "Closed to aircraft not involved in Volant Rodeo."

Controlled Movement Area (CMA)—As defined in AOIs, any portion of the airfield requiring aircraft, vehicles and pedestrians to obtain specific ATC approval for access (normally via two-way radio contact with the control tower). CMAs include but are not limited to areas used for takeoff, landing and as required taxiing of aircraft. **Note:** This definition is used in lieu of "movement area" as defined in the FAA Pilot Controller Glossary which can be found on the FAA website: **https://www.faa.gov/air_traffic/publications/media/PCG_10-12-17.pdf**.

Control Tower Operator (CTO)—Includes local control, ground control and flight data positions at contract tower locations.

Dual Certification—A controller is dual certified when they hold current position certifications in more than one facility. The controller must maintain proficiency standards in both facilities to retain dual certification status.

Evaluation—A judgment expressed as a measure or ranking of trainee achievement, instructor (trainer) performance, process, application, training material, and other factors in air traffic control training.

Example—Provides a sample of the way the associated prescribed phraseology maybe used. If there is no associated specific prescribed phraseology, the "***Example***" denotes suggested words and/or phrases that may be used in communications.

Follow—An acknowledgment that the pilot will maneuver the aircraft as necessary to avoid the other aircraft or to maintain in-trail separation. Additionally, in operations conducted behind heavy aircraft, or a small aircraft behind a B757 or other large aircraft, it is also an acknowledgment that the pilot accepts the responsibility for wake turbulence separation. Visual separation is prohibited behind super aircraft.

FUSION—The equivalent of the current single-sensor radar display.

Ground Controlled Approach (GCA)—A fixed, mobile, or transportable facility that provides radar arrival and RFC services within airspace designated by an approach control facility.

Knowledge—Use of the mental process, which enables a person to recall facts, identify concepts, apply rules or principles, solve problems, and think creatively. Knowledge is not always directly observable. A person manifests knowledge through performing associated overt tasks.

Local Operating Procedures (LOP)—Supplemental procedures issued as letters of agreement, operations letters, operating instructions, memorandum of understanding, squadron regulations, operations plans, or base manual or instructions.

Lost Link—UAS operator or pilot has lost the ability to provide real-time control of the UAS. Loss may be permanent or temporary.

Major Command (MAJCOM)—For the purpose of this manual, includes all Air Force Major Commands plus the Air National Guard Readiness Center, Air Force Reserve Command, Direct Reporting Units, and Field Operating Agencies.

Master Task and Technical Reference Listing (MTTR)—All work center facility tasks and corresponding technical reference that supports qualification, upgrade, recurring, review and specialized training.

Master Training Plan (MTP)—Employs a strategy for ensuring the completion of all work center job requirements by using a Master Task Listing (MTL) and provides milestones for task, Career Development Course completion, and prioritizes deployment UTC, home station training tasks, upgrade, and qualification tasks.

Micro Enroute Automated Radar Tracking System (MEARTS)—A modular, micro-computer-based air traffic system.

Mishap—A mishap is an unplanned occurrence, or series of occurrences, that results in damage or injury and meets Class A, B, C, D or Class E event reporting criteria (guidance located in DAFI 91-204)**.** Damage or injury includes: damage to DoD property (excluding normal wear and tear or aging), occupational illness to DoD military or civilian personnel, injury to DoD military personnel on or off-duty, injury to on-duty DoD civilian personnel, damage to public or private property, or injury or illness to non-DoD personnel caused by Air Force operations.

Multiple Approach—When more than one aircraft is on the radar final approach at the same time. Normal radar separation standards apply, and a controller controls only one aircraft, but may monitor two aircraft or two flights of two aircraft simultaneously.

Objective—A statement that specifies what behavior is to be exhibited, the conditions under which behavior will be accomplished and the minimum standard of performance. Objectives describe only the behaviors that directly lead to or specifically satisfy a job performance requirement. An objective is a statement of instructional intent.

On-the-Job Training (OJT)—Hands-on, "over-the-shoulder" training conducted to certify personnel in both upgrade and job qualification training.

Overrun—Usually a non-stressed extension at each end of the runway. The extension is not used as a landing area, except in instances where an aircraft emergency warrants its use. The extension is part of the controlled movement area, but not used for spacing/separation between aircraft.

Phraseology—Shown throughout as "***PHRASEOLOGY"*** denotes the prescribed words and/or phrases to be used in communications.

Portable Electronic Devices (PEDs)—A PED is any piece of lightweight, electronically-powered equipment capable of communications, data processing, and/or entertainment (e.g., smartphones or cellular phones, smart watches, e-readers, tablets, gaming systems).

Position Certification—An endorsement by the NCOIC, Standardization and Evaluation or Assistant NCOIC, Standardization and Evaluation/NCOIC, ATC Training and Standardization or Assistant NCOIC, ATC Training and Standardization or Control Tower Operator examiner that the applicant has demonstrated the competence, qualifications and skill required to operate at a specific operating position.

Position Certification Guide (PCG)—Documents used to assist the trainer and supervisor in logically training airfield operations personnel in a specific duty position.

Precision Approach Radar (PAR)—Radar displaying range, azimuth, and elevation (in relation to a glide slope) normally encompassing an area from 10 to 20 miles on final approach to a position on the runway intercepted by the glide slope.

Qualification Training Package (QTP)—An instructional package designed for use at the unit to qualify, or aid qualification, in a duty position or program, or a piece of equipment. This document may be printed, computer-based, or in other audiovisual media.

Qualified Controller—An individual who is (1) facility rated and holds a minimum classification of GS-2152, 13M3, PAFSC 1C151 or PAFSC 1C131 and (2) has been awarded a 053, 056, or 364 SEI or an equivalent level of experience or training as specified in this manual for the award of the aforementioned SEIs, or (3) is position certified but already meets aforementioned classification and SEI requirements.

Radar Approach Control (RAPCON)—A fixed, mobile, or transportable radar facility that provides approach control, arrival and RFC services using surveillance radar.

Radar Final Control (RFC)—An ATC service that provides navigational guidance or approach monitoring during the final approach phase of flight. This service normally includes precision approach radar (PAR) approaches, instrument approach monitoring using PAR equipment when final approach courses are coincident, flight following, airport surveillance radar (ASR) approaches and safety alert services. Additional services are provided within system capability. A controller assigned to the RFC position (called the radar final controller) normally provides this service.

Ready Reference File (RRF)—An easily accessible quick reference guide to performing common controller functions. Information is streamlined for use in time sensitive situations.

Recurring Training—Training provided to periodically review selected current operational procedures and techniques.

Review Training—Training conducted for the purpose of correcting or precluding specific operational deficiencies. Review training is developed based on analysis of performance evaluations, supervisory observations, trends, or operational evaluations.

Revocation—The official removal of controller ratings for reasons other than PCS or PCA or lack of proficiency.

Runway Surface Condition (RSC)—Identifies the condition of the runway surface when covered with slush, snow, ice or water.

