



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

Air Traffic Organization Policy

**ORDER
JO 3120.4P**

Effective Date:

10/30/2015

SUBJ: Air Traffic Technical Training

This order prescribes instructions, standards, and guidance for the administration of air traffic technical training. All persons involved in air traffic technical training are required to be familiar, and comply with, this order. Facilities must be in compliance with this order within 90 days of the effective date.

A handwritten signature in black ink, appearing to read "Terry Biggio", is positioned above the printed name.

Terry Biggio
Vice President, Safety and Technical Training
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Explanation of Changes

Background: This order prescribes instructions, standards, and guidance for the administration of air traffic technical training. FAA Order JO 3120.4P has been created to reflect updates and changes in procedural and technical requirements for air traffic controller training.

General: Many changes are editorial and administrative in nature, including clarification of existing standards and guidance, typographical errors, resolution of formatting errors, and inaccurate and/or outdated information and terms.

Recent reorganization to Service Units also updated.

Chapter 1: Paragraph 7. The name of the repository for national courseware was renamed to ATC Training Courseware.

Chapter 2: Roles and responsibilities for Director of Technical Training (AJI-2), Air Traffic Manager (ATM), and Training Administrator (TA) modified to reflect organizational changes within the ATO.

Paragraph 1. Added annual requirement for AJI-2 to solicit facility best practices, responsive to OIG Report AV-2013-121, Recommendation 2.

Paragraph 4.a.(4) Removed requirements for contract training. (7) Added requirement for annual evaluation report for Tower Simulator System (TSS) from ATMs at Hub TSS facilities. (8) Removed requirement to notify regional office of pending change in status of Limited Aviation Weather Reporting Station (LAWRS).

Paragraph 4.b.(6) Added requirement to ensure National Training Database (NTD) is populated.

Chapter 4: Paragraph 1. Added new hire language and new Table 4-1 to reflect current Agency hiring practices. Subparagraph b, changed All Sources, General Public, or another “entry level,” to “All Sources – No Experience.”

Paragraph 2. Deleted “e. En Route and Terminal controllers entering the Traffic Management option should attend initial traffic management qualification training as soon as practical.” Deleted references to Academy graduates, VRAs, RMCs.

Paragraph 4. Weather Observers: Revised language in sub-topics, including new course numbers.

Paragraph 5.a. Recurrent Training: New language to clarify requirements. Removed requirement to identify Recurrent topics by October 1 to be delivered following year. Removed wake turbulence and line up and wait (LUAW) from Recurrent topics.

Paragraph 5.b. Refresher Training: Removed requirements for Land and Hold Short (LAHSO) and tower visibility procedures and markers. Realigned airspace intruder training topic to fall under Refresher Training topic (1), including airspace intruder and Domestic Events Network notification requirements.

Paragraph 5.b.(12) Changed requirement for Refresher Training simulation to include facilities with access to simulation capabilities.

Paragraph 5.d.(1) and (2) Skill Enhancement Training: Clarified FLM/STMC must identify training to be administered, rather than develop training. Changed “will” to “must”.

Paragraph 6.b. Clarified FLM/STMC must “identify” training, rather than “develop” training. Changed “will” to “must”.

Paragraph 7.a. Weather Observer Recertification: Removed references to National Weather Service (NWS).

Chapter 5: Paragraph 1.c. Added language to change the retention of entries in FAA Form 3120-1 Section V (Proficiency Training) and Section VIII (Liaison Familiarization Travel) to 5 years.

Chapter 6: Paragraph 2.a: Changed language to clarify FLM may suspend OJT, not training.

Paragraph 3.a.(1): Removed Note reference Air Traffic Assistants, FV-2154, providing OJT.

Paragraph 3.a.(2) Note 1: Clarified that a transferring OJTI must have worked the position involved for a minimum of 60 hours after certification prior to conducting OJT.

Paragraph 3.d. Note: Clarified that OJTI certification is only applicable to the facility/area in which the certification was conducted.

Paragraph 3.e: Added requirement that yearly evaluation of OJTI must include debrief, responsive to Independent Review Panel (IRP) Recommendation 36.

Paragraph 3.f: Added language to encourage OJTIs to contact Local Safety Councils for best practices.

Paragraph 7: Suspension of Training: Changed language to clarify FLM/STMC may suspend OJT, not training.

Paragraph 9.a.(1)(b): Training Review Process: Changed “Support Manager/OM”

to “second level manager or above”.

Paragraph 10: Added language describing Figure 6-1 that was inadvertently dropped during previous update to order, clarifying the flowchart is an abbreviated version of the OJT process and not a substitute for policy set forth in the order.

Appendices: All reformatted and renumbered for consistency.

Appendix A: Paragraph 1.j: Removed requirement to enter Section III notation that “surveillance approaches not conducted in this facility”.

Paragraph 7. Section V. Proficiency Training: Added language to change the retention of entries in Section V to 5 years.

Paragraph 9. Section VII. Management and Other Training: Added sentence that training completed by eLMS need not be entered in this section.

Paragraph 10. Section VIII. Liaison Familiarization Travel: Added language to change the retention of entries Section VIII to 5 years.

Appendix B: Block 11, a. (2) Fixed inadvertent error in “Needs Improvement” language, changed to match previous L version of this order. Block 14 added language that employees can add attachments for comments.

Appendix C: Section 2. Updated Figure C-1, Form 3120-26 to reflect removal of En Route Flight Advisory Service (EFAS) and Maintenance Job Tasks.

Section 3. Updated Figure C-2 to align existing positions with Job Subtasks.

Updated position Job Task, Job Subtask, and Indicators to reflect removal of EFAS and

Maintenance Job Tasks and reflect current practices.

Appendix D: Section 3. Stage 2. Paragraph 2. Prerequisite amended to read, “Successful completion of Initial En Route (Course 50148001 or current course) or individual meets direct entry qualifications established for specific hiring source.” Paragraph 6.b: Removed phase references to national lesson plans. Updated lesson plan 6 to current title.

Section 4. Stage 3. Paragraph 6.a.(1): Removed training requirement for ATC Review (ES-7-1).

Paragraph 6.a.(5): Added Cold Temperature Compensation to examples of additional requirements as identified by the facility.

Paragraph 6.b.(1). Removed phase references to national lesson plans.

Paragraph 7.a.(1): Removed phase references to national lesson plans. Updated lesson plans 50 and 55 to current titles. Added requirement for Unmanned Aircraft Systems (UAS) training.

Paragraph 7.a.(2) Changed DARC operations to backup system operations.

Section 5. Stage 4. Paragraph 6.a. Removed phase references to national lesson plans. Updated lesson plans 1, 3, 4, 14, and 15 to current titles. Added requirement for Time Based Flow Management (TBFM) training. Paragraph 6.b.(1), deleted “HOST.”

Paragraph 7.e.(2) Added to Vectoring complexity factor examples: VFR aircraft, TBFM, responsive to Corrective Action Request (CAR)-2012-003.

Paragraph 7.e.(8): Added to Service to VFR aircraft complexity factor examples: safety alerts, vectors, responsive to CAR-2012-003.

Paragraph 7.e.(18): Added Traffic Management Initiatives to complexity factor examples.

Paragraph 10.b.: Changed sentence to read, “Developmentals/CPC-ITs must receive a minimum of one hour of instruction on backup systems (e.g. VTABS, EBUS, BUEC, Emergency PTT, Guard, Standby transmitters, etc.), as determined by the TA, prior to certification on the first radar sector.”

Appendix E: Section 2B. Updated course number of Flight Service Initial Training. Removed Course 57511 prerequisite. Prerequisite changed for Initial FS training due to new hiring process and change of terms.

Changed references from Block to Module, where applicable.

Paragraph 1. Module 1 title changed to Introduction. Module 2 title changed to Weather Analysis and updated sub-topics. Module 3 title changed to Weather Radar Interpretation and updated sub-topics. Module 4 title changed to Satellite Interpretation and updated sub-topics. Module 5 title changed to Flight Plan Processing and updated sub-topics. Module 6 title changed to Broadcast and Weather Briefing Basics and updated sub-topics. Module 7 title changed to Preflight and updated sub-topics. Module 8 title changed to Inflight and updated sub-topics. Module 9 removed references to direction finder (DF) equipment. Module 10 title changed to Search and Rescue and updated sub-topics. Module 11 title changed to NOTAMs and updated sub-topics. Module 12 title changed to Weather Transmit and Data Edit and updated sub-topics: a. amended to read, “Provides students with an introduction to weather data retrieval, data entry and editing weather and Service B messages.” Module

13 title changed to Combined Lab Exercises and updated sub-topics.

Paragraph 2. Evaluation. a. Updated evaluations in (1) through (5) and sub-topic b.

Section 3. Stage 2. Added bullet for OASIS Specialist Training. Deleted bullet “En Route Flight Advisory Service (EFAS) (Course 55247): OJT for position qualification and certification to perform EFAS duties at the Flight Watch position. This course is available but not required for facility certification.”

Section 3F. Weather Observer. Updated language to remove references to National Weather Service (NWS). Updated Course 60004715 references.

Section 3H. Deleted entire section.

Appendix F: Section 2B. General: Removed references to Performance Verification (PV). Evaluation: Updated evaluation criteria to current process.

Section 2C. Introduction to Radar Control (Course 50055001) removed, unique content from this course is covered in Course 50043 (Basics) and Course 50034 (Terminal Basic Radar).

Section 2C. Terminal Basic Radar Training. Prerequisite: Changed to current process. Added current evaluation criteria.

Section 2D. “1. General:” amended to read, “This workshop provides advanced training for developmentals/CPC-ITs assigned to Level 9, 10, 11, and 12 radar facilities.” Updated Prerequisite to reflect new hiring practices.

Section 3. Stage 2. Paragraph 2.b. and c: Added UAS and TBFM training to list of nationally-developed training.

Section 5. Stage 4. Administration: Removed reference to contractor-supported training. Changed Note 2 to include towers with access to Tower Simulation Systems (TSS). Added Note 3 which clarifies responsibility for determining facilities that have access to TSS. Renumbered previous Note 3 to Note 4.

Paragraph 4.c.(9): Removed reference to Microwave Landing System (MLS).

Section 6. Stage 5. Administration. Changed Note 2 to include towers with access to TSS. Added Note 3 which clarifies responsibility for determining facilities that have access to TSS.

Section 6. Stage 5. Paragraph 1.b. (11) Replaced with Cold Temperature Compensation, if applicable. Previous (11) was removed as briefing requirement already covered in b.(1)(d).

Section 7. Stage 6. Paragraph 2.a: Corrected inaccurate national-developed lesson plans (1) through (10).

Paragraph 4.c.(1): Added (h) VFR/IFR, responsive to CAR-2012-003.

Section 8. Stage 7. Administration. Note 2. Changed language to clarify facilities with access to high-fidelity simulators.

Paragraph 2.e.(3): Changed language from “Provide VFR traffic advisories” to “Provide VFR traffic advisories and VFR/IFR separation”, responsive to CAR-2012-003.

Appendix G. Updated TMS to National Traffic Management Specialist (NTMS) throughout appendix.

Section 3. Stage 2. 55116 PART A. Added new prerequisite for certification of at least 2 control positions at the facility. Training

Content: Added (e) TBFM nationally-developed training course, as applicable.

Stage 2. 55116 PART B. Job Function.
Added duties of the Arrival and Departure Coordinator in sub-topic k.

Appendix K: Added definition for Comprehensive Electronic Data Analysis and Reporting (CEDAR). Added definition for Simulation Fidelity. Removed definition of Performance Verification (PV) Process, and Air Traffic-Collegiate Training Initiative (AT-CTI).

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Chapter 1. General Information

- 1. Purpose of This Order.** This order conveys instructions, standards, and guidance for the administration of air traffic (AT) technical training.
- 2. Audience.** This order applies to all Air Traffic Organization (ATO) personnel, and anyone using ATO directives.
- 3. Where Can I Find This Order?** You can find this order on the MyFAA employee website. Select “Orders & Notices” in the “Tools & Resources” drop down menu. Or use one of these links:
 - http://www.faa.gov/regulations_policies/orders_notices/
 - https://employees.faa.gov/tools_resources/orders_notices/
 - http://faa.gov/air_traffic/publications
- 4. What This Order Cancels.** JO 3120.4N, Air Traffic Technical Training, dated September 30, 2013, and all changes to it are canceled.
- 5. Explanation of Policy Changes.** See page EC-1 in the previous section.
- 6. Background.** JO 3120.4P is an update that reflects changes in procedural and technical requirements for AT technical training.
- 7. Location of ATC Training Courseware.** ATC Training Courseware is located at:
<http://inet.atctraining.faa.gov/>
- 8. Word Meanings.**
 - a. “Must” means an action is mandatory.
 - b. “Should” means an action is recommended.
 - c. “May” means an action is permitted.
 - d. “Will” is used only to indicate futurity, not a requirement.
 - e. Singular words include the plural, plural words include the singular.

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Chapter 2. Roles and Responsibilities

1. ATO Safety and Technical Training (AJI). AJI is responsible for developing an integrated technical training strategy to lead, direct, and guide the overall design, management, and delivery of technical training. AJI also develops policies and standards for ATO technical training.

The Director of Technical Training (AJI-2). AJI-2 is responsible for program guidance, effectiveness, technical accuracy, evaluation of air traffic technical training, coursework/curriculum development and review, maintenance, and oversight of national and FAA Academy-delivered courses. AJI-2 will solicit facility training best practices and conduct an annual review of this order, with stakeholder participation, no later than July 1 each year.

2. Service Units (Air Traffic Services, System Operations). Service units are responsible for implementation, administration, and evaluation of the AT technical training program.

3. FAA Academy. The FAA Academy supports the administration of the national AT Technical Training Program.

4. Facility Personnel. Facility personnel involved in AT technical training must maintain a comprehensive working knowledge of the procedures and guidelines outlined in this order and the applicable national and local training directives.

a. Air Traffic Manager (ATM). The ATM must ensure:

(1) Where authorized, a Support Manager is assigned the responsibilities of the Training Administrator (TA). Where no Support Manager is authorized, an individual is designated in writing to serve as the TA. The ATM may serve as the TA without written designation.

(2) A training program is established for certification and proficiency and is conducted in accordance with national, service area and local directives, and Instructional Program Guides (IPG).

Note: The ATM is encouraged to develop, if feasible, local collaborative training workgroups.

(3) The training program is described in a facility training directive.

(4) Individuals who conduct instructor-led training and/or develop lesson plans attend the Facility Instructor Training course (Course 10501 or equivalent), as soon as possible. The On-the-Job Training Instructor (OJTI) course does not satisfy this requirement.

Note: This training should occur within 6 months.

(5) FAA Form 3120-1 is initiated and maintained (see appendix A).

(6) Resource requirements necessary to conduct the facility training program are submitted to the appropriate service center or flight services (FS) information office. The service center may submit resource requirements to the service unit.

(7) Tower Simulator Systems (TSS) Hub Facilities. An annual calendar year evaluation of the usage and effectiveness of the TSS is conducted, and a written report is forwarded to the Director, AJI-2, no later than March 1 of the following year. The report must be sufficiently detailed to identify the TSS hours used to satisfy proficiency and qualification training requirements. The report may also include recommendations for the usage and/or effectiveness of the TSS, facility-specific issues and initiatives, and other related data. Input from facilities that have access to the Hub TSS is mandatory. A sample report is available from AJI-2.

(8) For On-The-Job Training (OJT) and Certification:

(a) Individuals entering qualification training receive facility orientation and are briefed on the IPG contents that are pertinent to the current stage of training, facility training directive, and other associated directives prior to entering training.

(b) OJT is accomplished in accordance with this order.

(c) Training reports are properly completed and maintained.

(d) Facility target hours, minimum certification hours, and On-the-Job Familiarization (OJF) hours are established, maintained, and updated.

(e) All OJTIs and managerial personnel meet the qualification criteria in this order.

(f) OJTIs are recommended and designated in accordance with chapter 6.

(g) The training review process for non-supervisory personnel is conducted in accordance with this order.

(9) If training is unsuccessful, action is taken in accordance with Human Resources Policy Manual (HRPM) Volume 1: Employment (HRPM EMP) -1.14a., Collective Bargaining Agreement (CBA), and/or other directives.

(10) All information including national and local training orders and directives is made available to all facility personnel.

(11) Training teams receive support of the TA and Support Managers.

(12) Evaluate developmental/Certified Professional Controller-in-Training (CPC-IT) performance on a simulation scenario(s) when requested by the TA.

b. TA. The TA must:

(1) Administer the facility training program.

(2) Ensure that the facility training program is planned, conducted, assessed, and revised on a continuous basis.

(3) Administer the training contract at the local level.

(4) Ensure local course materials, visual aids, and control scenarios are developed, properly labeled, and continually updated to ensure technical accuracy.

(5) Maintain training documentation.

(6) Ensure the National Training Database (NTD) is populated.

(7) Plan and direct the training of personnel involved in the OJT/certification process.

(8) Attend the AT Facility Training Administration course (course 50310 or current course) as soon as possible after occupying the position.

c. Support Specialist. The Support Specialist assists in the administration of facility training.

d. Operations Manager (OM)/Traffic Management Officer (TMO). The OM/TMO provides oversight and direction to Front Line Managers (FLMs)/Supervisory Traffic Management Coordinators (STMCs) to ensure compliance with training directives and goals.

e. FLM/STMC. The FLM/STMC administers OJT, and identifies, and assigns Proficiency Training. The FLM/STMC (or as identified in the local training directive) must:

(1) Ensure OJTI qualifications are met.

(2) Ensure OJTIs have no other duties to perform during training sessions.

(3) Maintain currency and/or familiarization on positions where certifications are conducted.

(4) Conduct Performance and Certification Skills checks.

(5) Ensure OJT is conducted and documented in accordance with this order.

(6) Ensure position certification documentation is complete and logged on FAA Form 3120-1.

(7) Ensure FAA Form 3120-25/26/32/36, or its electronic equivalent, is signed.

(8) Serve as the training team lead.

(9) Make the final determination to amend an individual's training plan.

(10) Make the final determination regarding certification.

(11) Make the determination regarding suspension of OJT.

(12) Address any reported extenuating circumstances that may impede the training progress of the developmental/CPC-IT/Traffic Management Coordinator in Training (TMC-IT)/Full Performance Level in Training (FPL-IT).

f. OJTI. The OJTI is responsible:

(1) To teach, coach, and demonstrate techniques to apply AT procedures. OJT instruction must be based on handbook requirements and procedures. It must also provide guidance on control judgment.

(2) To ensure that OJT includes preferred methods of teaching through a combination of instruction, demonstration, and practical application.

(3) To document and discuss/debrief each training session on FAA Form 3120-25/26/32/36, or electronic equivalent.