Runway Suspension—A short-term condition that requires temporarily restricting aircraft arrivals and departures until corrected (e.g., foreign object debris, severe bird/wildlife activity, snow and ice removal checks, arresting systems maintenance or configuration changes, airfield construction, pavement repair).

Scheduled Air Carrier—An air carrier that holds a scheduled air carrier certificate and provides scheduled service year round between two or more points.

Senior Airfield Authority (SAA)—The SAA is an individual appointed by the component responsible for airfield operations at the direction of the joint force commander. The SAA is responsible for the control, operation, and maintenance of the airfield, to include deployable air traffic control and landing systems, the runways, associated taxiways, and parking ramps, as well as air, land, safety surfaces, and facilities of which proximity affects airfield operations.

Simulation Scenario—Scripted scenarios designed to develop or maintain a controller's skills using simulation equipment (any simulation equipment developed for ATC use) or any static environment (to include non-radar and tower static boards).

Skill Level—The level of qualification within an awarded Air Force specialty, shown by the fourth digit of the AFSC.

Special Evaluation—Used to evaluate a controller's performance after ratings have been suspended or revoked.

Specialty Experience Identifier (SEI)—A three-character code that identifies special experience training not otherwise identified in the personnel data system. SEIs may permit rapid identification of individuals with special qualifications to meet peacetime assignments. They provide a means for identifying critical manning requirements during wartime or contingency operations when little lead time is available for training personnel in specific technical skills.

Specialty Training Standard (STS)—An Air Force publication that describes an Air Force specialty in terms of tasks and knowledge which an Airman in that specialty may be expected to perform and identifies the training provided to achieve a 3-, 5-, or 7-skill level within an enlisted Air Force specialty. The STS further serves as a contract between AETC and the functional user to show the overall training requirements for an Air Force specialty code that are taught in formal schools and correspondence schools.

Stop Training—When a trainee is unable to accomplish knowledge based (including classroom instruction), simulator (including static scenarios), and OJT due to unforeseen events or inability to meet standards.

Supervisor of Flying (SOF)—A rated officer authorized by the flying unit commander to monitor and supervise current flight operations. A SOF may perform duties from the control tower.

Supplemental Training—Training for a portion of an Air Force Specialty without a change in AFSC. Formal training on new equipment, methods and technology that is not suited for on-the-job training.

Suspicious UAS—Suspicious UAS operations may include operating without authorization, loitering in the vicinity of sensitive locations (e.g., national security, law enforcement facilities, critical infrastructure), or disrupting normal air traffic operations resulting in runway changes, ground stops, pilot evasive action, etc. The report of a UAS operation alone does not constitute suspicious activity. Development of a comprehensive list of suspicious activities is not possible due to the vast number of situations that could be considered suspicious. ATC must exercise sound judgment when identifying situations that could constitute or indicate a suspicious activity.

Task—A unit of work activity or operation that forms a significant part of a duty. A task usually has clear beginning and ending points and directly observable or otherwise measurable processes, frequently but not always resulting in a product that can be evaluated for quantity, quality or fitness in the work environment. A task is performed for its own sake; that is, the task is not dependent upon other tasks, although it may fall in a sequence with other tasks in a duty or job array.

Training Status Code (TSC)—A coding system used by base education and training personnel to identify, change and manage Airman qualification and skill level upgrade processes. Refer to DAFMAN 36-2689, Attachment 2, for a listing of each training status code and definitions.

Attachment 2

AIRFIELD OPERATIONS DUTY TITLES, QUALIFICATIONS, AND SEIS

A2.1. Control Tower (SEI 056). Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements.

A2.2. Radar Approach Control (RAPCON, SEI 364). Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements. **Note:** At locations where controllers routinely perform Arrival Control functions as part of an Approach Control function, individuals may be awarded SEI 364. CCTLRs must outline the minimum standards necessary for award of the Arrival Control rating as part of a combined rating in the facility PCG and all training objectives and standards for the Arrival Control position must be met. **(T-1)**

A2.3. Ground Controlled Approach (GCA, SEI 053). Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements.

A2.4. Watch Supervisor (WS, SEIs 054, 055, 362) or civilian equivalent (i.e., Controller in Charge (CIC)).

A2.4.1. To be appointed as a WS an individual must possess the appropriate WS SEI (not required for GS-2152). **(T-1)** The SEI requirements waiver authority for a member's first-ever WS type SEI (i.e., 054/055/362) is the CFM. Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements. **Note:** GS-2152 as a minimum must complete the WS QTP. **(T-2)**

A2.4.2. WS position qualification requirements:

A2.4.2.1. Must be rated in all positions, including coordinator positions, and maintain proficiency. **(T-2)**

A2.4.2.2. Must complete WS QTP prior to performing duties as a WS. **(T-2)** CCTLRs will document the qualification on DAF Form 3622. **(T-1)**

A2.5. Chief Controller (CCTLR, SEIs 955, 956, 957) or civilian equivalent. Must be appointed as the CCTLR of the type facility, in writing, by the AOF/CC. **(T-2)** Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements. **Note:** Civilian personnel must hold the equivalent of AFSC 1C171. **(T-1)**

A2.5.1. Controllers selected short notice to fill or assume CCTLR duties due to deployments or other unusual situations that are unable to attend the CCTLR course prior to assumption of duties must complete the CCTLR QTP within six months of assumption of duties and attend the CCTLR course as soon as feasible. **(T-2)** MAJCOMs make every effort to secure a course allocation for the next available class.

A2.5.2. CCTLR course attendance is not mandatory for civilian controllers.

A2.5.3. CCTLRs will obtain the following minimum position certifications:

A2.5.3.1. Tower CCTLR: Flight Data, Ground Control, Local Control. **(T-2)**

A2.5.3.2. RAPCON CCTLR: Approach Control and Arrival Control. **(T-2)** **Note:** At facilities with more than one Approach Control position, CCTLRs must obtain ratings in the most complex Approach Control position. **(T-2)**

A2.5.3.3. GCA CCTLR: Arrival Control and Arrival Assistant or Arrival Control and RFC if facility has an RFC position. **(T-2)**

A2.5.3.4. Complex CCTLR: Complex CCTLRs must obtain rating requirements of each individual facility that a single facility CCTLR is required. **(T-2)** **Note:** At Tower or RFC locations, once the complex CCTLR is awarded the 365 SEI, if not previously awarded, does not have to maintain proficiency in the RFC position.

A2.5.3.5. Timelines: Must be certified in a minimum of one control position (e.g., Approach Control, Ground Control) within 12 months of assuming duties and must maintain proficiency. **(T-2)** **Note:** The AOF/CC determines additional certification timelines.

A2.6. Assistant Chief Controller (ACCTLR), or civilian equivalent.

A2.6.1. To be appointed as the ACCTLR, a controller must: hold at least PAFSC 1C171 or civilian equivalent, be WS qualified or civilian equivalent, maintain proficiency and have at least 5-years ATC experience, excluding RFC. These requirements may be waived by the CFM. **Note:** The CCTLR determines when an ACCTLR is required.