(4) For each training session conducted during the assigned shift, at least one OJT report for each position/consolidated position must be completed by each OJTI. It is permissible to combine reports if the OJTI trains the same developmental/CPC-IT/TMC-IT/FPL-IT on the *same position* on the same day. The OJTI must be:

(a) Plugged-in the same control position as the developmental/CPC-IT/TMC-IT/FPL-IT when OJT is conducted.

(b) Responsible for all positions combined during training, even if the developmental/CPC-IT/TMC-IT/FPL-IT is certified on one or more of the positions that are combined.

g. Developmental/CPC-IT/TMC-IT/FPL-IT. The developmental/CPC-IT/TMC-IT/FPL-IT must be physically and mentally prepared to receive OJT, exercise initiative, and study to ensure satisfactory training progress. They must be active participants in their training to achieve certification. The developmental/CPC-IT/TMC-IT/FPL-IT must:

(1) Perform operational assignments in order to maintain proficiency and currency.

(2) Review, discuss, and make suggestions to enhance the training plan with the other members of the training team.

(3) Ensure that all aspects of the training plan are understood.

(4) Review, discuss, and sign FAA Forms 3120-25/26/32/36, or their electronic equivalents.

(5) Immediately advise an FLM/STMC of any extenuating circumstance(s) that might impede training progress.

(6) Verify that all OJT/OJF times are recorded accurately.

(7) Engage in OJT only on positions that have been assigned.

(8) Be receptive to training performance feedback.

Chapter 3. Technical Training

1. Identification of Training Requirements. National technical training requirements are established at the Headquarters (HQ) Service Unit Level: Air Traffic Services, System Operations (Flight Service Stations (FSS) and the David J. Hurley Air Traffic Control System Command Center (ATCSCC)). Technical training requirements are developed and implemented in collaboration with AJI.

2. Changes, Modifications and Waivers. Changes, modifications, and waivers to national training courses or this order must be submitted in writing to the Director of Technical Training (AJI-2), through the Service Center training managers and/or Headquarters of any Service Unit. Waiver renewal requests must be submitted to the Service Center 60 days prior to the expiration date. Unless otherwise specified, waivers are valid for 2 years, and will be signed by AJI-0.

Note: Requests may be submitted electronically with electronic signatures.

3. Interpretations to JO 3120.4. All requests for interpretations to this order must be forwarded to AJI-2, through the Service Center training managers.

Note: Requests may be submitted electronically with electronic signatures.

4. New Training Requirement. Requests for the development of new national courses/curricula must be submitted to AJI-2.

5. Development of Training. AJI-2 will take action to establish and maintain training programs for identified requirements using an Instructional Systems Design (ISD) process. Briefing items developed for controller information/awareness only are excluded from ISD requirements.

6. Call for Training. The ATO must identify organizational training requirements for inclusion in the annual call for training.

7. Educational Opportunities for Non-FAA Personnel. In accordance with national policy, orientation, familiarization, shadowing, or other educational opportunities may be provided at FAA facilities. Educational opportunities for individuals not employed by the FAA will be provided in accordance with FAA agreements and/or memoranda of understanding.

Note: The provisions of JO 3120.4 may or may not apply to federal or non-federal contract towers and FSSs. Training at FAA contract towers and FSS must be conducted in accordance with each contractor's FAA-approved training plan.

8. Radar Approach Control (RAPCON) or Radar Air Traffic Control Facility (RATCF) Training. Military personnel assigned to jointly staffed approach control facilities must be provided training on radar control positions under FAA supervision.

a. To participate in radar control training, military personnel must possess an appropriate certificate (AC Form 8060-1, Control Tower Operator (CTO) Certificate; FAA Form 7220-1, Air

Traffic Control Specialist Certificate; or AC Form 8080-2, Airman Written Exam Report). Military personnel must meet FAA certification and currency requirements.

b. Training must be documented in FAA Form 3120-1 (see appendix A). All military participants who have successfully completed the training program must receive appropriate FAA certificates and ratings to be qualified for assignment to control positions under general supervision.

Chapter 4. Training Requirements for Air Traffic Control Specialists

1. Initial Qualification Training. The newly hired developmental must successfully complete initial qualification training for the selected option. Table 4-1 identifies the specific initial training requirements based on the hiring source (i.e., the type of vacancy announcement).

a. AT Basics (Courses 50043, 50043001, 50143, or 50243 or current course) is prerequisite to qualification training, as prescribed herein and in the Instructional Program Guide for the specific option.

b. Individuals hired under All Sources – No Experience job announcement, who satisfy any of the criteria specified below, may elect to skip AT Basics:

- (1) Individual has completed courses that cover the required AT Basics objectives, OR
- (2) Individual holds, or has previously held, an FAA-recognized AT Certification. These include the CTO certificate and facility certifications and/or ratings at military air traffic control facilities.

Table 4-1: Initial Qualification for New Hires

Hiring Source	Initial Training Requirement
All Sources-No Experience	<ul style="list-style-type: none"> Required to successfully complete AT Basics course conducted at the FAA Academy. Employee may request to bypass with documented education or experience prior to onboarding. Required to successfully complete initial qualification training conducted at the FAA Academy for the appropriate option.
All Sources - Experience	<ul style="list-style-type: none"> Enter appropriate stage of field training at the facility based on experience.

2. Field Qualification Training. CPC-IT, FPL-IT, TMC-IT, and developmentals must receive qualification training at field facilities as outlined in this order and in facility directives. Qualification training must be conducted in accordance with the IPGs contained in this order.

a. CPCs transferring from the En Route option to the Terminal option or from the Terminal option to the En Route option need not attend initial qualification training for the new option or facility type at the FAA Academy. The specialist will be entered into the appropriate stage of field training as determined by the receiving facility ATM.

b. CPCs transferring from the tower-only option to a combined tower/Terminal RADAR Approach Control (TRACON) or TRACON-only option are required to complete Course 50034 or current course.

c. CPCs transferring from a tower to a tower or combined tower/TRACON to another combined facility or from a TRACON to a TRACON will be entered into the appropriate stage of field training as determined by the ATM.

d. En Route developmentals changing to a Terminal option, Terminal developmentals changing to the En Route option, and Terminal developmentals changing to a different facility type must attend initial qualification training for the new option or facility type.

e. En Route, Terminal, and Traffic Management controllers changing to the FS option who have not previously completed the FS initial training must enter FS training at the appropriate training facility.

f. FSS specialists changing to the En Route or Terminal option must complete initial qualification training identified for the option at the FAA Academy. A FSS specialist who has successfully completed either Terminal or En Route initial qualification training at the FAA Academy must be entered into the appropriate development stage of the training program as determined by the receiving facility ATM.

3. Enrollment in Terminal Basic Radar Training (Course 50034 or current course).

Enrollment is limited to developmentals/CPC-ITs assigned to, or selected for, TRACON facilities, who have not been radar-certified at the CPC level at an FAA facility. Developmentals/CPC-ITs at visual flight rules (VFR) towers are not eligible to attend Course 50034. Developmentals/CPC-ITs at towers that meet the criteria to provide radar services must complete the Terminal Radar Qualification examination and the appropriate portions of Stage 7, *Radar Control Training* (see appendix F, Terminal Instructional Program Guide) as part of local control certification.

4. Weather Observers. Air Traffic Control Specialists (ATCS) at facilities that have weather observer responsibilities must:

a. Successfully complete Course 60004715 (LAWRS) and pass the Certification Examination contained in Course 60004715 with a score of 70 percent or greater.

b. ATCSs must receive at least 5 hours of OJT that includes operation of the weather-observing equipment used at the facility, and complete a minimum of 5 observations.

c. In order to retain certification, the ATCS must complete one official or practice observation recorded on an MF1M-10C within the past 60 days.

d. ATCSs at facilities required to augment an Automated Surface Observing System (ASOS) or an Automated Weather Sensor System (AWSS) must:

(1) Successfully complete weather observer training and certification.

(2) Complete Course 57005 (ASOS) or Course 57089 (AWSS). OJT is required on the actual ASOS/AWSS equipment prior to completion of training.

(3) In order to retain this certification, the ATCS must be logged on the position

responsible for ASOS/AWSS for at least 1 hour or complete one manual official or practice observation recorded on an MF1M-10C within the past 60 days.

Note: If only a portion of Courses 57005 or 57089 is required to meet the specific needs of the facility, only the portion(s) actually completed must be recorded on FAA Form 3120-1.

5. Proficiency Training. Proficiency Training is required for all personnel who maintain currency. This training includes Recurrent, Refresher, Supplemental, and Skill Enhancement. Training needs will differ from facility to facility, and should be tailored to meet identified requirements. All Proficiency Training must be documented on the employee's FAA Form 3120-1, or electronic equivalent. When Recurrent Training is prescribed, AJI must provide instructions for its applicability, and specific instructions for documentation in FAA Form 3120-1 or electronic equivalent.

a. Recurrent Training. Recurrent Training is conducted via an 8-hour block of training, two rounds delivered yearly. Each round is comprised of approximately 4 hours of training typically selected from the topics listed below, and 4 hours of training on relevant and timely safety topics. The following items need not be duplicated in local Refresher Training:

(1) Safety alerts and traffic advisories, to include Minimum Safe Altitude Warning (MSAW) procedures and the relationship between charted minimum altitudes and underlying topography.

(2) Weather and other conditions that affect flight (e.g., icing, thunderstorms, wind shear, and VFR aircraft that encounter instrument flight rules (IFR) conditions).

(3) Bird activity information and dissemination.

(4) Runway Safety.

(5) Recovery in ATC Operations.

(6) Fatigue awareness.

b. Refresher Training. Each facility must maintain, in writing, an annual (calendar year) Refresher Training plan. Annual Refresher Training contains two elements: nationally and/or facility-developed curriculum and simulation training. Facilities are encouraged to review their quality control data (e.g., Quality Control Monitoring, Service Reviews, and Compliance Verification and data available in the Partnership for Safety Portal) to identify additional topics for annual Refresher Training in order to meet each facility's changing needs. The following topics must be included unless designated by the TA as not applicable:

(1) Unusual situations, lost aircraft orientation, aviation security procedures (e.g., interceptor procedures and communications, Domestic Events Network (DEN) notification requirements), hijacking, airspace intruders, and other topics identified by the TA (Training on emergency situations should be based on real-life incidents and aircraft accidents, stressing a lessons-learned approach).

Note: Terminal and En Route personnel must receive lost aircraft orientation on an annual basis; FS personnel must receive lost aircraft orientation on a quarterly basis.

(2) Seldom-used procedures, such as transitioning to and applying non-radar separation and procedures for special flight handling.

(3) Facility procedures for Go Arounds and Missed Approaches (Towers only).

(4) Local airport de-icing plans (LADP).

(5) All certified weather observers who augment an ASOS or AWSS must receive at least semiannual LAWRS training, and at least annual training on the operator input device (OID). The LAWRS training should include, but is not limited to, seasonal changes, visibility markers, adverse weather situations, and common data entry errors. Observers who take manual observations must receive annual LAWRS training.

Note: The OID training may consist of a retake of individual sections of CBI Course 57005/57089 or current courses, as appropriate.

(6) Procedures and responsibilities for special use airspace (SUA)/special activity airspace (SAA). This training must include, but is not limited to, a review of military training routes (MTR) and the types of operations conducted on any MTR beginning in, passing through, or terminating within the controllers' area of responsibility.

(7) Primary Backup Mode. Terminal personnel required to maintain radar currency must receive training on the use of the primary backup mode. All En Route personnel required to maintain currency must receive training on the use of the primary backup mode at Air Route Traffic Control Centers (ARTCCs) when and where applicable. This training must include:

(a) Transitioning to and from normal operations to backup operations.

(b) The unique radar/flight data processing used while operating in the backup configuration(s).

(c) Control and communication procedures associated with operation in the backup mode.

(8) En Route Decision Support Tool (EDST). When an area of specialization exclusively utilizes EDST, facilities must conduct training on the transition to/from an EDST environment to paper strips. Training with the paper strips must focus on the identification of possible aircraft conflicts, as well as strip marking procedures.

(9) Managerial Personnel/Controller-In-Charge (CIC). Operational Managers and CICs must receive a minimum of 1 hour of training and include the handling of accidents, incidents, unusual situations, upward reporting, Domestic Events Network (DEN) notification, and emergency events.

(10) Air Traffic Organization Operational Contingency Plan, in accordance with JO

1900.47, ensures familiarity with procedures and airspace based on facility contingency plans (e.g., loss of radar, communications failure).

(11) Facilities that use Ocean21 (O21) must conduct annual training on the transition to/from the O21 environment to paper strips (dual channel failure procedures). Training with paper strips must focus on the identification of possible aircraft conflicts as well as strip marking procedures.

(12) Facilities with access to simulation capabilities such as AT Coach, ETG, Test Target Generator (TTG), TSS, Test and Training Laboratory (TTL), SIMFAST, O21 lab, etc., must complete locally identified, evidence-based simulation training on the topics identified in paragraph 5.b., Refresher Training, deemed appropriate by the TA, a minimum of two hours of evidence-based simulation training per calendar year.

Note 1: CBI is not an acceptable form of simulation to satisfy the above requirements.

Note 2: ATMs/District Managers are expected to support the use of high fidelity simulators (e.g. ETG, TSS, TTL, O21) to the fullest extent possible. The Terminal District Manager, in coordination with AJI-2, is responsible to determine which facilities have access to the TSS.

c. Supplemental Training. All operational personnel must complete supplemental training prior to the use of new/revised procedures, regulations, or equipment. The TA must review all supplemental training and update local training materials as appropriate.

d. Skill Enhancement Training (SET). The purpose of SET is to improve an individual's knowledge, skills, and abilities. SET may be assigned to individuals certified on a position(s). SET may not be used to correct deficient performance that resulted in decertification. For an individual not certified but training on a position(s), SET may be assigned to enhance specific skills, techniques, or knowledge, to assist in their success with the training program. (SET may also be the result of an Event Review Committee (ERC) recommendation).

Note: SET is not the same as an Individual Performance Management (IPM) Operational Skills Assessment (OSA). OSA procedures are in JO 3400.20, Individual Performance Management (IPM) for Operational Personnel.

(1) SET for CPC/FPL/TMC.

(a) The FLM/STMC must assign SET in writing to include the specific skills and requirements necessary to accomplish this training.

(b) The FLM/STMC is responsible for identifying the training to be administered to the specialist. Training must be tailored to meet the individual's needs. Methods may include OJT, CBI, instructor-led training, self-directed study, and simulation (evaluations may be used in SET if appropriate).

(c) SET must be documented on FAA Form 3120-25/26/32/36, or its electronic equivalent.

(d) SET must be documented in section V of FAA Form 3120-1.

Note 1: If subsequent observation of performance indicates that the SET did not produce the expected results, further action may be required such as Performance Skill Checks or Remedial Training.

Note 2: Record ATSAP SET as Type 4 training on FAA Form 3120-1 under Major Subject Areas as “ATSAP.” If an OJT form or electronic file, such as CEDAR, is used to document the ATSAP SET, those forms or files must be destroyed or deleted once successfully completed.

(2) SET for developmental/CPC-IT/TMC-IT/FPL-IT:

(a) The FLM/STMC must assign SET in writing to include the specific skills and requirements necessary to accomplish this training.

(b) The FLM/STMC is responsible for identifying the training to be administered to the specialist. Training must be tailored to meet the individual’s needs. Methods may include computer-based instruction, instructor-led training, self-directed study, and simulation (SET for developmentals may not include OJT; evaluations may be used in SET, if appropriate).

(c) SET must be documented on FAA Form 3120-25/26/32/36, or its electronic equivalent.

6. Remedial Training. The purpose of Remedial Training is to correct documented performance deficiencies. Remedial Training is mandatory if the individual has been decertified as a result of performance deficiencies. When an individual’s performance is deficient, however the individual has not been decertified, Remedial Training may be conducted.

a. The FLM/STMC must assign Remedial Training in writing to include the specific area(s) to be covered and the reasons.

b. The FLM/STMC is responsible for identifying the training to be administered to the specialist. Training must be tailored to meet the individual’s needs. Methods may include, but are not limited to, computer-based, instructor-led training, self-directed study, simulation, evaluation, and OJT.

c. Training provided as a result of performance deficiency must be documented as Remedial Training. When documenting Remedial Training due to a performance-related decertification, references must not be made to a reported occurrence in section V.

Note: Although not presently defined as Proficiency Training, Remedial Training is still recorded in section V of FAA Form 3120-1 and logged under Proficiency Training in TRAX. With the development of new tracking mechanisms, this may be expected to change accordingly.

7. Recertification Procedures. Personnel who fail to meet currency requirements and those who are decertified on one or more operational position(s) must be recertified prior to resuming operational duties. To be recertified, the specialist must demonstrate, under direct supervision, the ability to satisfactorily perform operational duties during normal workload conditions.

Recertification may be accomplished by individual position or a single action covering multiple positions at the discretion of the ATM or designee. If recertification is not achieved the ATM or designee must take action in accordance with Agency guidelines.

a. Weather Observer Recertification. To recertify as a weather observer, personnel who have not taken an observation within 60 days must demonstrate proficiency to an FLM or their designee. Personnel who have not taken an observation within 90 days must retake the weather observer certification exam. Recertifications due to a performance deficiency must be entered on FAA Form 3120-1, section VI, Technical Appraisal. All other recertifications must be recorded on FAA Form 3120-1, section III, Qualification Training.

b. Pilot Weather Briefer. Individuals certified as pilot weather briefers must comply with the proficiency check requirements established by the FAA and outlined in JO 7220.4, FAA Certification of Pilot Weather Briefing and En Route Flight Advisory Service.

c. Documentation. FAA Form 3120-25 ATCT/ARTCC OJT Instruction/Evaluation Report or FAA Form 3120-26 FSS OJT Instruction/Evaluation Report must be used to document recertification. Instructions for completing these forms are found in appendices B and C. Traffic Management Recertification(s) must be recorded on FAA Form 3120-32. Instructions for completing this form are found in appendix G. Recertification(s) must be recorded on FAA Form 3120-1, section III. Recertification due to a performance deficiency must be entered on FAA Form 3120-1, section VI, Technical Appraisal.

8. Recertification Hours. At the discretion of the TA, personnel who have not-worked an operational position 120 days or less may be recertified and returned to operational duties without additional training. They may receive training to include, but not limited to instructor-led, simulation training and/or OJT prior to recertification evaluation. OJT hours must not exceed 25 percent of the target hours established for developmentals with no previous experience.

a. Personnel who have not-worked an operational position for more than 120 days but less than 1 year must receive instructor-led, simulation training, and OJT prior to recertification. OJT hours must not exceed 50 percent of the target hours established for developmentals with no previous experience.

b. Personnel who have not-worked an operational position for 1 year or more must receive instructor-led, simulation and OJT prior to recertification. OJT hours must not exceed 100 percent of the target hours established for developmentals with no previous experience.

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Chapter 5. Training and Proficiency Records and Reports

1. Policy.

a. An FAA Form 3120-1, or its electronic equivalent, will be prepared for each ATCS individual and will be maintained as a permanent part of the employee's training file. It must be used to record the results and the completion of training requirements for each qualification course, Proficiency Training, and other agency-approved courses. Employment data as well as AT certificates and ratings must also be documented in the record. The guidance contained in appendix A must be followed when making entries on FAA Form 3120-1, which is governed by the provisions of the Privacy Act of 1974.

b. For reporting purposes, the terms "student/trainee/developmental/CPC-IT/TMC-IT/FPL-IT" apply to anyone receiving training at the specialist, instructor, or supervisory level.

c. Entries in Sections V and VIII of FAA Form 3120-1 may be disposed of five years after the training occurs.

d. A facility may maintain sections of FAA Form 3120-1 outside of the orange jacket of the form. When sections are kept outside the orange jacket for accessibility of initialing, etc., precautions must be taken to ensure that the provisions of the Privacy Act and other record-maintenance requirements are met. Precautions must be taken to ensure that there is no mixing or confusing of the records.

e. Documentation of training received should be the same at a temporary and a permanent AT facility, with the following necessary variations at the temporary facility:

(1) No entries are necessary in sections I and IIA.

(2) Section IIB entries must include "(TEMPORARY)" after the name of the facility.

(3) Section III entries should correctly reflect that the training was completed, either in separate development stages/positions or as a single action (all positions combined).

(4) If no three-character identification is assigned to the facility, enter the full name in the "FAC IDENT" column.

(5) Make entries in sections IV through VIII only if appropriate to the operations.

2. Responsibilities.

a. The ATM or designee must be responsible for initiating and maintaining the employee's FAA Form 3120-1.

b. FAA Academy, Air Traffic Division (AMA-500), must operate as a field facility for the purposes of this directive with respect to FAA Form 3120-1 management and administration.

3. Training Reports. A training report must be completed on the appropriate FAA OJT Instruction/Evaluation form for OJT sessions and simulated/simulation scenarios. Reports

reflecting certifications must contain the signature of the certifying official. Examples of the FAA forms and specific instructions regarding completion of training reports are contained in the appendices of this order and in facility training directives.

4. Disposition of Records and Reports.

a. Training documents (e.g., Training Plans, FAA Forms 3120-25/26/32/36, etc.) may be disposed of after certification on each position or, for the En Route option, after certification on each sector (e.g., D6/R6). *Exception:* Reports reflecting position certifications, re-certifications prior to being facility rated, and all written and performance-based examinations required by the IPG must be retained for 1 year after the employee is facility rated. Prior to these documents being disposed of, they should be offered to the employee.

b. In the event of a termination of employment due to a training failure, all training records, reports, training plans, etc., must be retained at the facility for a period of 1 year. After 1 year, if appropriate, they must be handled in accordance with national directives and JO 1350.14B; Records Management or current order.

Note: Procedures for record disposition may vary from service area to service area. Therefore, reference should be made to service area supplements regarding this process.

c. FAA Forms 3120-25/26/32/36 utilized for CPC/FPL/TMC recertification may be disposed of after the recertification has been documented with all appropriate signatures on the Training and Proficiency Record, FAA Form 3120-1, section III or TRAX.

d. Upon termination of employment, except for training failures, FAA Form 3120-1 must be forwarded to the appropriate Human Resource Management office.

e. The service area office may require retention of records beyond the periods specified above because of special circumstances (e.g., litigation, appeals, etc.). In these cases, facilities must comply with service area office instructions.

Chapter 6. Air Traffic Control Specialist On-the-Job Training (OJT) and Position Certification

1. General. This chapter establishes requirements and procedures for standardization of instruction and evaluation of the OJT and position certification process.

2. Facility Training Hours. Each facility must establish target hours, minimum certification hours, and OJT hours for each operational position within the facility. Cross-sectional work groups will be used to recommend these hours. Evaluate established hours at least annually and, if necessary, adjust the hours. Facility training hours must be categorized based on the level and type of previous Air Traffic Control (ATC) experience. (e.g., those with no previous experience, employees transferring from like-type facility to like-type facility, employees transferring from lower level to higher level or high level to lower facility, etc.).

a. The employee's FLM/STMC or designee may suspend OJT prior to completing all of the allotted target hours.

b. The FLM/STMC will ensure that OJT is productive and appropriate for the experience level of the developmental/CPC-IT/TMC-IT/FPL-IT.

c. When identified in the local training directive, ATMs may authorize training on consolidated/combined positions.

(1) OJT time may be allotted between the consolidated/combined positions based on traffic activity, as determined by the OJTI.

(2) If the developmental/CPC-IT/TMC-IT/FPL-IT is certified on one or more of the routinely consolidated/combined position(s) as identified in the local training directive, the total amount of OJT time must be allotted to the position on which the developmental/CPC-IT/TMC-IT/FPL-IT is not certified.

3. OJT and Position Certification.

a. Selection of OJTIs. To be eligible to be selected as an OJTI, individuals must not be a management official, and must meet the following criteria:

(1) Certified at the CPC/TMC/FPL level.

(2) Certified a minimum of 12 months on positions involved.

Note 1: Transferring CPC-ITs/TMC-ITs/FPL-ITs with previous OJTI experience on the same type position are exempt from this. However, they must have worked the position involved for a minimum of 60 hours after certification prior to conducting OJT. The 60-hour requirement may be waived at the ATM's or designee's discretion for non-control positions.

Note 2: At ATC-8 or below facilities having a developmental/CPC-IT to CPC ratio of greater than 35 percent, the ATM or designee may select OJTIs for Flight Data (FD), Clearance

Delivery (CD), and Ground Control (GC) once the individuals have been certified on the position for 6 months.

(3) Recommended by the employee's FLM/STMC, per FAA Form 3120-148, OJTI Candidate Abilities and Attributes Report (appendix J).

b. Selection Panel. The ATM or designee will designate a panel to recommend OJTI candidates. The panel is composed of a minimum of two people, including any participant identified in current collective bargaining agreement(s). The panel must consider, at a minimum, the nominee's performance, human relation skills, motivation, attitude, and objectivity. They must forward a recommendation to the ATM or their designee for their selection.

c. OJTI Training Requirements. Prior to being assigned OJTI duties, the selected individual must successfully complete the FAA Air Traffic OJTI course or OJTI Cadre course. Completion must be documented on FAA Form 3120-1, section VII.

d. OJTI Certification. To be certified as an OJTI, the employee's FLM/STMC must directly observe the OJTI's performance during their first OJT session. The FLM/STMC must document the certification. Certification must be entered on the employee's FAA Form 3120-1, section III.

Note: OJTI Certification is only applicable for the facility/area in which the certification was conducted. If a CPC-IT/TMC-IT/FPL-IT transfers to another facility/area, an OJTI certification is required for the new facility/area. A transferring CPC-IT/TMC-IT/FPL-IT is not required to retake the FAA Air Traffic OJTI course or OJTI Cadre course.

e. OJTI Evaluation. Once yearly, an FLM/STMC must conduct an evaluation of OJTIs while they are performing OJTI duties, to include debrief. If the last evaluation occurred more than 12 months ago, an OJTI evaluation must be conducted within 30 days of resuming OJTI duties. The evaluation(s) must be documented as skill checks on the employee's FAA Form 3120-1, section VI.

f. OJTI Best Practices. OJTIs are encouraged to share and review best practices, lessons learned, and optimum training techniques with their Local Safety Councils.

g. Training Teams. The FLM/STMC must establish a training team for the employee they are assigned. The training team must facilitate the training of the developmental/CPC-IT/TMC-IT/FPL-IT by continuously assessing training progress and providing feedback. In order to meet individual and/or facility needs, the specific individuals on this team may change as the developmental/CPC-IT/TMC-IT's/FPL-ITs training progresses.

(1) The training team must consist of:

(a) The employee's FLM/STMC.

(b) At least two and no more than three OJTIs.

Note: Only one OJTI is required for a TMC-IT.

- (c) The developmental/CPC-IT/TMC-IT/FPL-IT.
 - (d) Other person(s), as assigned by the ATM or designee.
- (2) The FLM/STMC must:
- (a) Act as the training team leader.
 - (b) Direct training by modifying the training plan as required.
 - (c) Facilitate training team functions and seek support of facility management and staff personnel when necessary.
 - (d) Review all training documentation and consider input from all training team members.
 - (e) Identify and assign SET as needed.
 - (f) Provide feedback to include, but not limited to, an identification of strengths, weaknesses, and specific recommendations to improve performance to the training team.
 - (g) Ensure that performance feedback is provided to the developmental/CPC-IT/TMC-IT/FPL-IT as soon as possible after each OJT session.
- (3) The training team must:
- (a) Develop and review the training plan and recommend modification to the developmental's/CPC-IT's/TMC-IT's/FLP-IT's FLM/STMC.
 - (b) Conduct training team meetings to ensure plan objectives are met in accordance with local directives.
 - (c) Make recommendations on the training progress and readiness for certification based on training history and observation of performance during simulation (if practical).
 - (d) Determine the operational positions for which OJF is required. OJF is required on at least two operational positions.
 - (e) Conduct the majority (51 percent or more) of OJT.
 - (f) When an identified training team member is unavailable to provide OJT, another OJTI may provide training.
 - (g) Provide performance feedback as soon as possible after OJT session(s) to include strengths, weaknesses, and specific recommendations.
 - (h) The OJTI must be plugged-in to the same position. Direct monitoring must be used when conducting OJT.

4. Training Plan. The employee's FLM/STMC must ensure the training plan is developed and documented in writing before beginning OJT. The training plan(s) must include, but is not limited to, operational positions requiring OJF, training objectives, team members, positions, target hours, and minimum certification hours. Operational positions requiring OJF and the assignment of OJF hours are determined in local directives. OJF should be accomplished before beginning OJT and documented on FAA Forms 3120-25/26/32/36. Modifications to the training plan will be documented and discussed with the training team. Retention of training plans and all modifications must be in accordance with national directives and JO 1350.14B, Records Management or current order.

5. Performance Skill Checks. Performance skill checks must be used to assess the developmental/CPC-IT's/TMC-IT's/FPL-IT's training progress and identify job task(s) that require improvement to achieve certification. Direct monitoring must be used when conducting performance skill checks. Performance skill checks may be performed on consolidated/combined position(s)/sector(s) only if training occurred on these consolidated/combined position(s)/sector(s).

Performance skill checks do not count toward OJT hours. Performance skill check(s) must:

a. Occur within the first 30 days after OJT begins, and then at least every calendar month on each position for which the developmental/CPC-IT/TMC-IT/FPL-IT is receiving OJT.

b. Be conducted by a FLM/STMC who maintains familiarity or currency on the operational position(s)/sector(s). Performance skill checks will normally be conducted by the employee's FLM/STMC or as specified in the local training directive. If the FLM/STMC only maintains familiarity on an operational position/sector, an OJTI must be plugged-in at the same position/sector with the developmental/CPC-IT/TMC-IT/FPL-IT and the OJTI is responsible for the position/sector.

c. Be documented on FAA Form 3120-25/26/32/36, or its electronic equivalent, to include a description of performance and any specific feedback/recommendations. After consideration of previous performance during OJT, performance demonstrated during the skill check session, recommendations resulting from the skill check session and input from other training team members, the FLM/STMC will take one of the following actions: continuation of OJT, SET, suspension of OJT, or recommend a certification skill check. (A recommendation for certification skill check may occur only if the developmental/CPC-IT/TMC-IT/FPL-IT has completed minimum certification requirements).

6. Certification Skill Checks. Certification Skill Checks are an assessment used to determine if an individual demonstrates the knowledge and skill level necessary to certify on an operational position. Certification skill checks must be conducted on operational position(s)/sector(s) by the employee's FLM/STMC or as identified in the facility's training directive. Direct monitoring must be used when conducting certification skill checks.

Prior to conducting the certification skill check, the individual must be informed, a review of the training documentation must be conducted, and input from the training team should be considered. The assessment may require more than one session on the position.

Certification skill checks may be supplemented with verbal and/or written questions, simulation, or other methods. They may be performed on consolidated/combined position(s)/sector(s) only if training occurred on these consolidated/combined position(s)/sector(s). A certification on consolidated/combined position(s)/sector(s) certifies the employee on each of the individual position(s)/sector(s). Certification skill checks do not count toward OJT hours. Certification skill checks may be substituted for the monthly required performance skill checks identified above in paragraph 5. Position/Sector certification(s) must be documented on FAA Form 3120-1.

a. Certification skill checks must:

- (1) Be conducted upon completion of assigned target hours.
- (2) Be conducted upon completion of additional OJT hours if assigned.
- (3) Be conducted by a FLM/STMC who maintains familiarity or currency on the operational position(s)/sector(s). If the FLM/STMC only maintains familiarity on an operational position/sector, an OJTI must be plugged-in at the same position/sector with the developmental/CPC-IT/TMC-IT/FPL-IT. The OJTI is responsible for the position/sector.

b. Certification skill checks may be:

- (1) Conducted prior to completing target hours if minimum certification hours have been met.
- (2) Conducted prior to exhausting the total additional hours if assigned.
- (3) At facilities without FLM/STMC's, the ATM/District Manager or their designee must perform the certification skill check.

c. The employee's FLM/STMC, or as identified in the local training directive, may certify the individual or suspend OJT.

(1) For a certification skill check to result in certification, all applicable job subtasks must be rated as satisfactory or not observed. If a job subtask(s) are not observed during this assessment, the FLM/STMC must document that the developmental/CPC-IT/TMC-IT/FPL-IT has demonstrated satisfactory performance/knowledge for that job subtask through verbal/written questions, simulation, or other methods.

(2) After the certification skill check, the employee's FLM/STMC must consider the following items prior to taking the appropriate action:

- (a) The developmental's/CPC-IT's/TMC-IT's/FPL-IT's performance during OJT.
- (b) The performance demonstrated during the certification skill check session.
- (c) The recommendation(s) resulting from the certification skill check session.
- (d) Input from other training team members.

(3) The results of the certification skill check must be documented on FAA Forms 3120-25/26/32/36, or its electronic equivalent, and must include a description of performance and a recommendation for one of the following: certification, continuation of OJT, SET, or suspension of OJT.

7. Suspension of OJT. Suspension of OJT is an action taken by the developmental's/CPC-IT's/TMC-IT's/FPL-IT's FLM/STMC or designee to temporarily stop OJT. There is no requirement to exhaust target hours and/or any additional OJT hours prior to suspension of OJT. The developmental/CPC-IT/TMC-IT/FPL-IT must be notified in writing of the documented performance deficiencies. OJT may be suspended without conducting a performance skill check. A training review must be conducted.

8. Additional OJT Hours.

- a. Not guaranteed.
- b. An OM/TMO, second level manager, or the ATM may assign additional OJT hours in cases where there is an expectation that certification will be accomplished within the additional period.
- c. Additional hours must not exceed 20 percent of the target hours.
- d. Review of training documents and consideration of input from the training team must be accomplished prior to the assignment of additional training hours.
- e. There is no requirement to exhaust additional OJT hours.
- f. Upon the completion of additional assigned OJT hours, a certification skill check must be conducted. The employee's FLM/STMC must take one of the following actions:
 - (1) Certification, or
 - (2) Suspension of OJT.
- g. Additional OJT hours must be documented in section III of FAA Form 3120-1.

9. Training Review Process. The purpose of the training review process is to ensure that opportunities for training success were utilized while maintaining the integrity of the training program. Training reviews must be conducted when requested by an ATM/District Manager, or when training has been suspended due to performance.

- a. A training review must:
 - (1) Be conducted by a minimum of two individuals from any of the following, as assigned by the ATM/District Manager or their designee:
 - (a) A FLM/STMC other than the employee's FLM/STMC. (If not available onsite, the District Manager may assign this duty to any FLM/STMC within the district.)

(b) A 2nd Level Manager or above at the facility where this position is staffed. (If not available onsite, the District Manager may assign this duty to any 2nd Level Manager or above in the District).

(c) TA/Support Specialist. (If not available onsite, the District Manager may designate any of these individuals from within the District.)

(2) Include a participant as designated by a collective bargaining agreement.

(3) Include an assessment of the training history on the position.

(4) Not include members of the training team.

(5) Provide a written statement of facts and recommendation to the ATM/District Manager. The document should include as a minimum, but is not limited to, the following:

(a) The trainee's performance deficiencies.

(b) Actions the facility has taken to correct the trainee's performance deficiencies.

(c) Whether or not training was conducted in accordance with JO 3120.4.

(d) Whether or not the trainee adhered to his/her responsibilities.

(e) Consistency of training (number of OJT hours per day, per week or per month, also number of OJTIs involved).

(f) Any extenuating circumstances.

(g) Recommendation (i.e., continuation of OJT or termination of training).

b. Training review may:

(1) Conduct interviews of the training team members and/or other individuals.