A2.6.2. ACCTLR must be certified in all positions in the facility within 12 months of assuming duties. **(T-2)**

A2.6.3. ACCTLR must complete the CCTLR QTP within six months of initial appointment to the position. **(T-2)**

A2.7. NCOIC, ATC Training (NATCT), or civilian equivalent.

A2.7.1. To be appointed as the NATCT, controllers must: hold at least PAFSC 1C171 or civilian equivalent, possess SEI 054, 055, 362 or, for civilians, an equivalent level of experience or training as specified earlier in this manual for the award of the aforementioned SEIs, and have performed ATC duties for at least five-years. These requirements may be waived by the CFM.

A2.7.2. NATCT minimum position certification and qualification requirements:

A2.7.2.1. Prior to appointment, must be certified and maintain proficiency in all required positions in one facility. Prior to assuming duties, coordinate with AOF/CC for timeline requirements to become certified in the opposing facility. **(T-2)**

A2.7.2.1.1. Tower Only Facility: Must obtain AOV facility rating tower or CTO at contract locations. **(T-1)**

A2.7.2.1.2. Complex: Must obtain most complex Approach Control, Approach Assistant, and Arrival Control (Arrival and Arrival Assistant in GCA) positions in the radar facility and local control and ground control positions in the tower facility. **(T-1)** **Note**: Nellis AFB and Eglin AFB. The NATCT minimum certification requirement may be reduced to their assigned corresponding facility (i.e., an appointed NATCT at Eglin AFB assigned to the Eglin radar facility is only required to certify and maintain proficiency in the most complex Approach Control, Approach Assistant, and Arrival Control positions of that facility. While an appointed NATCT at Eglin AFB assigned to the Eglin tower facility is only required to certify and maintain proficiency according to **paragraph A2.7.2.1.1**). **(T-1)**

A2.7.2.1.3. Short Tour Locations: Must obtain AOV facility rating radar approach control or radar arrival control to include the most complex Approach Control, Approach Assistant, and Arrival Control positions in the radar facility or AOV facility rating tower in the tower facility. **(T-1)**

A2.7.2.1.4. Must complete the NATCT QTP within six months of initial assignment to NATCT duties or training start date, whichever is earlier. **(T-2)**

A2.7.2.1.5. Completion of the Analysis, Design, Development, Implementation, and Evaluation Course is recommended. Contact the UTM for scheduling.

A2.8. Assistant NATCT (ANATCT), or civilian equivalent.

A2.8.1. To be appointed as an ANATCT controllers must: be a SrA at a minimum, hold at least PAFSC 1C151 and be certified in all positions in the facility where ANATCT support is provided. **(T-2) Note:** Appointment as an ANATCT is not intended to reflect the primary duties of an air traffic controller.

A2.8.2. ANATCT must complete the NATCT QTP within six months of initial appointment or training start date, whichever is earlier. **(T-2)**

A2.9. NCOIC, ATC Standardization and Evaluation (NSE), or civilian equivalent.

A2.9.1. To be appointed as the NSE, controllers must: hold at least PAFSC 1C171 or civilian equivalent, possess SEI 055, 362 or 054 or, for civilians, an equivalent level of experience or training as specified earlier in this manual for the award of the aforementioned SEIs, and have performed ATC duties for at least five-years. These requirements may be waived by the CFM.

A2.9.2. NSE position certification and qualification requirements:

A2.9.2.1. The NSE must be certified in all positions in one facility prior to appointment and coordinate with AOF/CC for timeline requirements for the opposing facility. **(T-2) Note 1**: An Assistant NSE (ANSE) or CTO examiner (at contract locations) must be available to conduct ratings in the facility in which the NSE is not rated. **(T-2) Note 2**: Nellis AFB and Eglin AFB. The NSE minimum certification requirement may be reduced to their assigned corresponding facility (i.e., an appointed NSE at Eglin AFB assigned to the Eglin radar facility is only required to certify and maintain proficiency in all required positions of that facility). **(T-2)**

A2.9.2.2. Must complete the NSE QTP within six months of initial assignment to NSE duties or training start date, whichever is earlier. **(T-2)**

A2.10. Assistant NSE (ANSE), or civilian equivalent.

A2.10.1. To be appointed as an ANSE controllers must: hold at least PAFSC 1C171 and be certified in all positions in the facility where ANSE support is provided. **(T-2) Note 1:** The PAFSC 1C171 requirement may be waived by the CFM only. **Note 2:** Appointment as an ANSE is not intended to reflect the primary duties of an air traffic controller.

A2.10.2. ANSE must complete the NSE QTP within six months of initial appointment or training start date, whichever is earlier. **(T-2)**

A2.11. NCOIC, ATC Training and Standardization (TSN), or civilian equivalent.

A2.11.1. To be appointed as the TSN, controllers must: hold at least PAFSC 1C171 or civilian equivalent, possess SEI 055, 362 or 054 or, for civilians, an equivalent level of experience or training as specified earlier in this manual for the award of the aforementioned SEIs, and have performed ATC duties for at least five-years. These requirements may be waived by the CFM.

A2.11.2. TSN position certification and qualification requirements.

A2.11.2.1. The TSN must be certified in all positions in one facility prior to appointment and coordinate with AOF/CC for timeline requirements for the opposing facility. **(T-2) Note 1**: An Assistant TSN (ATSN) or CTO examiner (at contract locations) must be available to conduct ratings in the facility in which the TSN is not rated. **(T-2) Note 2**: Nellis AFB and Eglin AFB. The TSN minimum certification requirement may be reduced to their assigned corresponding facility (i.e., an appointed TSN at Eglin AFB assigned to the Eglin tower facility is only required to certify and maintain proficiency in all required positions of that facility). **(T-2)**

A2.11.2.2. Must complete the NSE and NATCT QTPs within nine months of initial assignment to TSN duties. **(T-2)**

A2.12. Assistant TSN (ATSN), or civilian equivalent.

A2.12.1. To be appointed as an ATSN, controllers must: hold at least PAFSC 1C171 or civilian equivalent, possess SEI 055, 362 or 054 or, for civilians, an equivalent level of experience or training as specified earlier in this instruction for the award of the aforementioned SEIs, and must be certified in all positions in the facility and maintain proficiency. These requirements may be waived by the CFM. **Note**: Appointment as an ATSN is not intended to reflect the primary duties of an air traffic controller.

A2.12.2. ATSN must complete the NSE and NATCT QTPs within nine months of initial appointment. **(T-2)**

A2.13. NCOIC, Airfield Automation Management (NAAM), or civilian equivalent.

A2.13.1. To be appointed as a NAAM, controllers must: hold at least a PAFSC 1C171, or civilian equivalent, possess SEI 376, for civilians, an equivalent level of experience or training as specified for SEIs 376, and either 054 or 362 (as applicable). **(T-1)**

A2.13.2. NAAM position certification and qualification requirements:

A2.13.2.1. Must be certified in Approach Control and associated Approach Assist (equivalent positions for enroute or range facilities) or Arrival Control and Arrival Assist in GCA facilities within 12 months of initial assignment to the NAAM position and maintain proficiency (not applicable to in-garrison Combat Communications Group [CCG] units). **(T-2)** Additional certifications, determined by the AOF/CC, should be based on the complexity of the facility.

A2.14. Airfield Operations System Specialist (AOSS, SEI 376), or civilian equivalent.

A2.14.1. Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements. In addition to the AFECD requirements, personnel must not have more than 16 years Total Active Federal Military Service (TAFMS). **(T-1) Note:** Civilian personnel must hold the equivalent

of CAFSC 1C151, and possess equivalent experience and training as specified for SEIs 053, 056, or 364. **(T-1)** (TAFMS requirement not applicable to civilians).

A2.14.1.1. AOSS course prerequisites require three years of retainability.

A2.14.1.2. Assignment vulnerability and potential retainability concerns should be considered prior to selecting personnel for this position.

A2.14.1.3. Air Force Reserve Command, Operations (AFRC/A3) is responsible for approving specific guidance on the utilization of RAWS personnel appointed as AOSS at the locations identified in the MAJCOM supplement.

A2.14.2. AOSS position certification and qualification requirements:

A2.14.2.1. AOSS personnel will not perform automation duties unmonitored and are not considered qualified until they have successfully completed all appointment requirements listed above and the training or certification requirements listed below. **(T-1) Note:** When task certified on non-critical tasks, AOSS personnel may work unmonitored on those tasks only.

A2.14.2.2. Must be certified in Approach Control and associated Approach Assistant (equivalent positions for enroute or range facilities), Arrival Control and Arrival Assistant in GCA facilities, or tower facility rated within 12 months of initial assignment to the AOSS position and maintain proficiency (not applicable to in-garrison CCG units). **(T-2)** Additional certifications, determined by the AOF/CC, should be based on the complexity of the facility.

A2.14.2.3. Must complete the Airfield Automation Management QTP and local AOSS qualification training within 12 months of assignment to AOSS duties. **(T-2)**

A2.15. Trainer.

A2.15.1. To be appointed as a trainer, controllers must be recommended by the supervisor and appointed in writing by the CCTLR. (T-2) Note: Documentation on DAF Form 3622 suffices for this requirement.

A2.15.2. Trainer position certification and qualification requirements:

A2.15.2.1. Must be position certified and/or facility rated. **(T-1)**

A2.15.2.2. Must successfully complete the Air Traffic Control Trainer Course (ATCTC) or have previously completed Air Force Training Course (AFTC) and ATCTC Supplemental Course. **(T-1)** At the completion of the course, "ATCTC – AFTC 3F2X1 00" will be annotated in Section III on the inside front cover of the DAF Form 623.

A2.15.2.3. Must complete the Trainer QTP Part I following the ATCTC. **(T-1)** The Trainer QTP Part I DAF Form 797 will be completed and retained in Tab D of the DAF Form 623. **(T-1)** "Trainer QTP Part I" will be annotated in Section II of the inside front cover of the DAF Form 623. **(T-1)**

A2.15.3. Controllers must be position certified and trainer qualified to train or monitor a trainee. **(T-1)**

A2.16. ATCTC Instructor.

A2.16.1. To be appointed as ATCTC Instructor, controllers must be appointed in writing by the AOF/CC or CCTLR. **(T-1)** **Note:** Appointment as an ATCTC Instructor is not intended to reflect the primary duties of an air traffic controller.

A2.16.2. ATCTC Instructors must meet the following qualification requirements:

A2.16.2.1. Hold at least PAFSC 1C171 or civilian equivalent. **(T-1)**

A2.16.2.2. Hold trainer qualification in accordance with A2.15. **(T-1)**

A2.16.2.3. Have performed ATC duties for at least three years. **(T-1)**

A2.16.2.4. Must complete the Trainer QTP Part II. **(T-1)** The Trainer QTP Part II certification must be accomplished by a qualified ATCTC Instructor. **(T-2)** The Trainer QTP Part II DAF Form 797 will be completed and retained in Tab D of the DAF Form 623. **(T-1)** "Trainer QTP Part II" will be annotated in Section II of the inside front cover of the DAF Form 623. **(T-1)**

A2.16.3. ATCTC Instructor proficiency requirements:

A2.16.3.1. Must instruct a minimum of one ATCTC each calendar year. **(T-1)** ATCTC Instructors who fail to meet the annual requirement must accomplish a refresher of the most recent course materials prior to teaching a course. **(T-2)**

A2.16.3.2. Should attend TRBs to provide feedback, and/or obtain feedback on training outcomes.

A2.17. Combat Airspace Manager (CAM, SEI 900) Level I. Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements.

A2.18. Command and Control, Air Operations Center (SEI 901) Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements.

A2.19. Terminal Instrument Procedures (TERPS, SEI 357) Specialists or Managers. Reference AFECD, Attachment: Section III_SEIs-Enl. for SEI requirements. MAJCOM TERPS authorities must ensure all TERPS course candidates are provided the TERPS IP prior to reporting for the course. **(T-1)** Candidates are required to review the IP content prior to arrival at the course. A memorandum from the candidate's supervisor or MAJCOM TERPs authority must be sent to **HQAFFSA.XAP.TERPSTraining@us.af.mil** stating that the IP has been accomplished prior to the class start date. **(T-1)**

A2.19.1. Graduation from an HQ AFFSA approved ICAO Procedures for Air Navigation Services-Aircraft Operations (PANS-OPS) course and completion of the appropriate QTP items will be required prior to TERPS specialists or managers reviewing or designing instrument procedures utilizing NATO or PANS-OPS criteria. **(T-1)**

A2.19.2. HQ AFFSA TERPS division (AFFSA/XOS) manages TERPS course curriculum items. These items will constitute the formal training requirements for TERPS specialists or managers.

A2.19.3. Modification of the course will be in accordance with DAFMAN 36-2689. **(T-1)**

A2.19.4. AFFSA/XOS coordinates TERPS training quotas for TERPS courses to meet MAJCOM requirements.

A2.19.5. Specialized Training (i.e., ICAO, FAA courses):

A2.19.5.1. AFFSA/XOS should identify and approve existing courses or organize new courses to ensure specialized training is made available.

A2.19.5.2. HQ AFFSA approved specialized training courses provided by the FAA as applicable. Specialized training is encouraged for all Air Force personnel engaged in performing instrument procedures tasks by attending or completing one of the courses below:

A2.19.5.2.1. **(15300062)** DEPARTURE PROCEDURES.

A2.19.5.2.2. **(15300086)** PRINCIPLES OF PERFORMANCE BASED NAVIGATION (PBN) INSTRUMENT APPROACH PROCEDURE DESIGN.

A2.19.5.2.3. **(15310001)** BASIC ICAO PANS-OPS.

A2.19.5.2.4. **(15320002)** ADVANCED PANS-OPS USING RNAV/GNSS/PBN/RNP.

A2.19.5.2.5. **(06000001)** AIRPORTS OBSTRUCTION EVALUATION/AIRPORT AIRSPACE ANALYSIS (IOE/AAA).