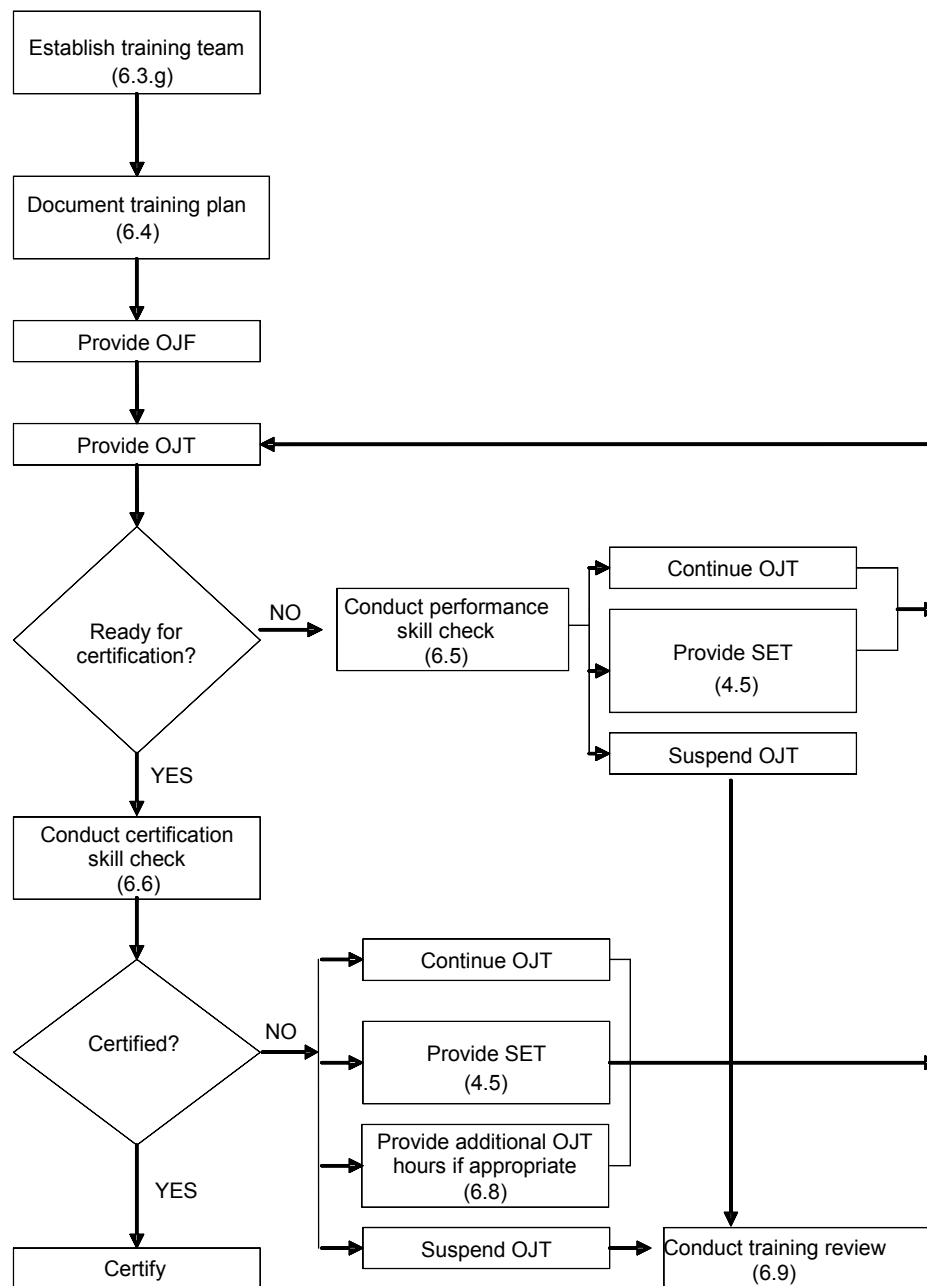
(2) Request information from the training team or other individuals.

c. ATM/District Manager must consider the training review's statement of facts and recommendations when making their final determination for continuation or termination of training. The employee will be notified in writing of the Manager's decision as soon as possible but not later than 30 days from the date of the suspension of OJT.

Note: If the ATM/District Manager assigns additional OJT hours, the number of hours/days must be finite. The provisions of chapter 6, section 8, Additional OJT Hours, are not applicable.

10. OJT and Certification Process Flowchart. The flowchart in Figure 6-1 is an abbreviated version of the process that provides a general overview of the basic steps involved in the OJT and certification process. It is not intended as a complete description of the OJT and certification process, or as a substitute for the policy set forth in this order. The flowchart is intended to assist in the understanding of the OJT and certification process. Paragraph numbers have been included in the flowchart to reference the location of specific policy information in the body of the order.

Figure 6-1: OJT and Certification Process



Appendix A. Instructions: Training and Proficiency Record (FAA Form 3120-1)

1. General. This appendix conveys instructions for recording employment data, training, and certification entries on FAA Form 3120-1. Examples of corresponding TRAX records are shown. TRAX, or eLMS if applicable, maintains all data logged on FAA Form 3120-1.

a. ATM or designee must ensure that training record entries conform to the requirements of this appendix. These requirements apply to all training occurring on or after the effective date of this order. The requirements described herein are not retroactive.

Note: Names entered on the orange cover portion are not required to conform to official payroll name.

b. Training, certifications, recertifications, and technical performance appraisals must be recorded in this record. Other data, such as temporary details, currency maintenance, awards, disciplinary actions, collateral duties, participation on committees, copies of training and other certificates, etc., should be maintained in working-level personnel records. Air Traffic Safety Oversight Service (AOV) credentialing actions are not required to be recorded on Form 3120-1. These records are maintained in the AOV Credentialing Program database.

c. When completing FAA Form 3120-1, enter only the required specific data. Training record entries must be complete and accurate. Entries must be typed or written in blue or black ink. If an entry must be changed, the incorrect entry must be lined out and the correct information must be inserted. Affected employees and the person making the change must initial the new entry. Computer TRAX records must be updated when certified TRAX records are changed.

d. All entries, including the employee's initials and certification signature, must be recorded on FAA Form 3120-1 or the TRAX program no later than 120 calendar days following the month in which the training was completed. By initialing or signing, the employee acknowledges that the training recorded has been provided. Operating initials must be used. Certified TRAX records must be retained in section IX of the employee's FAA Form 3120-1.

e. Entries on FAA Form 3120-1 that reflect position certification/recertification and performance reviews must be signed by the employee's first-level manager, even though this individual may not have performed the position certification/recertification or appraisal. This signature indicates that the entry (information) logged on FAA Form 3120-1 is accurate.

f. The certification signature for any instructor-led training conducted, including briefings, indicates that the entry is correct. Therefore, the certification signature for instructor-led training entries may be that of the facility's support specialist or an FLM/STMC who has knowledge that the training was conducted.

g. Manual entries must be single spaced. Blocks on the entry line for which no entry will be made must have a diagonal line drawn through them. Portions of a page not intended for future use must also have a diagonal line drawn through them.

h. A signature stamp may be used by the certifying official or FLM/STMC as an aid to reduce workload. A signature stamp must only be used by the person whose signature is on the stamp.

i. Each training entry must have a separate signature and set of initials, except as noted in section V and TRAX.

j. Mandatory briefing items not pertaining to qualification, certification, proficiency, or management training (e.g., Standards of Conduct, Drug Awareness, The Performance Management System, etc.), must not be recorded on Form 3120-1.

2. Section I. Employment Data. The entries in this section pertain to specific employment information.

Block A. EMPLOYEE'S NAME: Enter the employee's full payroll name. In the event of a legal name change because of marriage or other reasons, put a single line through the old name and insert the new name and the date of the entry in this block. Do not obliterate the old name since it may be necessary to refer to this name at a later time. The employee must initial next to the name change. The person making the change must initial the new entry.

Block B. DATE EOD WITH FAA: Enter the date the employee entered on duty (EOD) with the FAA. Do not use the employee's service computation date. The entry in this block is made only at the employee's first facility of assignment.


Block C. FACILITY: Enter the facility's three-character identifier, type, and level.

Block D. EOD: Enter the date the employee was officially assigned to the facility. Use the effective date shown on the official Notification of Personnel Action.

Block E. EMPL INIT: The employee must initial in this block.

Note: If the level of a facility changes while an employee is at the facility, make a new entry. Enter the date of the facility-level change in the EOD column.

Figure A-1: Section I, Employment Data

 A Erica S. Smith Mapp			DATE EOD WITH FA 1/2/00		
2/14/15					
C FACILITY	D EOD	E EMPL INIT	C FACILITY	D EOD	E EMPL INIT
FAI FSS	4/2/00	EG			
APA ATCT ATC-6	5/1/05	EG			
OKC ATCT ATC-9	1/9/07	EG			
ZAU ARTCC ATC-12	1/20/09	EG			

3. Section II A. Air Traffic Certificates. This section relates to certificates that are required for the performance of AT duties and that are not specific to a particular location or area of operation. Do not enter pilot or flight inspection certificate information, etc. Data in this section should not be confused with ratings, which are described in section II B.

Block A. CERTIFICATE TITLE: Enter the title of the certificate.

Block B. CERTIFICATE NUMBER: Enter the certificate number. If no number is associated with the certificate, enter "N/A."

Block C. DATE ISSUED: Enter the date of issuance as shown on the certificate. If no date is shown on the certificate, enter the date of the entry.

Block D. EMPL INIT: The employee must initial in this block.

Figure A-2: Section II A, Air Traffic Certificates

CERTIFICATE TITLE	CERTIFICATE	DATE	EMPL.
Control Tower Operator	457924411	4/15/00	LP
Pilot Weather Briefing Certificate	68359	10/15/00	LP
TWR Visibility Certificate	1234	10/19/02	LP
Air Traffic Control Specialist	N/A	11/16/03	LP

4. Section II B. Air Traffic Ratings. The entries in this section relate to specific facility ratings, not to certificates. Ratings describe facility operational functions and are required for employees to perform the full range of duties associated with a particular area of specialization or facility. The use of the term “Facility” or “Area” indicates that the employee has successfully completed all the certification requirements for that facility or area.

Block A. RATING: Enter the title of the rating.

Block B. FACILITY: Enter the facility’s three-character identifier, level, and type.

Block C. DATE ISSUED: Enter the effective date of the rating.

Block D. EMPL INIT: The employee must initial in this block.

Figure A-3: Section II B, Air Traffic Ratings

RATING	FACILITY	DATE	EMPL
Facility	FAI FSS	10/4/00	LL
Facility	APA ATCT	3/3/04	LL
Gateway Area	ZKC ARTCC	3/12/06	LL
Facility	R90 TRACON	2/9/10	LL

5. Section III. Qualification Training. Initial qualification training requirements are described in appendices D through F. Training relative to position qualification, including additional OJT hours and position recertification, must be recorded in this section.

Block A. DEVELOPMENT STAGE: Enter the course number. (Course title may be included). For En Route and Terminal field training, indicate whether the training was instructor-led, simulated, OJT, and/or additional OJT. Facilities must indicate the position on which qualification has taken place if multiple positions are involved. For recertification, enter recertification and the positions involved.

Block B. FAC IDENT: Enter “AAC” if FAA Academy-conducted. Enter the three-character facility identifier if facility-conducted.

Block C. DATE STARTED: Enter the date the employee began training in this course.

Block D. NO OF AUTH HOURS: Enter the number of hours authorized to complete this course or the number of additional OJT hours authorized. The number of hours entered must not exceed those indicated in the appropriate directive. The hours allowed must be derived from the facility training directive. No entry is required in Block D for FAA Academy-conducted training.

Block E. EMPL INIT: The employee must initial in these blocks.

Block F. DATE COMPLETED: Enter the date the employee successfully completed, received an incomplete in, failed this training course, or was granted additional OJT hours. (If the employee did not successfully complete the training, enter “I” for incomplete or “F” for failed in Block A.)

Block G. HOURS: Enter the actual number of hours the employee used in this portion of the training program. No entry is required in Block G for FAA Academy-conducted training.

Block H. EMPL INIT: The employee must initial in these blocks.

Block I. CERTIFICATION SIGNATURE: The certifying official must sign or use a signature stamp in this block.

Figure A-4: Section III (Terminal Example)

QUALIFICATION TRAINING								
A DEVELOPMENT STAGE	B FAC IDENT	C DATE STARTED	D NO. OF AUTH HOURS	E EMPL INIT	F DATE COMPLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
50032	AAC	1/2/00		gm	4/25/00		gm	J. Williams
50034	AAC	11/30/00		gm	12/17/00		gm	J. Williams
55060 FD-TWR Instructor led	PHL	5/1/00	16	gm	5/4/00	16	gm	ggones
55060 FD-TWR OJT	PHL	5/8/00	20	gm	5/15/00	18	gm	J. Williams
55060 FD- Radar Instructor led	PHL	5/20/00	20	gm	5/27/00	20	gm	ggones
55060 Arrival Data OJT	PHL	6/1/00	30	gm	6/11/00	28	gm	J. Williams
55060 Dept. Data OJT	PHL	6/20/00	40	gm	7/8/00	36	gm	J. Williams
55061 CD Instructor led	PHL	7/20/00	5	gm	7/21/00	5	gm	ggones
55061 CD OJT	PHL	7/24/00	20	gm	7/30/00	18	gm	J. Williams
55062 GC Instructor led	PHL	8/15/00	40	gm	8/20/00	40	gm	ggones
55062 GC OJT	PHL	8/23/00	60	gm	9/20/00	54	gm	J. Williams
55063 LC Instructor led	PHL	9/25/00	40	gm	9/30/00	40	gm	ggones

Figure A-4: Section III (Terminal Example, continued)

QUALIFICATION TRAINING								
A DEVELOPMENT STAGE	B FAC IDENT	C DATE STARTED	D NO. OF AUTH HOURS	E EMPL INIT	F DATE COMPLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
55063 LC OJT	PHL	10/10/00	100	gm	11/19/00	70	gm	J. Williams
55064 Non-radar Instructor led/Lab	PHL	12/22/00	40	gm	1/4/01	40	gm	J. Williams
55065 Radar Instructor led	PHL	1/10/01	80	gm	1/24/01	80	gm	J. Jones
55065 North Dept. OJT	PHL	1/27/01	90	gm	3/28/01	90	gm	/
55065 North Dept Addl. OJT	PHL	4/1/01	18	gm	4/6/01	15	gm	J. Williams
55065 South Dept. OJT	PHL	4/10/01	60	gm	5/18/01	55	gm	J. Williams
55065 West Arrival OJT	PHL	5/20/01	80	gm	7/25/01	70	gm	J. Williams
55065 East Arrival OJT	PHL	5/20/01	80	gm	8/1/01	65	gm	J. Williams
55065 Final Approach. OJT	PHL	7/15/01	50	gm	8/27/01	45	gm	J. Williams
Recertification – Tower Positions			/	/	9/10/01	/	gm	J. Williams
OJT Instructor	PHL	/	/	/	4/20/02	/	gm	J. Williams
55073 CIC	PHL	3/20/03	40	gm	3/29/03	40	gm	J. Williams

Figure A-5: Section III (En Route Example)

QUALIFICATION TRAINING								
A DEVELOPMENT STAGE	B FAC IDENT	C DATE STARTED	D NO. OF AUTH HOURS	E EMPL INIT	F DATE COMPLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
50132	AAC	1/2/98	/	MR	4/4/98	/	MR	B Jones
55053 Instructor led	ZDV	4/22/98	48	MR	5/1/98	48	MR	B Jones
55053 OJT	ZDV	5/1/98	80	MR	6/25/98	18.7	MR	B Jones
55054 Instructor led	ZDV	7/9/98	240	MR	8/25/98	240	MR	B Jones
55054 LAB	ZDV	8/28/98	120	MR	11/30/98	120	MR	B Jones
55054 OJT RAP HIGH	ZDV	12/9/98	120	MR	2/25/99	94	MR	B Jones
55054 OJT BFF HIGH	ZDV	4/10/99	80	MR	5/25/99	65	MR	B Jones
55054 OJT RAP LOW	ZDV	7/9/99	80	MR	8/15/99	56.5	MR	B Jones

Figure A-5: Section III (En Route Example, continued)

QUALIFICATION TRAINING								
A DEVELOPMENT STAGE	B FAC IDENT	C DATE STARTED	D NO. OF AUTH HOURS	E EMPL INIT	F DATE COMPLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
55055 Instructor led	ZDV	11/23/99	60	MR	12/23/99	60	MR	B Jones
55055 LAB	ZDV	1/8/00	160	MR	3/20/00	160	MR	B Jones
55055 OJT RAP LOW	ZDV	12/1/00	80	MR	2/12/01	80	MR	
55055 Add. Hrs OJT RAP LOW	ZDV	2/15/01	16	MR	2/22/01	12	MR	B Jones
OJT Inst. East Area	ZDV				6/6/02		MR	B Jones
55055 LAB	ZDV	11/1/03	8	MR	11/5/03	8	MR	B Jones
55055 OJT	ZDV	11/11/03	80	MR	12/11/03	80	MR	
Recertification - East Area					2/15/03		MR	B Jones

Figure A-6: Section III (FS Example)

QUALIFICATION TRAINING								
A DEVELOPMENT STAGE	B FAC IDENT	C DATE STARTED	D NO. OF AUTH HOURS	E EMPL INIT	F DATE COMPLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
55239	ENA	7/9/99	80	gm	7/21/99	52	gm	B Jones
55242	ENA	9/12/99	160	gm gm	9/24/99	70	gm	B Jones
55241	ENA	10/14/99	100	gm	1/5/00	100	gm	
55241 Addl. Hrs. OJT	ENA	1/8/00	20	gm	1/15/00	15	gm	B Jones
OJT Inst. Flight Data	ENA				9/12/00		gm	B Jones
55247	ENA	3/10/01	60		4/10/02	60	gm	B Jones

6. Section IV. Equipment Certification.

a. Only equipment training that specifically requires a certification examination must be entered in this section. The only equipment training that meets this requirement is the Terminal Radar Qualification Examination.

Note: The En Route Radar Qualification Examination must not be logged in this section.

b. Other equipment training that is associated with position certification, such as communications, lighting systems, recording, and other ATC equipment, must not be logged in this section. Such equipment training is considered part of the qualification process, and no need exists to separately record certification thereon. Refer to the appropriate instructional program guide for equipment certification requirements. If equipment training is provided as a result of facilities receiving new equipment (other than that requiring a certification examination), include as supplemental training in section V.

Block A. DATE: Enter the date of the equipment certification indicated on the appropriate certificate examination.

Block B. EQUIPMENT: Specify the type of equipment.

Block C. FAC IDENT: Enter the three-character facility identifier.

Block D. CERTIFICATION SIGNATURE: The certifying official must sign or use a signature stamp in this block.

Block E. EMPL INIT: The employee must initial in this block.

Figure A-7: Section IV, Equipment Certification

A DATE	B EQUIPMENT	C FAC IDENT	D CERTIFICATION SIGNATURE	E EMPL INIT
9/15/98	Radar Qualification Exam	DFW	<i>James Matthews</i>	<i>JM</i>

7. Section V. Proficiency (Recurrent, Refresher, Supplemental, Skill Enhancement), and Remedial Training. Entries in this section must specifically describe the training provided and may be disposed of 5 years after the training occurs. Refer to chapter 4, paragraph 5, Proficiency Training, for the type of training to be entered in this section. Air Traffic Safety Action Program (ATSAP) training must be recorded in this section with ATSAP as the major subject area and the type coded as 4.

a. ATM or designee is authorized to use coded entries in this section if a corresponding facility master sheet is maintained that specifically describes the training provided. This master sheet must be attached to the employee's training record and forwarded to the receiving facility

in the event the employee is transferred.

Note: A photocopy or other reproduction of FAA Form 3120-1.5, Proficiency Training, may be used in lieu of individual entries in each employee's FAA Form 3120-1. When a reproduction is used, the following statement must be on the form where the employee's signature is to be placed: "I certify that I have received the above Proficiency Training for

(Month)

(Year)

(Specialist's Signature)

(Certification Signature)

b. Scheduled Proficiency Training may be entered in section V of FAA Form 3120-1 prior to the time the training is administered, under the following conditions:

- (1) Only Blocks A, B, C, and E may be completed before the training is administered.
- (2) Blocks D, F, and G must be completed after the training has been administered and in accordance with other requirements of this order.
- (3) The date entered in Block A must reflect the date that information was entered in Blocks B, C, and E.