A2.19.5.2.6. **(12053)** IOE/AAA REFRESHER TRAINING.

A2.19.5.2.7. **(12051)** BASIC OBSTRUCTION EVALUATION AND AIRPORT/AIRSPACE ANALYSIS.

A2.19.5.2.8. **(50019)** AIRSPACE AND PROCEDURES.

A2.19.5.2.9. **(76101)** NATIONAL TRANSPORTATION SAFETY BOARD (NTSB) AIRCRAFT ACCIDENT INVESTIGATION.

A2.19.5.2.10. **(200000101)** AIRCRAFT ACCIDENT INVESTIGATION SAFETY (AAIS) – USER.

A2.19.5.2.11. **(50314001)** QUALITY ASSURANCE/QUALITY CONTROL SPECIALIST COURSE.

A2.19.5.2.12. **(57022)** (CBI) MILITARY OPERATIONS: MILITARY TRAINING ROUTES.

A2.19.5.2.13. **(57107)** (CBI) NOTAM DISTRIBUTION SYSTEM OPERATOR TRAINING.

A2.19.5.2.14. **(57045)** (CBI) CREATING QUALITY CBT.

A2.19.5.2.15. **(57105)** (CBI) RNAV LESSONS LEARNED AND INTRO TO RNP.

A2.20. MILPDs Duty Titles. MILPDs Duty Titles and further duty title guidance is available via CFM policy letter(s) hosted on the HQ AFFSA SharePoint.

Attachment 3

SAMPLE MEMORANDUM, REVOCATION OF ATCS CERTIFICATE

Figure A3.1. Sample Memorandum, Revocation of ATCS Certificate.

(*date*)

MEMORANDUM FOR (Controller Concerned)

FROM: (Unit Commander)

SUBJECT: ATCS Credential Revocation (Pending Withdrawal)

1. Under the provisions of DAFMAN 13-204 Volume 3, I revoke your ATCS credential and restrict you from performing air traffic control duties. This revocation will remain in effect pending the results of the evaluation of your case. (Insert a statement of substance of cause for revocation.)

2. After receipt of the evaluation results, I may take action to withdraw your AFSC without further notice (military). If I, or the review authority, determines your withdrawal is for reasons within your control (for cause) it could result in an administrative discharge or termination of employment.
Note: If the controller is receiving an SRB, add the following statement: "If I, or the review authority, determine withdrawal was for cause, then I will initiate action to terminate and recoup your SRB."

3. You may consult with legal counsel and submit any written statement or documentary evidence to consider in evaluating this matter.

4. Acknowledge receipt of this memorandum by endorsement below within three workdays. Submit any statements or documents for consideration within ten workdays.

(Signature of Unit Commander)

1st Ind, (Controller) (*date*)

TO: (Unit Commander)

1. I acknowledge receipt of ATCS credential revocation and pending withdrawal.

2. I have been afforded the opportunity of consulting with legal counsel regarding this action. I have consulted legal counsel / I declined legal counsel.

3. I do / do not desire to attach a statement in my own behalf.

4. I agree / disagree with the proposed action.

(Signature of Controller Concerned)
(Name, Grade,) AF

Note: Controller will initial directly above the phrases lined out in their endorsement.

Attachment 4

AFSC WITHDRAWAL CHECKLIST FOR CONTROLLERS WHO FAIL TO OBTAIN OR MAINTAIN POSITION CERTIFICATION OR FACILITY RATING (FTOR) OR CONTROLLERS WHO FAIL TO MAINTAIN QUALIFICATION STANDARDS OTHER THAN MEDICAL

A4.1. Name, Grade, & Date Assigned.

A4.2. Initial Withdrawal Actions:

A4.2.1. CCTLR will:

A4.2.1.1. Stop controller training and document using DAF Form 623a, suitable substitute, or electronic equivalent and retain in DAF Form 623 (if applicable). **(T-2)**

A4.2.2. Unit Commander will:

A4.2.2.1. Issue an ATCS credential revocation, pending withdrawal memorandum and address (**Attachment 3**):

A4.2.2.1.1. Whether withdrawal is "For Cause" or "Not for Cause." **(T-2)**

A4.2.2.1.2. One of the following statements regarding an SRB:

A4.2.2.1.2.1. Member did not receive an SRB. **(T-2)**

A4.2.2.1.2.2. If an SRB was received include a recommendation whether or not to recoup and terminate SRB (followed by unit commander's rationale). **(T-2)**

A4.2.3. AOF/CC will:

A4.2.3.1. Notify MAJCOM OPR for ATC of pending withdrawal action within 24 hours of controller ATCS credential revocation and advise if it is "For Cause" or "Not for Cause." **(T-2)**

A4.3. Investigation Actions:

A4.3.1. After initial removal from training, the NATCT must get statements from:

A4.3.1.1. AOF/CC, outlining a synopsis of individual's training or electronic equivalent generated from AODMS. **(T-2)** Include any actions which make the controller a hazard to flying safety or incapable of performing as an air traffic controller. This statement may include inputs from the airfield operations flight director of operations (AOF/DO), CCTLR, NSE, and NATCT/TSN. Individual statements from other staff members are optional. If the member was currently in training, the AOF/CC statement must include:

A4.3.1.1.1. Date controller entered training. **(T-2)**

A4.3.1.1.2. Summary of actions taken to correct deficiencies. **(T-2)**

A4.3.1.1.3. Stop training days. **(T-2)**

A4.3.1.2. Immediate supervisor, outlining individual's duty performance. **(T-2)**

A4.3.1.3. Individual being removed from training. **(T-2)**

A4.3.2. Refer the controller to the base flight surgeon to determine if there are medical problems which caused the actions for recommended withdrawal and/or verify the controller meets the ATC medical requirements in DAFMAN 48-123. If a physical condition could have impaired the ability of the controller to perform in a satisfactory manner, refer the controller to the base flight surgeon for an evaluation of medical qualification. **Note:** Document the referral on the AOF/CC Synopsis.

A4.4. Evaluation, Determination and Processing Actions:

A4.4.1. NATCT/TSN will compile the following information and provide to the BTM for review within 10 duty days of controller ATCS credential revocation, or if the controller makes a statement on the ATCS Credential Revocation Memorandum, 7 duty days after the statement is received. **(T-2)** Following the BTM review, the following information will be provided to the MAJCOM OPR for ATC and for concurrence or non-concurrence within 7 duty days of submission of required information. **(T-2) Note:** If applicable, withdrawal documentation will be provided in electronic format and all Privacy Act information will be in accordance with AFI 33-332, Air Force Privacy and Civil Liberties Program. **(T-3)**

A4.4.1.1. ATCS credential revocation letter. **(T-2)**

A4.4.1.2. Unit commander cover memorandum recommending AFSC withdrawal. **(T-2)** Memorandum will include:

A4.4.1.2.1. Course of action recommended. **(T-2)**

A4.4.1.2.2. Response to allegations made by the controller who is recommended for withdrawal. **(T-2)**

A4.4.1.2.3. Any inconsistent data or recommendations in the ATC staff's supporting statements**. (T-2)**

A4.4.1.2.4. Any disciplinary or administrative actions taken or pending against the controller that support the withdrawal. **(T-2)**

A4.4.1.2.5. Why the controller is a hazard to flight safety or incompatible with ATC. **(T-2)**

A4.4.1.2.6. One of the following statements:

A4.4.1.2.6.1. Member did not receive an SRB. **(T-2)**

A4.4.1.2.6.2. Recommendation whether or not to recoup and terminate SRB (followed by unit commander's rationale). **(T-2)**

A4.4.1.2.7. Whether "For Cause" or "Not for Cause." **(T-2)**

A4.4.1.3. CCTLR DAF Form 623a stop-training documentation or electronic equivalent. **(T-2)**

A4.4.1.4. AOF/CC synopsis of individual's training or electronic equivalent. **(T-2)**

A4.4.1.5. Immediate supervisor's duty performance statement. **(T-2)**

A4.4.1.6. Trainee's statement with any supporting documents (if applicable). **(T-2)**

A4.4.1.7. Any additional statements from appropriate personnel (i.e., AOF/DO, CCTLR, NSE, NATCT/TSN) (if applicable). **(T-2)**

A4.4.1.8. Copy of all documents in DAF Form 623 or electronic equivalents. **(T-2)**

A4.4.1.9. Draft DAF Form 2096 for AFSC disqualification (no signatures required for initiation, one copy only). Refer to Enlisted AFSC Disqualification PSD Guide, Attachment 1 for complete instructions for filling out the draft DAF Form 2096. **(T-2)** **Note:** Coordinate with the UTM to ensure TSCs reflect the appropriate status of personnel.

A4.4.1.10. Copy of last three enlisted performance reports (if applicable). **(T-2)**

A4.4.1.11. Medical evaluations (if applicable). **(T-2)**

A4.4.2. The Commander, with the aid of the BTM, should evaluate the training provided to the individual.

A4.4.3. BTM will provide the Force Support Squadron Commander (FSS/CC) and unit CC with a "For Cause" or "Not for Cause" concur or non-concur recommendation of AFSC withdrawal letter within 14 duty days of receiving the AFSC withdrawal documentation. **(T-2)** A recommendation letter suspense extension will be coordinated with the unit commander (if applicable). **(T-2)**

A4.4.4. MAJCOM OPR for ATC will provide the unit commander with a "For Cause" or "Not for Cause" concur or non-concur recommendation of AFSC withdrawal letter within 14 duty days of receiving the AFSC withdrawal documentation. A recommendation letter suspense extension will be coordinated with the unit commander (if applicable).

A4.4.5. After receiving all recommendations, the Commander determines the next step in the withdrawal course of action.

A4.4.5.1. If the Commander's overall evaluation does not substantiate the recommended AFSC withdrawal, then the NATCT/TSN will:

A4.4.5.1.1. Return the controller for duty. **(T-2)**

A4.4.5.1.2. Document return to training on DAF Form 623a or suitable substitute. **(T-2)**

A4.4.5.1.3. Notify MAJCOM OPR for ATC of return to duty status within 24 hours of initiation. **(T-2)**

A4.4.5.2. If the Commander's evaluation does substantiate the recommended AFSC withdrawal, then continue to **paragraph A4.4.6**.

A4.4.5.3. If the Commander's evaluation substantiates recommended withdrawal with a change in the category initially recommended, then the NATCT/TSN will:

A4.4.5.3.1. Proceed to the new category checklist. **(T-2)**

A4.4.5.3.2. Suspend the controller's ATCS credential under the new category (**Attachment 5**). **(T-2)**

A4.4.6. In addition to **paragraph A4.4.1** above, the NATCT/TSN will:

A4.4.6.1. Forward an electronic copy of items listed in paragraphs **A4.4.1.1 - 4.4.1.11** to the Force Support Squadron (Force Management) for entry into the Case Management System (CMS) for AFPC review. **(T-2)**

A4.4.6.1.1. Include AFSC withdrawal recommendation letter from BTM. **(T-2)**

A4.4.6.1.2. Include AFSC withdrawal recommendation letter from MAJCOM OPR for ATC. **(T-2)**

A4.4.6.1.3. Reference **paragraph A4.4.1.8**, only include CFETP Part II: (Air Force Job Qualification Standard portion only), DAF Forms 797 and 623a, suitable substitute training documentation, or electronic equivalents. **Note:** Unit will file one copy of withdrawal package according to AFI 33-322. **(T-3)**

A4.5. AFSC Withdrawal Notification.

A4.5.1. AFPC/DPMSSM will notify the CMS originator the status of AFSC withdrawal and further withdrawal instructions or guidance, as necessary. **(T-3)**

A4.5.1.1. NATCT/TSN will e-mail digitally signed DAF Form 2096 to AFPC/DPMSSM. Submit in the .pdf format from the website, not a scanned version. **(T-1)**

A4.5.2. AFPC/DPMSSM will notify the originator once DAF Form 2096 is received and MilPDS updated. **(T-3)**

A4.5.3. 9A000, 9A100, 9A200, and 9A300 are the disqualified Airmen Reporting Identifiers (RI) as described in the Air Force Enlisted Classification Directory (AFECD). AFMAN 36-2100, Chapter 2, delineates Air Force policy for withdrawing (disqualification from)/downgrading AFSCs and implements the AFECD. The AFECD is published four times per year and is the authoritative source for reporting identifiers and the applicability to Airmen. Additionally, DAFMAN 36-2689, provides further guidance. Criteria for RIs are outlined in the Enlisted AFSC Disqualification PSD Guide, DAFI 36-2110, and DAFMAN 36-2689. The latest disqualification guidance is located on the MyFSS website. Additional criteria for RIs are outlined below:

A4.5.3.1. 9A000, Disqualified for Reasons Beyond Control (Not for Cause). No longer meets the specialty qualifications for the awarded AFSC and the basis for withdrawing the AFSC is for conditions or actions not within the member's control.

A4.5.3.1.1. Medical conditions such as hearing loss, toxic chemical exposure, or injuries.

A4.5.3.1.2. Failure to progress in training for reasons beyond the Airman's control (e.g., reading comprehension deficiency, learning disability).

A4.5.3.2. 9A100, Disqualified for Reasons Within Control (For Cause). Commander must consider separation for all Airmen before initiating retraining.

A4.5.3.2.1. Loss of security clearance due to misconduct.

A4.5.3.2.2. Drug or alcohol involvement.

A4.5.3.2.3. Failure to progress in training for reasons within the Airman's control (e.g., ability and aptitude to perform job but doesn't try).

A4.5.3.2.4. Substandard duty performance or other acts that lead to AFSC withdrawal.

A4.5.3.3. 9A200, Enlisted Airman Awaiting Discharge, Separation, or Retirement for Reasons Within Their Control and 9A300, Enlisted Airman Awaiting Discharge, Separation, or Retirement for Reasons Beyond Their Control are described in the AFECD.