Block A. DATE: Record the date the training was entered on FAA Form 3120-1. A date stamp may be used.

Block B. MAJOR SUBJECT AREAS: Specifically describe or use a coded entry for refresher or supplemental training. Remedial and SET entries must specifically describe the training conducted. Coded entries must not be used for remedial or SET. If the facility is maintaining a master code/decode sheet, a single entry (e.g., 1/2) may be utilized if both refresher and supplemental training items were provided during a single briefing. If a master code/decode sheet is maintained, training items must be identified by a singular training type. If training is conducted via CBI, enter CBI. Training recorded as part of the ATSAP program must be recorded as ATSAP.

Block C. TYPE: Indicate the type of training by number: 1 = Refresher, 2 = Supplemental, 3 = Remedial, 4 = Skill Enhancement.

Note: SET will be encoded number 4. Continue to use FAA Form 3120-1.5 (dated 4/77) until supplies are exhausted. Make a written annotation explaining code 4 at the bottom of the form when entries appear on that page.

Block D. DATE COMPLETED: Enter the date the training was completed.

Block E. HOURS: Indicate the number of actual training hours.

Block F. CERTIFICATION SIGNATURE: The certifying official must sign or use a signature stamp in this block.

Block G. EMPL INIT: The employee must initial in this block.

**Figure A-8: Section V
Proficiency (Recurrent, Refresher, Supplemental, Skill Enhancement), and Remedial Training**

A DATE	B MAJOR SUBJECT AREAS	C TYPE 1/	D DATE COMPLETED	E HOURS	F CERTIFICATION SIGNATURE	G EMPL INIT
1/15/00	Wake Turbulence Film	1	4/10/00	.5	<i>J Parks</i>	CU
2/1/00	57002, NOTAMs CBI	1	1/22/00	4.0	<i>J Parks</i>	CU
3/10/00	Aircraft Characteristics Climb Rates					
	Vertical Separation Standards	3	3/3/00	2	<i>J Parks</i>	CU
5/1/00	Speed Control & Sequencing	4	4/10/00	1.2	<i>J Parks</i>	CU
6/22/00	Review: Radar Vector Procedures, Effect of					
	Temperature on Climb Rates, Coordination					
	(Facility SOP on Position Relief Briefings)	3	6/15/00	8	<i>J Parks</i>	CU
6/22/01	ETG Lab Problems 2, 8, 11, 21, 22, 23, 24, 25	3	6/21/01	16	<i>J Parks</i>	CU
6/30/01	Lost Aircraft Orientation	1	6/30/01	2	<i>J Parks</i>	CU
7/1/01	Pilot Weather Briefing	1	7/1/01	2	<i>J Parks</i>	CU
8/3/08	ATSAP	4	7/3/08	.5	<i>J Parks</i>	CU
8/3/08	VSCS ATCS Operations Course	2	7/27/08	16	<i>J Parks</i>	CU
<u>1/</u> TRAINING TYPE CODE 1 - Refresher 2 - Supplemental 3 - Remedial 4 - Skill Enhancement						

8. Section VI. Technical Appraisal. The technical appraisal section for all options must include the OJTI skill check described in chapter 6.

Block A. DATE COMPLETED: Enter the date shown on the appraisal form or the date the skill check was completed.

Block B. TECHNICAL APPRAISAL: Enter the position on which the appraisal took place, the type of appraisal, and the result (satisfactory or unsatisfactory). If the result is unsatisfactory, recertification is required prior to the resumption of operational or OJTI duties.

Block C. DATE DISCUSSED: Enter the date the appraisal was discussed with the employee.

Block D. CERTIFICATION SIGNATURE: For technical appraisals and OJTI skill checks, the employee's FLM/STMC, even though this individual may not have performed the appraisal, must sign or use a signature stamp in this block.

Block E. EMPL INIT: The employee must initial in this block.

Figure A-9: Section VI, Technical Appraisal

A DATE COMPLETED	B TECHNICAL APPRAISAL	C DATE DISCUSSED	D CERTIFICATION SIGNATURE	E EMPL INIT
9/25/00	East Arrival-OJTI Performance Skill Check—Satisfactory	9/25/00	<i>V Conrad</i>	PC
10/1/02	RAP LOW- Performance Skill Check Unsatisfactory	10/1/02	<i>V Conrad</i>	PC

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NSN: 0052-00-863-9001

9. Section VII. Management and Other Training. All management and other agency-approved training not previously listed must be entered in this section. This includes, but is not limited to, automation and other technical training, correspondence, college, out-of-agency, and instructor training courses. Only training that was completed during employment with FAA must be recorded in this section. Management and other training completed via eLMS need not be entered.

Block A. DATE: Enter the date the training was completed.

Block B. COURSE: Enter the course title and the FAA course number, if applicable, as described on the training certificate, transcript, or other official course document. Refer to the FAA Catalog of Training Courses or the CBI course catalog for this information. Regardless of length, all courses assigned an FAA course number or courses specified in FAA directives must

be recorded in this section. All other courses of 8 hours or more must be recorded in this section. Courses of less than 8 hours may be recorded in this section if specified in a facility directive.

Block C. LOCATION: Enter the location where the training was conducted (e.g., FAA Academy, university name, facility, regional office, correspondence course, etc.).

Block D. HOURS: Enter the number of hours indicated in the FAA course catalog. If not contained in the catalog, use the hours in the course description document. Exception: For college/university courses, enter the number of quarter or semester credit-hours attained.

Block E. EMPL INIT: The employee must initial in this block.

Figure A-10: Section VII, Management and Other Training

A DATE COMPLETED	B COURSE	C LOCATION	D HOURS	E EMPL INIT
5/5/90	ARTS IIIA for Automation Specialists, Phase V 53010	FAA Academy	240	CT
6/12/91	Fundamentals of Supervision 14002	Correspondence Course	150	CT
11/19/91	Aviation-A Global History	Princeton University	3 Qtr.	CT
9/8/98	Facility instructor Training 10501	FAA Academy	80	CT
8/15/00	Cadre Training for Traffic Management Unit 50403	FAA Academy	16	CT
11/30/00	Investment in Excellence	OCCC College OKC	32	CT
5/23/01	ATC Teamwork Enhancement Facilitator Training 55050	Salt Lake ARTCC	24	CT
12/7/01	Fundamentals of ATC On-the Job Instruction 55049	Pittsburgh, PA	28	CT
1/12/02	ATC Operational Supervisor Workshop 55047	Chicago ARTCC	24	CT
2/16/02	ATC Operational Supervisor Cadre Facilitator Training 50319	Pittsburgh, PA	28	CT
6/12/12	Weather Satellite Data Interpretation 50206	Kenai, AK	32	CT

10. Section VIII. Liaison Familiarization Travel. Familiarization travel except Flight Deck Training (FDT), is entered in this section. FDT is recorded per JO 3120.29, Flight Deck Training Program. Entries in this section may be disposed of 5 years after the training occurs.

11. Section IX. Certified TRAX Records.

- a. The entries in this section pertain only to the TRAX Employee Training Record report.
- b. The TRAX Employee Training Record report is divided into eight parts (see Figure A-11). These parts correspond to the sections described above (section IIA/B, section III, section IV, section V, section VI, section VII, and section VIII). TRAX only prints those sections in which training has been entered.

Figure A-11: Anywhere ATCT Employee Training Record

Controller, Joe C (JC)

Section I - Employment Data

Fac EOD Facility

FAA EOD

01/05/97	ANY ATCT ATC-12	02/02/80
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Section IIA - Air Traffic Certificates

Issued Certificate Title Number

01/05/98	CONTROL TOWER	12345678
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Section IIB - Air Traffic Ratings

Issued Rating Facility

01/05/98	Facility	ANY
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Section III - Qualification Training

Issued Stage/Course Fac ID Auth Hours Completed Hours

01/13/98	55060 FD Instructor led	ANY	56:00	01/21/03	56:00
02/05/98	55060 FD OJT	ANY	40:00	2/10/03	13:18
04/05/98	OJTI-ALL - OJTI	ANY	0:00	04/05/03	0:00

Section V - Proficiency Training

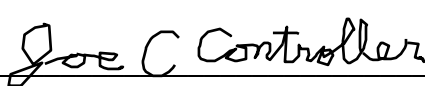
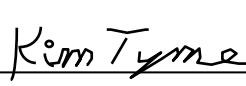
Complete Major Subject Area Type Hours Item Date

05/04/12	57008, METAR/TAF (BASIC) - CBI	Refresher	4:00	05/01/12
05/08/12	CENRAP ORDER/TRANSITION	Refresher	0:30	05/01/17
05/08/12	R4102 LETTER OF PROCEDURE	Supplemental	0:18	05/01/12
05/08/12	LAHSO PROCEDURES	Refresher	0:12	05/01/12
06/04/12	GENOT N7000.16 12-01-05	Supplemental	0:15	06/01/12

Section VI - Technical Appraisal

Complete	Performance Test Title	Result	Discussed
05/05/98	East Arrival—OJTI Performance Skill Check—Satisfactory	Satisfactory	05/05/98
11/05/98	RAP LOW-Performance Skill Check	Unsatisfactory	11/05/98

Section VII – Management and Other Training

Date	Course	Location	Hours		
09/24/98	55051 AIR TRAFFIC TEAMWORK	ASW	24:00		
10/03/98	50113 NATIONAL TRAFFIC MANAGEMENT	WASHINGTON D.C.	28:00		
03/05/98	55049 Fundamentals of ATC OJT Instruction	ANY	24:00		03/05/98
I certify that the above training items are correct for 03/02/03 to 05/10/03 <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  _____ </div> <div style="text-align: center;">  _____ </div> </div>					

**Appendix B. Instructions for Completing the
ATCT/ARTCC OJT Instruction/Evaluation Report (FAA Form 3120-25)**

1. Section 1. Introduction. This appendix contains instructions for completing FAA Form 3120-25. The form must be used by simulation instructors, OJTIs, and FLMs to record their observations of the performance and progress of the developmental/CPC-IT/TMC-IT during simulation scenarios, OJT instruction, SET, and skill-check sessions. FAA Form 3120-25 may be used to document OJF. (See Figure B-2, FAA Form 3120-25).

2. Section 2. Using the Form. Entries on training reports must be sufficiently detailed to support appropriate administrative actions (e.g., promotions, awards, dismissals, reassignments, litigations, etc.). Complete the following items. Block numbers correspond to the numbered blocks on the form.

Block 1. NAME: Print/Enter developmental/CPC-IT/TMC-IT name.

Block 2. DATE: Enter month/day/year.

Block 3. SCENARIO/POSITION(S): Enter scenario number and/or position.

Block 4. WEATHER: Record description of weather as VFR, Marginal Visual Flight Rules (MVFR), IFR, or Other (specify type; e.g., thunderstorm deviations, turbulence, etc.). Check the one box most representative of the session(s). Conditions that impact training should be noted in Block 12.

Block 5. WORKLOAD: Check description of traffic volume. Check the one box most representative of the session(s).

Block 6. COMPLEXITY: Check description of complexity of operations. Check the one box most representative of the session(s). Note any unusual situations, equipment outages, configurations, and/or restrictions that impact training in Block 12.

Block 7. HOURS: Enter actual hours and minutes for the training session or sessions covered by this report.

Block 8. TOTAL HOURS THIS POSITION: Enter total hours and minutes spent in training on this position. Include OJT session(s) covered by this report.

Block 9. PURPOSE: Check purpose of report on the form. Check "OJT" for any activity that is counted as part of the assigned training time. Check "OJF" for on-the-job familiarization time. Indicate "Familiarization," "Instructional," or "Evaluation" when simulation training is being administered. The FLM checks "Skill Check" if administering a performance skill check or "Certification" if administering a certification skill check. If "Other" is indicated, document the specific use in Block 12.

Block 10. ROUTING: According to facility requirements.

Block 11. PERFORMANCE: This section contains job tasks and job subtasks used as a basis for instructing and evaluating the developmental/CPC-IT/TMC-IT. Users of this form should review the definitions of all job subtasks and their respective performance indicators. These guidelines are to be used by all participants involved in training to ensure mutual understanding. This checklist is not all-inclusive and is not meant to limit the duties to be reviewed. The job task entitled “Other” is intended for local use and adaptation.

a. OJT. During OJT, place a mark (e.g., ✓, X) in the columns “OBSERVED” or “COMMENT”.

(1) **Observed:** A mark in this column indicates that the operation or procedure was observed during the session but that no significant comments are made.

(2) **Comment:** A mark in this column indicates that the operation or procedure was observed during the session and is accompanied by a comment in Block 12. During OJT, references in Block 12A are optional.

Note: If a job subtask is not applicable to a position being observed, it may be left blank or recorded as “N/A” (not applicable).

b. Performance/Certification Skill Check. During skill checks, place a mark (e.g., ✓ X) in the column(s) “SATISFACTORY,” “NEEDS IMPROVEMENT,” and “UNSATISFACTORY.” OJTIs do not mark in these columns. Definition of Terms:

(1) **SATISFACTORY:**

(a) Performance skill check developmental/CPC-IT/TMC-IT. A mark in this column indicates that the developmental’s/CPC-IT’s/TMC-IT’s observed performance in the session(s) meets the expected level of performance for this stage of training.

(b) Certification skill check. A mark in this column indicates that the developmental’s/CPC-IT’s/TMC-IT’s observed performance in the session(s) meets the expected CPC performance requirements and indicates that the developmental/CPC-IT/TMC-IT demonstrates the ability to work this task independently.

(c) Performance skill check for CPC/TMC. A mark in this column indicates that the observed performance in the session(s) meets expected CPC performance requirements to work independently.

(2) **NEEDS IMPROVEMENT:** A mark in this column indicates that the developmental’s/CPC-IT’s/TMC-IT’s observed performance is acceptable at this stage of training, but must improve in order to meet certification requirements. Specific comments, along with suggestions or requirements for improvement, must be stated in Block 12 of the form for each job subtask indicated. References must be made to specific procedures, letters of agreement (LOA), orders/directives, etc., in Block 12A.

(3) **UNSATISFACTORY:** A mark in this column indicates that the developmental’s/CPC-IT’s/TMC-IT’s observed performance is unsatisfactory at this stage of

training. Specific comments relating to each unsatisfactory job subtask will be stated in Block 12. References must be made to specific procedures, LOAs, orders/directives, etc., in Block 12A.

(a) Performance skill check developmental/CPC-IT/TMC-IT. A mark in this column indicates that the developmental's/CPC-IT's/TMC-IT's observed performance in the session(s) is unsatisfactory for this stage of training.

(b) Certification skill check. A mark in this column indicates that the developmental's/CPC-IT's/TMC-IT's observed performance in the session(s) does not meet expected CPC performance requirements and indicates that the developmental/CPC-IT/TMC-IT does not demonstrate the ability to work this task independently.

(c) Performance skill check for CPC/TMC. A mark in this column indicates that the observed performance in the session(s) does not meet the expected CPC performance requirements to work independently.

(4) To certify a developmental/CPC-IT/TMC-IT on a certification skill check, all applicable items must be marked satisfactory or not observed (N/O). If an item is marked "N/O," Block 12 must indicate the method used to determine satisfactory performance/knowledge for that job subtask. If necessary, verbal questioning, simulation, or other methods must be used to demonstrate knowledge of a job subtask when not observed.

(5) If a job subtask is not applicable to a position being observed, it must be recorded as "N/A".

c. Simulation. The "Simulation Training" column must be used only in conjunction with simulation training. During simulation training, instructors must evaluate the developmental's/CPC-IT's/TMC-IT's performance in each of the job subtasks shown on the form, as well as any area the instructor may deem appropriate. If the developmental/CPC-IT/TMC-IT is observed performing job subtasks in a consistently satisfactory manner, a plus sign (+) must be placed in the "Simulation Training" column. If the developmental/CPC-IT/TMC-IT is observed making a control error, a dot (•) must be placed in the "Simulation Training" column. If the instructor did not observe a performance on a subtask that required a plus or dot, then that subtask must be left blank. When dots are marked, explanatory remarks must be included in Block 12.

(1) The maximum number of allowable errors per scenario for each job task in oceanic/non-radar, radar-associate, tower simulation, and radar simulation training situations is shown in Figure B-1. The number of errors for a job task is the sum of the dots marked in that job task. The number of errors noted should be included in the comments in Block 12 on the back of the form.

(2) The developmental/CPC-IT/TMC-IT and the instructor must sign each form after each simulated scenario. The signatures will indicate that the two have discussed the training session.

Figure B-1: Maximum Errors Allowed Per Scenario by Job Task

Job Task	Oceanic/ Non-radar Lab	Radar- Associate Lab	Radar Sim Lab	Ground Control	Local Control
Separation	0	0	0	0	0
Coordination	2	2	2	2	2
Control Judgment	4	4	5	5	5
Methods and Procedures	4	4	5	5	5
Equipment, Communication, and Other	4	4	5	5	5

Block 12. COMMENTS: Used by the OJTI, FLM, or lab instructor to document the developmental's/CPC-IT's/TMC-IT's performance during OJT, skill-check sessions, and simulation training. The OJTI, FLM, or lab instructor must sign and date this block.

a. OJT. During OJT, this block is used to document when a mark is made in the "Comment" column on the front of the form. The comments:

- (1) May be specific or general.
- (2) May include exemplary, noteworthy, or unusual events.
- (3) Must describe any observed performance deficiencies. In the case of performance deficiencies, or when improvement is needed in a specific area, references may be made in Block 12A to applicable procedures, LOAs, directives, etc.

b. Skill Checks. During skill checks, this block is used to:

- (1) Document performance/progress. The performance/progress description may include comments of exemplary, noteworthy, or unusual events.
- (2) Describe any observed performance deficiencies. When a mark is placed in the "NEEDS IMPROVEMENT" or "UNSATISFACTORY" column, references must be made to specific procedures, LOAs, orders/directives, etc., in Block 12A.

c. Simulation Training. This block is used to make explanatory remarks when dots or pluses are marked in the "Simulation Training" column on the front of the form. The comments:

- (1) May include exemplary, noteworthy, or unusual events.
- (2) Must specifically describe all errors observed. References must be made in Block 12A to applicable procedures, LOAs, directives, etc.

Block 12A. REFERENCES: References must be included in conjunction with Skill Checks, Skill Enhancement and Simulation Training and include specific procedures, LOAs or directives

that would be useful in correcting any performance deficiencies identified. The FLM and/or lab instructor must include paragraph numbers or other specific references in this block. An OJTI may include references in this block.

Block 13. RECOMMENDATION: This block must be used by the FLM who conducted the skill check. The FLM must recommend one of the following:

- a. certification skill check;
- b. certification (when appropriate);
- c. continuation of OJT;
- d. SET;
- e. suspension of OJT.