A4.5.3.4. Each AFSC disqualification action stands on its own merits and, as such, the RI determination is based on the supporting documentation provided, to include “For or Not for Cause.”

A4.5.4. CCTLR will ensure withdrawal is initiated in AOV Credentialing system. **(T-1)**

A4.5.5. Unit Commander will recommend retention or revocation of authority to wear the ATC badge or a statement that the authority to wear the badge was not given. **(T-1)**

A4.5.6. NATCT/TSN will notify the MAJCOM OPR for ATC once AFPC approves the AFSC withdrawal actions and MilPDS is updated removing the 1C1XX AFSC. **(T-1)** If appropriate, notification via the TRB will suffice.

Attachment 5

SAMPLE MEMORANDUM, CHANGE OF RECOMMENDED WITHDRAWAL CATEGORY

Figure A5.1. Sample Memorandum, Change Of Recommended Withdrawal Category.

(*date*)

MEMORANDUM FOR (Controller Concerned)

FROM: (Unit Commander)

SUBJECT: Change of Recommended ATCS Credential Withdrawal Category

1. This is to inform you the evaluation of your case resulted in a change of category to my letter, (date), Subject: ATCS Credential Revocation and Pending Withdrawal. You are hereby recommended for withdrawal under the provisions of DAFMAN 13-204 Volume 3. (Statement of substance of cause for change in recommended withdrawal category.)

2. You may consult with legal counsel and may submit any written statement or documentary evidence you believe should be considered reference the change of recommended withdrawal category.

3. Acknowledge receipt of this memorandum by endorsement below within five workdays. Any statements or documents that you wish to be considered should be submitted with the return of your endorsement.

(Signature of Unit Commander)

1st Ind (*date*)

FROM: (Controller)

TO: (Unit Commander)

1. I acknowledge receipt of change to recommended category of ATCS credential withdrawal.

2. I have been afforded the opportunity of consulting with legal counsel regarding this action. I have consulted legal counsel / I declined legal counsel.

3. I have / have not attached a statement in my own behalf.

4. I agree / disagree with the proposed action.

Note: If change of category is from a medical reason to "failure to maintain mandatory qualification standards other than medical", then add the following paragraph.

5. I understand withdrawal action under the category of "failure to maintain mandatory qualification standards other than medical" may result in:

a. ATCS credential removal "For Cause" (initial).

b. Termination/recoupment of SRB (initial).

c. Possible administrative discharge action (initial).

(Signature of Controller Concerned)
(Name, Grade, AF)

Note: Controller will initial directly above the phrases lined out in the endorsement.

Attachment 6

ATC AFSC WITHDRAWAL PROCESS NARRATIVE FLOWCHART

Table A6.1. ATC AFSC Withdrawal Process Narrative Flowchart.

STEP	ACTION OWNER	NARRATIVE
1	CCTLR, AOF/CC, & Operations Support Squadron Commander (OSS/CC)	CCTLR places controller in stop training, AOF/CC notifies MAJCOM OPR for ATC of pending withdrawal & OSS/CC issues an ATCS credential revocation, pending withdrawal and identifies whether “for cause” or “not for cause.”
2	Supervisor & AOF/CC	AOF/CC & immediate supervisor investigate & provides training & duty performance statements to OSS/CC.
3	NATCT/TSN	Compiles training data and forwards to the Base Training Manager (BTM) within 10 duty days of ATCS credential revocation, or if the controller makes a statement on the ATCS Credential Revocation Memorandum, 7 duty days after the statement is received. Then forwards to MAJCOM OPR for ATC for concurrence or non-concurrence within 7 duty days of BTM review.
4A	OSS/CC & BTM	OSS/CC works with BTM to evaluate the training provides to the individual. BTM provides the OSS & FSS CC’s a recommendation letter within 14 duty days of receiving the withdrawal documentation.
4B	MAJCOM OPR for ATC	MAJCOM OPR for ATC evaluates the training provided to the individual & provides the OSS/CC a recommendation letter within 14 duty days of receiving the withdrawal documentation. If more time needed to evaluate training, request extension with OSS/CC.
5	OSS/CC	OSS/CC evaluates all withdrawal recommendations. If the course of action isto continue with AFSC withdrawal, proceed to step 6. If not, proceed to step 5a.
5A	OSS/CC	OSS/CC directs the individual to be reentered into training & documents accordingly.
6	NATCT/TSN & FSS	NATCT/TSN forwards individuals training data to FSS (force management) to be entered into the Case Management System (CMS) for AFPC review.
7	AFPC/DPMSSM	Request received via CMS. AFPC/DPMSSM reviews disqualification standards and documentation provided to determine if withdrawal is approvable and the recommended reporting identifier (9A000 – 9A300) is supportable. If so, go to step 9 for non-training related actions, if training- related go to step 8, if not supportable proceed to step 7A.

7A	AFPC/DPMSSM, FSS & OSS/CC	AFPC/DPMSSM returns package to CMS originator via CMS. CMS originator (force management) notifies OSS/CC of determination. OSS/CC determines next course of action.
8	AFPC/DPMSSM (training- related cases only)	AFPC/DPMSSM reviews package to ensure it meets standards & concurs or non-concurs with withdrawal action. If withdrawal request meets training standards, proceed to step 9. If not, proceed to step 7A.
9	AFPC/DPMSSM, FSS, OSS/CC & NATCT/TSN	AFPC/DPMSSM returns package to CMS originator via CMS. CMS originator notifies OSS/CC of final determination, need for DAF Form 2096 (and changes thereto, as necessary). NATCT/TSN will e-mail a digitally signed DAF Form 2096 to AFPC/DPMSSM.
10	AFPC/DPMSSM, FSS & OSS/CC	OSS/CC is notified via CMS originator once DAF Form 2096 is received & processed by AFPC/DPMSSM.
11	OSS/CC	Recommends retention or revocation of authority to wear the ATC badge or a statement that the authority to wear the badge was not given.
12	NATCT	NATCT/TSN notifies MAJCOM OPR for ATC of completed withdrawal action.
13	MAJCOM	MAJCOM OPR for ATC notifies AFFSA/XAT of completed withdrawal action via email.

Attachment 7

LONG-TERM DUTIES NOT TO INCLUDE CONTROLLING PROCEDURES

A7.1. Long-Term DNIC (LDNIC) Phase Procedures.

A7.1.1. The LDNIC phase process is intended to provide a pathway for a member's return to flying status, AFSC reclassification, or service separation, when members are unable to perform duties pursuant to their current designated 1C1X1 duty. The phase process addresses 1C1X1 duty capabilities and adheres to DoD Instruction (DoDI) 1332.45*, Retention Determination for Non- Deployable Service Members*, AFI 48-133*, Duty Limiting Conditions*, and DAFMAN 48-123. **Note**: Leadership should consult with the Civilian Personnel Office concerning any LDNIC status involving GS-2152 employees.