Block 14. EMPLOYEE'S COMMENTS: This block may be used by the developmental/CPC-IT/TMC-IT for making comments pertaining to the training session or the skill check, and may include reference to an attachment, if needed. The employee must sign and date this block. A signature does not necessarily indicate concurrence with the report, only that the report has been discussed with the developmental/CPC-IT/TMC-IT. Electronic signatures may be used where secure automation systems exist.

Block 15. CERTIFICATION/RECERTIFICATION: This block is used by FLMs to document position certification/recertification. Sign and date. Electronic signatures may be used where secure automation systems exist.

Figure B-2: FAA Form 3120-25

ATCT/ARTCC OJT INSTRUCTION/EVALUATION REPORT										
1. Name			2. Date		3. Scenario/Position(s)					
4. Weather <input type="checkbox"/> VFR <input type="checkbox"/> MVFR <input type="checkbox"/> IFR <input type="checkbox"/> Other _____		5. Workload <input type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy		6. Complexity <input type="checkbox"/> Not Difficult <input type="checkbox"/> Occasionally Difficult <input type="checkbox"/> Mostly Difficult <input type="checkbox"/> Very Difficult		7. Hours		8. Total Hours This Position		
9. Purpose <input type="checkbox"/> OJT <input type="checkbox"/> OJF <input type="checkbox"/> Familiarization Scenario <input type="checkbox"/> Instructional Scenario <input type="checkbox"/> Evaluation Scenario <input type="checkbox"/> Skill Check <input type="checkbox"/> Certification <input type="checkbox"/> Recertification <input type="checkbox"/> Skill Enhancement <input type="checkbox"/> Other						10. Routing				
11. Performance	Job Task	Job Subtask			Observed	Comment	Satisfactory	Needs Improvement	Unsatisfactory	Simulation Training
	A. Separation	1. Separation is ensured.								
		2. Safety alerts are provided.								
	B. Coordination	3. Performs handoffs/pointouts.								
		4. Required coordinations are performed.								
	C. Control Judgment	5. Good control judgment is applied.								
		6. Priority of duties is understood.								
		7. Positive control is provided.								
		8. Effective traffic flow is maintained.								
	D. Methods and Procedures	9. Aircraft identity is maintained.								
		10. Strip posting is complete/correct.								
		11. Clearance delivery is complete/correct and timely.								
		12. LOAs/directives are adhered to.								
		13. Additional services are provided.								
		14. Rapidly recovers from equipment failures and emergencies.								
		15. Scans entire control environment.								
	E. Equipment	16. Effective working speed is maintained.								
		17. Equipment status information is maintained.								
		18. Equipment capabilities are utilized/understood.								
	F. Communication	19. Functions effectively as a radar/tower team member.								
		20. Communication is clear and concise.								
		21. Uses prescribed phraseology.								
		22. Makes only necessary transmissions.								
23. Uses appropriate communications method.										
G. Other	24. Relief briefings are complete and accurate.									

Figure B-2: FAA FORM 3120-25 (continued)

12. Comments	12A. References	
	Signature: _____ Date: _____	
	13. Recommendation <input type="checkbox"/> Certification Skill Check <input type="checkbox"/> Certification <input type="checkbox"/> Continuation of OJT <input type="checkbox"/> Skill Enhancement Training <input type="checkbox"/> Suspension of OJT	
14. Employee's Comments: This report has been discussed with me (Signature) _____ Date: _____		
15. Certification/Recertification I certify that this employee meets qualification requirements and is capable of working under general supervision. Signature of Certifier: _____ Date: _____		

**Job Subtasks and Indicators Checklist for the
ATCT/ARTCC OJT Instruction/Evaluation Report**

Job Task: Separation

Job Subtask	Indicator
1. <i>Separation is ensured.</i> Provides control instructions or restrictions to ensure separation standards are maintained at all times.	<p>a. Issues appropriate control instructions or restrictions, including speed control, vectoring techniques, and visual separation.</p> <p>b. Ensures traffic entering/departing his/her airspace is not in conflict or about to lose separation.</p> <p>c. Obtains specific approval prior to entering another position's/facility's area of jurisdiction.</p> <p>d. Tower only. Ensures traffic is not in conflict with other aircraft or vehicular traffic on runway(s) and/or any movement area.</p>
2. <i>Safety alerts are provided.</i> Recognizes that safety alerts are a first-priority duty along with separation of aircraft, and remains constantly alert for unsafe proximity situations.	<p>a. Informs pilot or appropriate controller when unsafe situation has been observed.</p> <p>b. Issues alternate course of action when feasible.</p>

Job Task: Coordination

Job Subtask	Indicator
3. <i>Performs handoffs/pointouts.</i>	Performs handoffs/pointouts correctly, and at the appropriate time/position.
4. <i>Required coordinations are performed.</i> Coordinates all information that is pertinent to the situation. Ensures that personnel receiving the information have all the contents. Acknowledges all information received on position.	<p>a. Coordinates restrictions or special instructions.</p> <p>b. Verifies aircraft/vehicle position and/or altitude at the time of coordination.</p> <p>c. Verifies and acknowledges all information exchanges.</p>

Job Task: Control Judgment

Job Subtask	Indicator
<p>5. <i>Good control judgment is applied.</i> Issues control instructions or restrictions that are correct. Carefully plans procedures prior to issuing instructions to provide a safe, expeditious traffic flow.</p>	<p>a. Uses correct speed control procedures/techniques.</p> <p>b. Applies effective vectoring techniques.</p> <p>c. Considers aircraft performance capabilities in control decisions, and demonstrates awareness of aircraft equipment capabilities and limitations that affect AT control instructions.</p> <p>d. Uses control procedures that do not place workload or stress on other controllers/facilities.</p> <p>e. Considers subsequent controller requirements.</p> <p>f. Does not terminate or activate radar control prematurely.</p> <p>g. Informs aircraft and appropriate personnel of significant situations.</p> <p>h. Tower only. Applies effective techniques for taxiing to, from, and crossing runways.</p> <p>i. EDST. Investigates and prioritizes all alerts according to sector requirements.</p>
<p>6. <i>Priority of duties is understood.</i> Properly prioritizes actions according to their significance in the overall traffic situation.</p>	<p>a. Maintains situational awareness.</p> <p>b. Performs duties in the order of their importance.</p> <p>c. Tower only. Applies effective prioritization during operations where anticipated separation is utilized.</p>
<p>7. <i>Positive control is provided.</i> Takes command of control situations and does not act in a hesitant or unsure manner. Observes present and considers forecasted traffic to predict if an overload may occur, and takes appropriate action to prevent or lessen the situation.</p>	<p>a. Demonstrates confidence and takes command of control situations.</p> <p>b. Maintains positive control during stressful situations.</p> <p>c. Recognizes potential overload situations.</p>

<p>8. <i>Effective traffic flow is maintained.</i> Takes into account aircraft characteristics and their effect on traffic control.</p>	<ul style="list-style-type: none"> a. Makes effective use of runways and taxiways. b. Provides orderly traffic flow with proper aircraft spacing, and avoids use of excessive separation/restrictions. c. Considers aircraft characteristics and their effect on traffic flow and properly sequences traffic. d. Manages ground traffic effectively and efficiently. e. Implements and recovers from holding procedures efficiently. f. Adheres to flow control procedures.
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Job Task: Methods and Procedures

Job Subtask	Indicator
<p>9. <i>Aircraft identity is maintained.</i> Maintains positive identification during the entire time the aircraft are within the area of responsibility.</p>	<ul style="list-style-type: none"> a. Uses radar displays to assist in maintaining identity. b. Re-identifies aircraft when doubt exists. c. Detects errors in aircraft identity. d. Employs correct beacon and radar procedures in identifying aircraft. e. Maintains awareness of non-radar, untracked, unassociated, or primary targets within delegated airspace. f. Remains aware of previously coordinated traffic.

<p>10. <i>Strip posting is complete/correct.</i> Posts all required information on strips, and updates as required.</p>	<ul style="list-style-type: none"> a. Receives flight plans and distributes strips to correct operational positions in a timely manner. b. Posts all required information on strips, and reviews and updates as required. c. Posts data in correct area on strips. d. Ensures postings are legible. e. Detects and corrects strip errors or EDST aircraft list errors, ensuring that printed/ displayed information agrees with the assigned altitude and route. f. Selects appropriate EDST sorting and posting options so that the aircraft list is easily referenced for necessary flight information. g. Enters all required information into the EDST system and updates as required.
<p>11. <i>CD is complete/correct and timely.</i> Transmits/issues clearances in correct format, is specific, and uses correct phraseology.</p>	<ul style="list-style-type: none"> a. Uses specific terms to describe a fix. b. Adheres to readback procedures. c. Adheres to predeparture clearance (PDC) procedures.
<p>12. <i>LOAs/directives are adhered to.</i> Ensures performance of control instructions/duties is in compliance with handbooks, facility procedures, and directives.</p>	<ul style="list-style-type: none"> a. Adheres to LOA requirements. b. Adheres to facility directives and local routing instructions.

<p>13. <i>Additional services are provided.</i> Follows the required format for providing navigational assistance, weather information, and traffic advisories.</p>	<ul style="list-style-type: none"> a. Provides navigational assistance when operational advantage would be gained by pilot or controller. b. Provides significant weather information in a timely manner to aircraft and controllers/facilities. c. Solicits pilot reports as required. d. Adheres to Notice to Airmen, significant meteorological information, and center weather advisory procedures. e. Issues complete traffic information in required format for both radar-identified and non-radar-identified aircraft as required. f. Provides chaff services and bird activity information when necessary.
<p>14. <i>Rapidly recovers from equipment failures and emergencies.</i> Handles equipment failures, unusual or non-standard situations, and emergencies correctly.</p>	<ul style="list-style-type: none"> a. Handles aircraft emergencies effectively, including radio failures, hijacks, and bomb threats. b. Appropriately handles special flight operations, and unusual or non-standard situations. c. Is knowledgeable of available backup equipment and properly transitions to its use.
<p>15. <i>Scans entire control environment.</i> Checks assigned control environment and equipment for changes in data or presentation.</p>	<ul style="list-style-type: none"> a. Monitors equipment, equipment alarms, displays, and status information area for changes in data or presentation. b. Scans assigned control environment for potential errors or conflicts and weather-related problems. c. Scans runways for landing, departing, and crossing situations. d. Acts rapidly to correct errors. e. Recognizes when incorrect information has been passed to aircraft or other positions. f. Remains alert for possible problem situations from other controllers/facilities.

<p>16. <i>Effective working speed is maintained.</i> Paces control actions and associated tasks at an acceptable rate.</p>	<ul style="list-style-type: none"> a. During periods of inactivity, reviews and updates pending/current information for familiarity and plans actions to be taken. b. Records information at the same time that it is received from pilots/controllers/facilities. c. Records information at the same time that it is issued to pilots/controllers/facilities.
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Job Task: Equipment

Job Subtask	Indicator
<p>17. <i>Equipment status information is maintained.</i> Maintains knowledge of equipment operating status.</p>	<ul style="list-style-type: none"> a. Determines status of equipment performance. b. Reports malfunctions.
<p>18. <i>Equipment capabilities are utilized/ understood.</i> Uses available equipment to the fullest extent possible. Displays knowledge of capabilities and limitations of equipment and its associated backup.</p>	<ul style="list-style-type: none"> a. Enters all required data into computer for required area display. b. Displays appropriate area of jurisdiction. c. Adjusts radar presentation to present best display possible. d. Displays appropriate filter limits. e. Demonstrates knowledge of required computer entries and ensures entries are complete and correct. f. Enters necessary corrections/updates in a timely manner. g. Demonstrates knowledge of procedures for operating all equipment. h. Is aware of equipment peculiarities.

Job Task: Communication

Job Subtask	Indicator
19. Functions effectively as a radar/tower team member. Accepts equal responsibility for the safe and efficient operation of the position.	<ul style="list-style-type: none"> a. Maintains a spirit of cooperation. b. Maintains professional manner. c. Is receptive to instructor's/FLM's/ team members' suggestions for improvement of job performance. d. Remains calm under stress. e. Conveys pertinent information to other team members in a timely manner.
20. Communication is clear and concise. Ensures that all data passed or received are understood. Does not have to repeat information using different words to convey the intended meaning.	<ul style="list-style-type: none"> a. Demonstrates professional, positive voice. b. Demonstrates moderate, rather than too fast or too slow, speech rate. c. Listens carefully and verifies that correct information is transmitted and received. d. Demonstrates clear pronunciation. e. Does not transpose words, numbers, or symbols.
21. Uses prescribed phraseology. Uses words and phrases in accordance with the requirements of the duty being performed.	<ul style="list-style-type: none"> a. Uses approved procedures, words, phrases, and formats. b. Issues instructions that are specific.
22. Makes only necessary transmissions. Transmits only information that is required over radio or interphone.	<ul style="list-style-type: none"> a. Uses radio/interphone only when necessary. b. Transmits only required information/instructions. c. Does not use abusive or profane language. d. Does not transmit separate message when it would be more effective to combine information.
23. Uses appropriate communications method. Transmits information using the communications method that is appropriate.	<ul style="list-style-type: none"> a. Formulates message before transmitter is keyed. b. Uses radio/interphone when required.

<p>24. <i>Relief briefings are complete and accurate.</i> Ensures that duty familiarization and transfer of position responsibility are complete and accurate. Follows approved checklist when exchanging information, and both individuals acknowledge the positive transfer of responsibility.</p>	<ul style="list-style-type: none">a. Communicates pertinent status information.b. Communicates weather information to relieving specialist as necessary.c. Communicates overall traffic situation.d. Ensures that unresolved questions about the operation of the position are resolved before transfer of responsibility.
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10/30/2015

JO 3120.4P
Appendix B

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**Appendix C. Instructions for Completing the
FSS OJT Instruction/Evaluation Report (FAA Form 3120-26)**

1. Section 1. Introduction. This appendix contains instructions for completing FAA Form 3120-26. The form must be used by OJTIs and FLMs to record their observations of the performance and progress of the developmental/ FPL-IT during simulated scenarios, OJT instruction, SET, and skill-check sessions. FAA Form 3120-26 may be used to document OJF. (See Figure C-1, FAA Form 3120-26.)

2. Section 2. Using the Form. Entries on training reports must be sufficiently detailed to support appropriate administrative actions (e.g., promotions, awards, dismissals, reassignments, litigations, etc.). Complete the following items. Block numbers correspond to the numbered blocks on the form.

Block 1. NAME: Print developmental's/FPL-IT's name.

Block 2. DATE: Enter month, day, year.

Block 3. SCENARIO/POSITION(S): Enter scenario or operational position on which training or skill check is being performed.

Block 4. WEATHER: Record description of weather as VFR, MVFR, IFR, or LIFR. Check the one box most representative of the session(s). Conditions that impact training should be noted in Block 12.

Block 5. WORKLOAD: Check description of traffic volume. Check the one box most representative of the session(s).

Block 6. COMPLEXITY: Check description of complexity of operations. Check the one box most representative of the session(s). Note any unusual situations, equipment outages, configurations, and/or restrictions that impact training in Block 12.

Block 7. HOURS: Enter actual hours and minutes for the training session(s) covered by this report.

Block 8. TOTAL HOURS THIS POSITION: Enter total hours and minutes spent in training on this position. Include OJT session(s) covered by this report.

Block 9. PURPOSE: Check appropriate purpose of report on the form. Check "OJT" for any activity that is counted as part of the assigned training time. Check "OJF" for on-the-job familiarization time. Check "Skill Enhancement" if used for SET. FLM checks "Skill Check" if administering a performance skill check or "Certification" if administering a certification skill check. If "Other" is indicated, document the specific use in Block 12. Indicate "Simulation" if simulation is used.

Block 10. ROUTING: According to facility requirements.

Block 11. PERFORMANCE: This section contains job tasks and job subtasks used as a basis for instructing and evaluating the developmental/FPL-IT.

Users of this form should review the definitions of all job subtasks and their respective performance indicators. These guidelines are to be used by all participants involved in training to ensure mutual understanding. This checklist is not all-inclusive and is not meant to limit the duties to be reviewed. The job task entitled “Other” is intended for local use and adaptation.

a. During OJT/lab scenarios, place a mark (e.g., X, ✓, etc.) in the columns “OBSERVED” and “COMMENT” as follows:

(1) **OBSERVED:** A mark in this column indicates that the operation or procedure was observed during the session but that no significant comments are made.

(2) **COMMENT:** A mark in this column indicates that the operation or procedure was observed during the session and is accompanied by a comment in Block 12. During OJT, reference(s) in Block 12A are optional.

b. During skill checks/simulated evaluations, place a mark (e.g., X, ✓, etc.) in the columns “OBSERVED” and “COMMENT” as follows: “SATISFACTORY,” “NEEDS IMPROVEMENT,” and “UNSATISFACTORY.” OJTIs do not make check marks in these columns because these terms are evaluative. The terms are defined as follows:

(1) **SATISFACTORY:** A mark in this column indicates that the developmental’s observed performance in the session(s) meets certification requirements and indicates that the developmental/FPL-IT demonstrates the ability to work independently for this performance item. Examples of exemplary performance and/or specific comments must be stated in Block 12 of the form for each job subtask indicated.

(2) **NEEDS IMPROVEMENT:** A mark in this column indicates that the developmental’s observed performance is acceptable at this stage of training, but must improve in order to meet certification requirements. Specific comments, along with suggestions or requirements for improvement, must be stated in Block 12 of the form for each job subtask indicated.

(3) **UNSATISFACTORY:** A mark in this column indicates that the developmental’s observed performance is unsatisfactory at this stage of training. Specific comments, suggestions, and recommendations for correcting each unsatisfactory job subtask must be stated in Block 12.

c. To certify on a certification skill check, all applicable items must be marked satisfactory or not observed (N/O). If an item is marked “N/O”, Block 12 must indicate the method used to determine satisfactory performance/knowledge for that job subtask. If necessary, verbal questioning, simulation, or other methods must be used to demonstrate knowledge of a job subtask when not observed.

d. If a job subtask is not applicable to a position being observed, it must be recorded as “N/A” (not applicable).

Block 12. COMMENTS: Used by the OJTI/FLM to document the developmental’s performance during OJT instruction and skill-check sessions. The OJTI/FLM must sign and date this block.

a. During OJT/Simulation Scenarios: This block is used to document when a check mark is made in the “Comment” column on the front of the form. The comments:

- (1) May be specific or general.
- (2) May include exemplary, noteworthy, or unusual events.
- (3) Must describe any observed performance deficiencies. In the case of performance deficiencies or when improvement is needed in a specific area, references may be made in Block 12A to applicable procedures, letters of agreement (LOA), directives, etc.

b. During Skill Checks/Simulation Evaluations: This block is used to:

- (1) Document performance/progress. The performance/progress descriptions may include comments of exemplary, noteworthy, or unusual events.
- (2) Describe any observed performance deficiencies. When a check mark is placed in the “Needs Improvement” or “Unsatisfactory” column, references must be made to specific procedures, LOAs, orders/directives, etc., in Block 12A.