A7.1.2. Definition: Long-Term Duties Not to Include Controlling (LDNIC) status is defined as any consecutive 120-day period, during which the member is unable to actively control air traffic due to medical restrictions.

A7.2. Phase Process.

A7.2.1. The member is responsible for making all attempts to resolve Duty Limiting Conditions (DLC) in a timely manner and to keep leadership informed during the LDNIC phase process. **Note**: A member's LDNIC status will be tracked using a MAJCOM-provided tracking tool and will be addressed in the AOB forum, including board minutes. The member is removed from the LDNIC phase process once returned to flying status.

A7.2.1. **(ACC)** When **nonconsecutive** but chronic disruptions to UGT or performance of ATC duties occur, and do not meet the timelines outlined in **Attachment 7**, CCTLRs should coordinate with AOF/Unit CC to develop a course of action (e.g., utilize the LDNIC Phase Process). This includes situations where there are 180 cumulative days of DNIC within a 365-day period (i.e., cumulative vs consecutive).

A7.2.1.1. Phase I. Members in DNIC status for four months (120 consecutive days) or longer will be entered into Phase I.

A7.2.1.2. The member, with CCTLR and unit commander's assistance, will obtain a status update, along with a targeted 'get-well' date, and discuss Deployment Availability Working Group (DAWG) enrollment with the Flight Surgeon or Medical Group. The CCTLR will notify the AOF/CC of the inquiry and status of the member throughout the process.

A7.2.1.3. The AOF/CC will notify major command airfield operations and airspace (MAJCOM/A3A) OPR of the member's LDNIC status.

A7.2.1.3. **(ACC)** Documentation in the TRB suffices as coordination with the MAJCOM OPR.

A7.2.1.4. The unit commander may direct a DAWG review process to determine if a member is unfit for continued military service and initial Review-in-lieu-of Medical Board (RILO).

A7.2.1.5. At the unit commander's discretion, the member may perform limited augmentation duties in another 1C AFSC to address shortfalls or assist with duties while awaiting medical clearance or other pending actions.

A7.2.2. Phase II. Members in DNIC status for six months (180 consecutive days) or longer will be entered into Phase II.

A7.2.2.1. The member, with CCTLR and unit commander's assistance, will obtain a status update, along with a targeted 'get-well' date, from the Flight Surgeon or Medical Group. The AOF/CC will notify MAJCOM/A3A via the ATC MFM if no RILO or medical evaluation board (MEB) has been initiated, or if no waiver approval has been obtained. The MAJCOM/A3A, with the assistance of the ATC MFM, will then engage with the major command surgeon general (MAJCOM/SG) for remediation.

A7.2.2.1. **(ACC)** Notifications should be made via email to ACC/A3AO (**acc.a3ao@us.af.mil**).

A7.2.2.2. MAJCOM/A3A will notify HQ AFFSA of the member's status on a quarterly basis.

A7.2.3. Phase III. Members in DNIC status for 12 months (365 consecutive days) or longer will be entered into Phase III.

A7.2.3.1. The unit commander and AOF/CC will engage with the Medical Group to obtain an updated medical evaluation to determine AFSC reclassification or military retention (guidance is located in AFI 48-133, DAFMAN 48-123, and DoDI 1332.45).

A7.3. AFSC Reclassification.

A7.3.1. A member will be considered for immediate reclassification if the Medical Group determines return to flying status is improbable (guidance is located in AFMAN 36-2100), provided the member is deemed medically fit to deploy and execute duties in another AFSC.

A7.4. Service Separation.

A7.4.1. A member will be considered for service separation if the Medical Group determines return to flying status is improbable and the member is deemed non-deployable and/or unable to execute duties in another AFSC.

Attachment 8

RADAR ALIGNMENT PROCEDURES

A8.1. Alignment Accuracy Check.

A8.1.1. For applicable ANG units, and at locations not equipped with digital terminal automation systems (DTAS), during relief briefing, or as soon as possible after assuming responsibility for a control position, check the operating equipment for alignment accuracy and display acceptability. Recheck periodically throughout the watch.

A8.1.2. Check the alignment of the radar video display by assuring that the video or digital map or overlay is properly aligned with a permanent target of known range and azimuth on the radar display. Where possible, check one permanent target per quadrant.

A8.1.3. Accuracy of the radar video display must be verified for digitized radar systems by using the moving target indicator (MTI) reflectors, fixed location beacon transponders (Parrots), beacon real-time quality control (RTQC) symbols or calibration performance monitor equipment (CPME) beacon targets.

A8.1.4. DTAS conduct continuous self-monitoring of alignment accuracy; therefore, controller alignment checks are not required.

A8.2. Beacon Range Accuracy.

A8.2.1. You may use beacon targets for separation purposes if beacon range accuracy is verified by one of the following methods: **Note 1:** The check for verification of beacon range accuracy accomplished by correlation of beacon and primary radar targets of the same aircraft is not a check of display accuracy. Therefore, it is not necessary that it be done using the same display with which separation is being provided, nor the same targets being separated. **Note 2:** Narrowband and Full Digital Automation Systems: Technical operations personnel verify beacon range accuracy for automated narrowband display equipment and Full Digital Terminal Automation Systems. Consequently, further verification by the controller is unnecessary.

A8.2.2. Correlate beacon and primary targets of the same aircraft (not necessarily the one being provided separation) to assure that they coincide.

A8.2.3. When beacon and primary targets of the same aircraft do not coincide, correlate them to assure that any beacon displacement agrees with the specified distance and direction for that particular radar system.

A8.2.4. Refer to beacon range monitoring equipment where so installed.

A8.2.5. If beacon range accuracy cannot be verified, you may use beacon targets only for traffic information.

A8.3. Service Limitations.

A8.3.1. When radar mapping is not available, limit radar services to separating identified aircraft targets and vectoring aircraft to intercept a PAR final approach course.

A8.3.2. Providing radar service in areas that ensure no confliction with traffic on airways, other ATC areas of jurisdiction, restricted or prohibited areas, terrain, etc.

A8.3.3. Report radar malfunctions immediately for corrective action and for dispatch of a Notice to Airmen. Advise adjacent ATC facilities when appropriate.

A8.4. Electronic Cursor.

A8.4.1. An electronic cursor may be used to aid in identifying and vectoring an aircraft and to give finer delineation to a video map. Do not use it as a substitute for a video map or map overlay, (e.g., to form intersections, airway boundaries, and final approach courses).

A8.4.2. Fixed electronic cursors may be used to form the final approach course for surveillance approaches conducted by military operated mobile radar facilities.

A8.5. ATC Radar Beacon System Decoder Control Box Checks.

A8.5.1. Facility air traffic managers must ensure that radar controllers perform daily performance checks of the decoder control box as follows:

A8.5.2. Each controller is responsible for determining on a day-to-day basis if the operation of his or her decoder control box is satisfactory for ATC purposes. Decoder control box performance can be determined by checking all switches, thumbwheel code selectors, and selected channels to ensure that they are functioning properly. The actual operation of each channel should be checked by decoding a known target sequentially on each channel and observing it on both double and single slash.