Block 12A. REFERENCES: Used by the FLM to list references to specific procedures, LOAs, or directives that should be reviewed by the developmental/FPL-IT so that the performance problem may be corrected. The FLM must include paragraph numbers or other specific reference(s) in this block. An OJTI may include reference(s) in this block.”

Block 13. RECOMMENDATION: This block must be used by the FLM who conducted the skill check. The FLM must recommend one of the following:

- a. Certification skill check.
- b. Certification (when appropriate).
- c. Continuation of OJT.
- d. SET.
- e. Suspension of OJT.

Block 14. EMPLOYEE’S COMMENTS: This block may be used by the developmental/FPL-IT for making comments pertaining to the training session or the skill check, and may include reference to an attachment, if needed. The employee must sign and date this block. A signature does not necessarily indicate concurrence with the report, only that the report has been discussed with the developmental/FPL-IT. Electronic signatures may be used where secure automation systems exist.

Block 15. CERTIFICATION/RECERTIFICATION: This block is used to document position certification/recertification. Sign and date. Electronic signatures may be used where secure automation capabilities exist.

Figure C-1: FAA Form 3120-26

[illegible]

Figure C-1. FAA FORM 3120-26 (continued)

[illegible]

3. Section 3. Job Subtasks and Indicators: FSS OJT Instruction/Evaluation Report Checklist

The list of job subtasks/indicators specified for each position is stated in general terms to account for differences in equipment and to accommodate FSSs. Some job subtasks/indicators may not apply at individual facilities because of equipment, staffing, or shift variations. The job subtasks/indicators for the flight data, Notice to Airmen (NOTAM), and coordinator positions have been combined to accommodate some of these variations. Individual facilities can use their facility training directive to specify facility-level job subtasks/indicators.

Figure C-2. FSS Assignment of Job Subtasks to Positions

Job Subtask	Weather Observer	Broadcast	Flight Data/ NOTAM	Preflight	Inflight
1. Adheres to priority of duties.	X	X	X	X	X
2. Demonstrates ability to handle unusual situations.			X	X	X
3. Initiates required search and rescue.			X		X
4. Maintains basic weather watch.	X				
5. Compiles, evaluates, records, and disseminates data.	X	X	X	X	X
7. Computer entries are correct.	X	X	X	X	X
8. Equipment capabilities are utilized/maintained.	X	X	X	X	X
9. Equipment malfunctions are recognized/restored.	X	X	X	X	X
11. Pre-duty/relief briefings are complete and accurate.	X	X	X	X	X
12. Functions effectively as a team member.	X	X	X	X	X
13. Is sensitive to the needs of system users.		X	X	X	X
14. Communication is clear/concise.	X	X	X	X	X

15. Uses prescribed phraseology.	X	X	X	X	X
16. Coordination is thorough.			X		X
17. Makes only necessary transmissions.		X			X
18. Coordinates with NWS and CWSU.			X		X
19. Obtains sufficient background information.				X	X
20. Presents briefing in prescribed format.				X	X
21. Briefs in a tailored, organized, clear, concise manner.				X	X
22. Maintains awareness of current weather and forecasts.		X		X	X
23. Applies VNR procedures as prescribed.		X		X	X
24. Maintains complete, accurate, real-time weather.				X	X
25. Develops flight advisories for routes/altitudes.				X	X

WEATHER OBSERVER**Job Task: Methods and Procedures**

Job Subtask	Indicator
1. <i>Adheres to priority of duties.</i>	a. Performs all position functions in accordance with locally published priority of duties. b. Evaluates observation elements in prescribed order.
4. <i>Maintains basic weather watch.</i>	a. Records meteorological and non-meteorological data accurately and promptly. b. Makes scheduled and unscheduled observations.
5. <i>Compiles, evaluates, records, and disseminates data.</i>	a. Evaluates sky cover. b. Determines ceiling and heights. c. Determines visibility. d. Records and reports atmospheric phenomena. e. Determines sea level pressure, altimeter settings, and station pressure. f. Determines temperature data. g. Determines wind data. h. Measures precipitation and additive data.
7. <i>Computer entries are correct.</i>	Uses prescribed procedures for computer entries.

Job Task: Equipment

Job Subtask	Indicator
8. <i>Equipment capabilities are utilized/maintained.</i>	Operates position equipment/backup equipment using prescribed procedures.
9. <i>Equipment malfunctions are recognized/restored.</i>	Notifies maintenance of malfunctions in accordance with prescribed local procedures.

Job Task: Communication/Coordination

Job Subtask	Indicator
11. <i>Preduty/relief briefings are complete and accurate.</i>	a. Follows position relief checklist when exchanging information.

	<p>b. Ensures that both individuals acknowledge the positive transfer of responsibility.</p> <p>c. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</p>
12. Functions effectively as a team member.	<p>a. Maintains cooperative, professional manner.</p> <p>b. Is courteous and tactful.</p> <p>c. Is receptive to instructor's/supervisor's/team member's suggestions for improvement of job performance.</p> <p>d. Remains calm under stress.</p> <p>e. Does not use abusive or profane language.</p> <p>f. Convey pertinent information to other team members in a timely manner.</p>
14. Communication is clear/concise.	Demonstrates clear and understandable speech rate.
15. Uses prescribed phraseology.	Uses approved procedural words, phrases, and formats.

BROADCAST**Job Task: Methods and Procedures**

Job Subtask	Indicator
1. <i>Adheres to priority of duties.</i>	Performs all position functions in accordance with locally published priority of duties.
5. <i>Compiles, evaluates, records, and disseminates data.</i>	<ul style="list-style-type: none"> a. Discards non-pertinent data and makes corrections as required. b. Checks all sources for pertinent broadcast data. c. Obtains required data from alternate sources when required. d. Updates data as required. e. Starts all broadcast recordings at designated times. f. Adheres to prescribed content and format.

Job Task: Equipment

Job Subtask	Indicator
8. <i>Equipment capabilities are utilized/maintained.</i>	<ul style="list-style-type: none"> a. Operates position equipment/backup equipment using prescribed procedures. b. Removes and replaces obsolete data. c. Records and monitors broadcast. d. Records and monitors weather advisories and surface reports. e. Records and monitors pilot report (PIREP) summaries, NOTAMs, and military training route/military operations area statements. f. Observes schedule and time restrictions. g. Announces missing items. h. Makes suspension announcements.
9. <i>Equipment malfunctions are recognized/restored.</i>	Notifies maintenance of malfunctions in accordance with prescribed local procedures.
11. <i>Preduty/relief briefings are complete and accurate.</i>	<ul style="list-style-type: none"> a. Follows position relief checklist when exchanging information. b. Ensures that both individuals acknowledge

	<p>the positive transfer of responsibility.</p> <p>c. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</p>
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Job Task: Communication/Coordination

Job Subtask	Indicator
12. Functions effectively as a team member.	<p>a. Maintains cooperative, professional manner.</p> <p>b. Is courteous and tactful.</p> <p>c. Is receptive to instructor's/supervisor's/team member's suggestions for improvement of job performance.</p> <p>d. Remains calm under stress.</p> <p>e. Does not use abusive or profane language.</p> <p>f. Conveys pertinent information to other team members in a timely manner.</p>
14. Communication is clear/concise.	<p>a. Has pleasant and positive voice.</p> <p>b. Formulates message before transmitter is keyed.</p> <p>c. Selects appropriate channels.</p> <p>d. Has clear and understandable speech rate.</p>
15. Uses prescribed phraseology.	Uses approved procedural words, phrases, and formats.
17. Makes only necessary transmissions.	<p>a. Radio/interphone is used only when necessary.</p> <p>b. Transmits only required information/instructions.</p>

Job Task: Pilot Weather Briefing

Job Subtask	Indicator
23. Applies visual flight rules (VFR) not recommended (VNR) procedures as prescribed.	Applies VNR procedures as prescribed.

FLIGHT DATA/NOTAM**Job Task: Methods and Procedures**

Job Subtask	Indicator
1. <i>Adheres to priority of duties.</i>	Performs all position functions in accordance with locally published priority of duties.
2. <i>Demonstrates ability to handle unusual situations.</i>	Demonstrates ability to handle unusual situations.
3. <i>Initiates required search and rescue situations.</i>	<ul style="list-style-type: none"> a. Takes timely action regarding overdue, missing, or lost aircraft. b. Performs local communications search. c. Initiates request for information on overdue aircraft, information request, or alert notice. d. Expands communications search. e. Prepares complete/accurate search and rescue (SAR) messages. f. Forwards field status reports and other pertinent data within prescribed time limits. g. Cancels all SAR messages.
5. <i>Compiles, evaluates, records, and disseminates data.</i>	<ul style="list-style-type: none"> a. Accurately routes and distributes received flight data. b. Addresses outbound traffic as required. c. Posts all new flight data accurately and promptly. d. Uses authorized abbreviations. e. Revises flight data promptly as necessary. f. Correctly formats/edits all messages. g. Classifies, formats, and distributes NOTAMs, as prescribed.

Job Task: Equipment

Job Subtask	Indicator
6. <i>Equipment status is maintained.</i>	<ul style="list-style-type: none"> a. Maintains circuit operation, taking appropriate action during circuit interruptions. b. Uses weather chart reproduction and display

	equipment.
7. Computer entries are correct.	Uses prescribed procedures for computer entries.
8. Equipment capabilities are utilized/maintained.	Operates position equipment/backup equipment using prescribed procedures.
9. Equipment malfunctions are recognized/restored.	<p>a. Activates spare/backup equipment when required.</p> <p>b. Notifies maintenance of equipment malfunctions in accordance with prescribed local procedures.</p>

Job Task: Maintenance

Job Subtask	Indicator
10. Replaces expendable materials as necessary.	Correctly replaces printer cartridges and paper.

Job Task: Communication/Coordination

Job Subtask	Indicator
11. Preduty/relief briefings are complete and accurate.	<p>a. Ensures thorough self-briefing before assuming preflight duties.</p> <p>b. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</p>
12. Functions effectively as a team member.	<p>a. Maintains cooperative, professional manner.</p> <p>b. Is courteous and tactful.</p> <p>c. Is receptive to instructor's/supervisor's/team member's suggestions for improvement of job performance.</p> <p>d. Remains calm under stress.</p> <p>e. Does not use abusive or profane language.</p> <p>f. Conveys pertinent information to other team members in a timely manner.</p>

13. <i>Sensitive to needs of system users.</i>	<ul style="list-style-type: none"> a. Listens and responds to user requests in a courteous and tactful manner. b. Provides additional assistance/data when requested.
14. <i>Communication is clear/concise.</i>	<ul style="list-style-type: none"> a. Answers calls in a timely manner. b. Has pleasant and positive voice. c. Has clear and understandable speech rate. d. Identifies calling facility when required. e. Uses correct communication line to forward data. f. Exchanges initials as required. g. Deactivates communication line.
15. <i>Uses prescribed phraseology.</i>	<ul style="list-style-type: none"> a. Uses approved procedural words, phrases, and formats. b. Listens for acknowledgment. c. Issues instructions that are specific. d. Ensures readbacks are correct.
16. <i>Coordination is thorough.</i>	<ul style="list-style-type: none"> a. Conducts intrafacility/interfacility coordination in a timely manner. b. Forwards IFR departures, progress reports, and arrival reports to AT control (ATC), upon request.
17. <i>Coordinates with NWS and CWSU.</i>	<ul style="list-style-type: none"> a. Alerts Weather Service Forecast Office and CWSU immediately when conditions are reported that differ from forecasts. b. Describes significant current weather changes. c. Verifies information with the NWS and CWSU.

PREFLIGHT**Job Task: Methods and Procedures**

Job Subtask	Indicator
1. <i>Adheres to priority of duties.</i>	Performs all position functions in accordance with locally published priority of duties.
2. <i>Demonstrates ability to handle unusual situations.</i>	Demonstrates ability to handle unusual situations.
5. <i>Compiles, evaluates, records, and disseminates data.</i>	a. Completes required flight plan and entries. b. Assists pilot in flight planning.

Job Task: Equipment

Job Subtask	Indicator
7. <i>Computer entries are correct.</i>	Uses prescribed procedures for computer entry.
8. <i>Equipment capabilities are utilized/maintained</i>	Operates position equipment using prescribed procedures.
9. <i>Equipment malfunctions are recognized/restored</i>	Notifies maintenance of malfunctions in accordance with prescribed local procedures.

Job Task: Communication/Coordination

Job Subtask	Indicator
11. <i>Preduty/relief briefings are complete and accurate.</i>	a. Ensures thorough self-briefing before assuming preflight duties. b. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.
12. <i>Functions effectively as a team member.</i>	a. Maintains cooperative, professional manner. b. Is courteous and tactful. c. Is receptive to instructor's/supervisor's/team member's suggestions for improvement of job performance. d. Remains calm under stress. e. Does not use abusive or profane language. f. Conveys pertinent information to other team members in a timely manner.

13. Sensitive to needs of system users.	a. Listens and responds to user requests in a courteous and tactful manner. b. Provides additional assistance/data when requested.
14. Communication is clear/concise.	a. Has pleasant and positive voice. b. Has clear and understandable speech rate.
15. Uses prescribed phraseology.	Uses approved procedural words, phrases, and format.

Job Task: Pilot Weather Briefing

Job Subtask	Indicator
19. Obtains sufficient background data.	a. Receives request and determines actions required. b. Obtains sufficient, pertinent information to properly conduct preflight briefing.
20. Presents briefing in prescribed format.	Presents standard, abbreviated, or outlook briefing in accordance with prescribed procedures.
21. Briefs in a tailored/organized/clear/concise manner.	a. Provides information tailored to a specific flight. b. Solicits PIREPs when applicable. c. Provides other prescribed assistance or information upon request.
22. Maintains awareness of current weather and forecasts.	a. Reviews and analyzes all weather and aeronautical data. b. Indicates recognition of all significant discrepancies between actual and forecast data. c. Takes correct action in accordance with prescribed procedures, when discrepancies exist.
23. Applies VNR procedures as prescribed.	Applies VNR procedures as prescribed.
25. Maintains complete, accurate, real-time weather.	a. Solicits, disseminates, and posts PIREPs according to prescribed local procedures. b. Reviews, describes, compares, and points out significant factors depicted on the various charts used at position. c. Selects all new relevant charts and updated displays. d. Service A data and updates flight advisory.

	materials and displays.
<i>26. Develops flight advisories for routes/altitudes.</i>	Advises aircraft of alternative routes/altitudes to avoid areas of hazardous weather.

INFLIGHT**Job Task: Methods and Procedures**

Job Subtask	Indicator
1. <i>Adheres to priority of duties.</i>	Performs all position functions in accordance with locally prescribed priority of duties.
2. <i>Demonstrates ability to handle unusual situations.</i>	Demonstrates ability to handle unusual situations.
3. <i>Initiates required search and rescue situations.</i>	a. Indicates recognition of overdue aircraft. b. Attempts radio contact of overdue aircraft.
5. <i>Compiles, evaluates, records, and disseminates data.</i>	a. Records aircraft contacts. b. Uses prescribed symbols/abbreviations. c. Provides weather advisories. d. Provides flight plan services. e. Solicits/prepares/disseminates PIREPs in prescribed format when applicable. f. Performs unscheduled broadcasts. g. Issues altimeter settings as prescribed. h. Provides airport advisory services/airport information services. i. Provides special visual flight rules services. j. Provides hazardous area reporting services. k. Provides emergency services. l. Keeps airmen and weather information current. m. Provides VFR cruising level advisories.

Job Task: Equipment

Job Subtask	Indicator
7. <i>Computer entries are correct.</i>	Uses prescribed procedures for computer entries.
8. <i>Equipment capabilities are utilized/maintained.</i>	a. Operates position equipment/backup equipment using prescribed procedures. b. Uses primary/secondary radios selectively. c. Compares console instruments. d. Correctly uses aircraft orientation tools to solve problems.

9. <i>Equipment malfunctions are recognized/restored.</i>	<ul style="list-style-type: none"> a. Resets console clocks as required. b. Responds promptly to aural/visual alarms. c. Ensures status of NAVAID equipment. d. Notifies maintenance of malfunctions in accordance with prescribed local procedures.
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Job Task: Communication/Coordination

Job Subtask	Indicator
11. <i>Pre-duty/relief briefings are complete and accurate.</i>	<ul style="list-style-type: none"> a. Follows position relief checklist when exchanging information. b. Ensures that both individuals acknowledge the positive transfer of responsibility. c. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.
12. <i>Functions effectively as a team member.</i>	<ul style="list-style-type: none"> a. Maintains cooperative, professional manner. b. Is courteous and tactful. c. Is receptive to instructor's/supervisor's/team member's suggestions for improvement of job performance. d. Remains calm under stress. e. Does not use abusive or profane language. f. Conveys pertinent information to other team members in a timely manner.
13. <i>Sensitive to needs of system users.</i>	<ul style="list-style-type: none"> a. Listens and responds to user requests in a courteous and tactful manner. b. Provides additional assistance/data when requested.
14. <i>Communication is clear/concise.</i>	<ul style="list-style-type: none"> a. Has a pleasant and positive voice. b. Has clear and understandable speech rate. c. Responds promptly to aircraft calls. d. Relays ATC clearances/advisories as received from the control facility. e. Formulates message before keying transmitter.

15. Uses prescribed phraseology.	<ul style="list-style-type: none"> a. Uses approved procedural words, phrases, and formats. b. Listens for acknowledgment. c. Issues instructions that are specific. d. Ensures readbacks are correct.
16. Coordination is thorough.	<ul style="list-style-type: none"> a. Conducts intrafacility/interfacility coordination in a timely manner. b. Forwards IFR departures, progress reports, and arrival reports to ATC upon request.
17. Makes only necessary transmissions.	<ul style="list-style-type: none"> a. Uses radio/interphone only when necessary. b. Transmits only required information/instructions. c. Does not transmit separate messages when it would be more effective to combine information.
18. Coordinates with NWS and CWSU.	<ul style="list-style-type: none"> a. Alerts Weather Service Forecast Office and CWSU immediately when conditions are reported that differ from forecasts. b. Describes significant current weather changes. c. Verifies information with the NWS and CWSU.

Job Task: Pilot Weather Briefing

Job Subtask	Indicator
19. Obtains sufficient background data.	<ul style="list-style-type: none"> a. Receives requests and determines actions required. b. Obtains sufficient, pertinent information to properly conduct preflight briefing.
20. Presents briefing in prescribed format.	Presents standard, abbreviated, or outlook briefing in accordance with prescribed procedures.
21. Briefs in a tailored/organized/clear/concise manner.	<ul style="list-style-type: none"> a. Provides information tailored to a specific flight. b. Solicits PIREPs when applicable. c. Provides other prescribed assistance or information upon request.
22. Maintains awareness of current	a. Reviews and analyzes all incoming weather

<i>weather and forecasts.</i>	and aeronautical data. b. Indicates recognition of significant discrepancies between actual and forecast data. c. Takes correct action in accordance with prescribed procedures, when discrepancies exist.
23. Applies VNR procedures as prescribed.	Applies VNR procedures as prescribed.
24. Maintains complete, accurate, real-time weather.	a. Solicits, disseminates, and posts PIREPs according to prescribed local procedures. b. Reviews, describes, compares, and points out significant factors depicted on the various charts used at position. c. Selects all new relevant charts and updated displays. d. Service A data and updates flight advisory materials and displays.
25. Develops flight advisories for routes/altitudes.	Advises aircraft of alternative routes/altitudes to avoid areas of hazardous weather.

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Appendix D. En Route Instructional Program Guide (IPG)

Section 1. Introduction. This IPG includes information about the following four development stages:

- a.** FAA Academy Training (Courses 50143 and 50148001, or current courses)
- b.** Assistant Controller Training (Course 55053, or current course)
- c.** Non-radar/Radar-Associate Controller Training (Courses 55054 and 55056, or current courses)
- d.** Radar Controller Training (Courses 55055 and 55057, or current courses)

When training CPCs who have lost currency or have transferred from another facility or area of specialization, the TA must decide which portions of the instructor-led and simulation training will be administered based on the needs of the specialist.

OJT must be conducted and documented as specified in chapter 6.

Section 2. Stage 1: FAA Academy Training.**Section 2A. Air Traffic Basics (En Route).
(Course 50143 or current course)**

- 1. General:** Designed for individuals with no AT experience, this course provides the fundamental aviation/AT knowledge needed for developmentals to begin training in the En Route option.
- 2. Prerequisite:** Entry qualifications established for specific hiring source.
- 3. Location:** FAA Academy.
- 4. Training Length:** 200 hours.
- 5. Administration:** Training is administered in an instructor-led environment and includes the following topics: introduction to the AT control (ATC) system, publications, Federal Aviation Regulations, principles of aerodynamics, aircraft types and characteristics, fundamentals of navigation, pilot's environment, flight assistance and emergencies, wake turbulence, weather, and communications. Instruction is delivered through instructor-led lecture accompanied by graphics and video. Group discussions and exercises with limited hands-on practice and demonstrations are provided.
- 6. Evaluation:** Student proficiency is measured through academic block exam(s) plus a final comprehensive academic exam. A passing score of 70 percent is required on the final comprehensive exam. There are no retakes permitted.

Note: For additional or more specific information, contact the Office of Safety and Technical Training (AJI-2).

**Section 2B. Initial En Route Training.
(Course 50148001 or current course)**

- 1. General:** Initial En Route Training is designed for developmental/CPC-IT en route Air Traffic Control Specialists (ATCS). It provides job-related knowledge and skill-oriented training. The course consists of classroom instruction, part-task skills practices utilizing an interactive pc-based instructional system, and high fidelity En Route Automation Modernization (ERAM) simulation in an en route laboratory environment. Instruction provided will enable the developmental/CPC-IT to progress into field-delivered stages of AT control training.
- 2. Prerequisite:** Successful completion of the Air Traffic Basics (En Route) course or the individual has met the direct entry qualifications established for specific hiring source.
- 3. Location:** FAA Academy
- 4. Training Length:** 504 hours

5. Administration: Training is administered in an instructor-led/simulation environment and a simulated control area (Academy Airspace). Training is primarily oriented to procedural studies and demonstration/evaluation of control scenarios.

6. Evaluation: Four written and six performance assessments for a total of ten evaluations with different point values equaling 100 points (percent). Students are required to achieve a score of 70 percent in order to proceed to field training. Student grades are rounded up/down to the nearest hundredth of a point. There are no retakes allowed.

Note: For additional or more specific information, contact the Office of Safety and Technical Training (AJI-2).

**Section 3. Stage 2: Assistant Controller Training (Flight Data).
(Course 55053 or current course)**

1. General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of the assistant controller position on all sectors within an area of specialization and to attain certification on those positions.

This stage of training is administered in two parts: instructor-led training and OJT. The instructor-led training uses facility-prepared instructional materials to supplement nationally prepared materials.

2. Prerequisite: Successful completion of Initial En Route (Course 50148001 or current course) or individual meets direct entry qualifications established for specific hiring source.

3. Location: Field facility.

4. Training Length: Site specific.

5. Administration: Instructor-led training is administered using FAA nationally and facility-developed lesson plans, and conducted under the direction of the TA. Facility lesson plans must be developed for:

- a. Center/Area Chart knowledge.
- b. Flight data processing.
- c. Computer operations.

After successful completion of instructor-led training, OJT must be conducted in the operational environment in accordance with chapter 6 of this Order. The TA may delay Stage 2 OJT until completion of Stage 3 instructor-led and simulation training. Stage 2 OJT must be completed prior to starting Stage 3 OJT.

6. Instructor-Led Training and Evaluation.

a. Instructor-Led Training. The developmental/CPC-IT must successfully demonstrate the following skills and complete the following objectives.

(1) Center Area Chart. Given a center area chart depicting the location of navigational aids (NAVAID), sector boundaries, adjacent center boundaries, and special use airspace, as applicable, the developmental/CPC-IT must:

- (a) Label each NAVAID/fix with its correct identifier (including the first NAVAID outside the area).
- (b) Label sector boundaries within the student's area of specialization.
- (c) Label special use airspace.

(d) Label sector boundaries adjacent to the student's area of specialization, both intra- and inter-facility, as applicable.

(e) Other items as identified by the TA and as documented in the local training directive.

(2) Operating Communication System. Given an operational position containing a communication system (e.g., Voice Switching Control System (VSCS)), the developmental/CPC-IT must:

(a) Place outgoing calls:

- i. Locate the interphone jack/dual jack module at the assistant position.
- ii. Locate the interphone and radio jacks/dual jack module at the controller position.
- iii. Identify and state the function of the five components of a pushbutton dial.
- iv. Identify and state the function of the VSCS display module (VDM).
- v. Identify and state the function of the key panel module, short ring, ring and flash, and release keys.
- vi. Place direct access calls.
- vii. Place override calls.

(b) Receive incoming calls:

- i. Identify the basic components of the system/VDM on which incoming calls are received.
- ii. Identify the audio/visual signals for an incoming call.
- iii. Operate the radio transfer key when the:
 - (aa) Controller uses the I/R jack.
 - (bb) Controller uses the interphone jack.
 - (cc) Controller answers an interphone line.
 - (dd) Developmental/CPC-IT answers an interphone line.

(3) Flight Data Position (Non-automated). The TA may determine as documented in the local training directive, based on the configuration of the area of specialization, that no training is required on the non-automated mode of the flight data position. At the TA's discretion, and given an operational position, flight progress strips, and flight plan information, the

developmental/CPC-IT must perform the full range of flight data duties in the non-automated mode, including:

- (a) Compute sector fix postings.
- (b) Apply flight data procedures applicable to the assigned center.
- (c) Pick up and sequence the strips for delivery.
- (d) Place the strips in the appropriate bay at receiving sectors.
- (e) Post and forward flight plan information.

(4) Flight Data Position (Automated). Given an operational position in an automated environment that contains a computer entry device, the developmental/CPC-IT must:

- (a) Identify and state the function of the:
 - i. Function keys.
 - ii. Keyboard.
 - iii. Computer readout device.
 - iv. Flight strip printer.
 - v. EDST display, if applicable.
 - vi. En Route Information Display System (ERIDS) display, if applicable.
- (b) Prepare and enter computer commands in correct format.
- (c) Respond to computer-generated messages.

(d) If applicable, pick up and sequence the strips and deliver in the appropriate bay at receiving sectors.

b. The following nationally-developed lesson plans must be taught via instructor-led or CBI, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT.

- (1) Lesson Plan 1 Federal Airway & Jet Route System
- (2) Lesson Plan 2 Voice Switching and Control System (VSCS) Equipment
- (3) Lesson Plan 3 Flight Progress Strip Distribution
- (4) Lesson Plan 4 Computer Operational Equipment
- (5) Lesson Plan 5 Computer Field Format

(6) Lesson Plan 6 Computer Command Composition and Entry

c. Instructor-Led Training Evaluation.

(1) Locally prepared evaluations must be administered on the following items, as applicable:

- (a) The center chart.
- (b) Processing flight data in the non-automated and automated modes.
- (c) Computer command entry.

(2) Additional evaluations may be developed to evaluate the developmental's progress as deemed necessary to meet facility and/or individual training needs.

7. OJT. Through OJT, the developmental/CPC-IT must demonstrate the ability to satisfactorily perform the applicable job subtasks described in appendix B of this order.

**Section 4. Stage 3: Non-radar and Radar Associate Controller Training.
(Courses 55054 and 55056 or current courses)**

1. General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of a non-radar and a radar associate controller on all sectors within the assigned area of specialization and to attain certification on those sectors (Course 55054).

This stage is subdivided into three types of training: instructor-led/situational training, simulation training, and OJT. When training CPCs who have lost operational currency or have transferred from another facility or area of specialization, the TA must decide which portions of the instructor-led and simulation training will be administered based on the needs of the specialist. Pass/fail criteria must apply in this stage of training.

An optional administration of this stage of development (Course 55056) allows for the developmental/CPC-IT to attain certification on two non-radar/radar associate control positions of operation in an area of specialization. These sectors are selected for OJT and evaluation based on their potential to provide the developmental/CPC-IT with realistic but fair standards in demonstrating an ability to handle control situations anticipated in the assigned area of specialization. After successfully obtaining certification on these two sectors, the developmental/CPC-IT may proceed to the next stage of training, radar control (Course 55057). The TA may delay Stage 2 OJT until completion of Stage 3 instructor-led and simulation training. Stage 2 OJT must be completed prior to starting Stage 3 OJT.

The TA must determine, based on the needs of the facility and the developmental/CPC-IT, if the complete lesson(s) will be instructed or if a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure training is provided to correct any deficiencies identified on the end-of-lesson exam(s), when applicable.

2. Prerequisite: Successful completion of Stage 2 Classroom.

3. Instructor-led/Situational Training: This training is conducted under the direction of the facility TA using self-study guides and lesson plans developed nationally and at the local facility. Instructor-led/situational training should also include training exercises that allow the developmental/CPC-IT to apply the knowledge acquired during the self-study and instructor-led training.

4. Simulation Training: Simulation training consists of familiarization, instructional, and evaluation exercises designed to allow the developmental/CPC-IT to apply the basic skills and knowledge gained during instructor-led/situational training.

5. OJT: After successful completion of instructor-led and simulation training, OJT must be conducted in the operational environment in accordance with chapter 6 of this order.

6. Non-radar Training.

a. Non-radar Instructor-led Training. Instructor-led training must include the following:

(1) Detailed chart of assigned area of specialization. Given an unlabeled chart or sector maps of the assigned area of specialization depicting low-altitude and high-altitude NAVAID symbols, the developmental/CPC-IT must be able to depict as needed and:

(a) Label each NAVAID in the area of specialization and the first NAVAID outside the area of specialization.

(b) Label adjacent sector and facility boundaries.

(c) Label the airways extending from the first NAVAID outside the sectors.

(d) Label all intersections.

(e) Label the mileage between NAVAIDs and/or fix postings on each route segment, as determined by the TA and as documented in the local training directive.

(f) Label all minimum en route altitudes, minimum reception altitude, minimum obstruction clearance altitude, and minimum crossing altitude.

(g) Label restricted, prohibited, and warning areas and other special use areas.

(h) Label all approach control airspace, VFR towers, and FSS.

(i) Label the following information for a minimum of two airports within the area of specialization not served by a full-time approach control facility that have published penetration/approach procedures:

i. Initial penetration/approach altitude.

ii. Initial penetration/approach fix.

iii. Inbound heading/bearing/radial.

iv. Missed approach procedures and altitudes.

(2) Special Military Operations self-study guide and assessments (ES-7-2).

(3) LOAs and facility orders/directives pertinent to the assigned area of specialization.

(4) A locally-developed exam will evaluate the developmental/CPC-IT's knowledge of how to interpret the various approach plates within the area of specialization.

(5) Additional requirements as identified by the facility (e.g., depict standard instrument departures/standard terminal arrivals, depict Class B, C, D, and E airspace, Phraseology/Strip Marking self-study guide and assessment, Cold Temperature Compensation) and as documented in the local training directive.

b. Non-radar Instructor-led/Situational Training.

(1) The facility training department must instruct the following nationally-developed training:

- (a) Lesson Plan 26 Recording Clearances and Control Information
- (b) Lesson Plan 27 Radio and Interphone Communication
- (c) Lesson Plan 29 Vertical Separation
- (d) Lesson Plan 30 Longitudinal Separation
- (e) Lesson Plan 31 Lateral Separation
- (f) Lesson Plan 33 General Control and Board Management
- (g) Lesson Plan 34 IFR Clearances and Route Assignments
- (h) Lesson Plan 35 IFR Flight Direction, Altitude Assignment, and Altimeter Setting
- (i) Lesson Plan 38 Approaches
- (j) Lesson Plan 39 Initial Separation of Departures/Arrivals and Visual Separation
- (k) Lesson Plan 40 Holding Aircraft
- (l) Lesson Plan 42 Forwarding Control Information
- (m) Lesson Plan 44 Air Traffic Services
- (n) Lesson Plan 45 Lost Communication Procedures
- (o) Lesson Plan 46 Initiating Emergency Procedures
- (p) Lesson Plan 47 VFR and VFR/OTP Procedures
- (q) Lesson Plan 48 Special VFR

(2) Each facility, as determined by the TA, may develop (in accordance with the local training directive) non-radar instructor-led skills development exercises that allow developmentals to apply specific skills and knowledge acquired during academic instruction.

Example: For areas of specialization that have sectors where lack of radar coverage requires extensive use of non-radar control procedures, the TA must develop (in accordance with the local training directive) non-radar instructor-led skills development exercises. For areas of specialization that have lack of radar coverage or existing procedures that require only occasional use of non-radar control procedures, the TA may determine that no non-radar instructor-led skills development exercises need be administered.

The exercises will provide the developmental/CPC-IT with the opportunity to:

- (a) Record clearances and control information on strips.
- (b) Use correct radio and interphone message format and communication procedures.
- (c) Determine the need for separation (plotting and projecting).
- (d) Issue clearances according to priority.
- (e) Apply effective board management.

c. Non-radar Simulation Training.

(1) During the non-radar simulation stage of training, the developmental/CPC-IT will apply non-radar ATC procedures in accordance with JO 7110.65, Air Traffic Control, and other pertinent directives. Guidelines for development and administration of simulation scenarios are listed in appendix D, section 4, paragraph 6.

(2) Non-radar simulation scenarios will be conducted in a one-position sector configuration.

(3) Non-radar Familiarization Scenarios. The developmental/CPC-IT must be given non-radar familiarization scenarios on one sector in the assigned area of specialization. The scenarios will provide a highly interactive instructional environment in which the instructor and developmental/CPC-IT will be able to discuss strategies and alternatives.

(4) Non-radar Instructional/Evaluation Scenarios.

(a) Instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing non-radar ATC duties in a simulated operational environment.

(b) The TA must determine (and as documented in the local training directive) the number of non-radar instructional scenarios the developmental/CPC-IT will complete. Periodic evaluation scenarios must be conducted to determine the developmental's progress through the completion of the instructional scenarios.

Example: For areas of specialization that have sectors where lack of radar coverage requires extensive use of non-radar control procedures, the TA may require the administration of 11 instructional scenarios, with instructional scenario numbers 8 and 11 as evaluations. For areas of specialization that have sectors where lack of radar coverage or existing procedures require only occasional use of non-radar control procedures, the TA may determine that no instructional scenarios need be administered.

(c) If the developmentals' training program calls for the administration of facility-developed evaluation scenarios, they must be administered at regular intervals during the non-radar procedures simulated segment of training. The evaluations must be pass/fail. If the developmental/CPC-IT does not successfully complete the scenario, the TA may determine that SET is warranted. SET may include:

- (d) Instructor-led training.
- (e) Computer-based courseware.
- (f) Instructional scenarios.

SET must be followed by a re-evaluation scenario at the same complexity point level as that at which the failure occurred.

(g) Developmentals must be removed from training if they fail to meet the requirements for satisfactory completion of non-radar training.

(5) Non-radar Scenario Development. The following situations and procedural items must be included in the simulation scenarios. Other items may be added as deemed appropriate by the TA and as documented in the local training directive, based on their applicability in the developmental's sectors.

(a) Applying separation rules:

- i. Crossing, converging, and opposite direction traffic.
- ii. Overtakes.
- iii. Separation from: adjacent airspace, obstructions, and SUA/SAA.
- iv. Successive arrivals and departures.
- v. Simultaneous arrivals and departures.
- vi. Arrivals with altitudes inverted.

(b) Communication and coordination:

- i. Hearback/readback errors.
- ii. Transfer of control and communications.
- iii. Communication with aircraft via a method other than direct pilot-controller communication.
- iv. Inter/intra- facility coordination.
- v. Coordinate restrictions.
- vi. Verify information.

(c) Clearances and control information:

- i. IFR clearances.

- ii. Clearance to alternate airport.
- iii. VFR-on-top (VFR OTP).
- iv. VFR traffic encountering IFR.
- v. Route change in flight.
- vi. Arrivals and departures.
- vii. Approaches, including high-altitude IFR approaches.
- viii. Holding.
- ix. Airfiles.
- x. Request for altitude change at assigned altitude.

(d) Procedures:

- i. Interphone procedures.
- ii. Traffic Management Initiatives (e.g., Estimated Departure Control Time (EDCT), TBFM, SWAP, metering, flow control).
- iii. Fuel Dumping.
- iv. Approach control saturation.
- v. Special flight operations.
- vi. Military procedures (e.g., SUA/SAA, altitude reservations (ALTRVs), aerial refueling).

(e) Emergencies and Equipment Outages:

- i. Loss of communication.
- ii. In-flight emergencies.
- iii. Aircraft with Minimum Fuel.
- iv. National Airspace System (NAS) control equipment failures (e.g., communications, NAVAIDs).
- v. In-flight equipment malfunctions.
- vi. Overdue aircraft.
- vii. Hijacking.

(f) Weather:

- i. Reporting and disseminating weather information.
- ii. Changes to routes due to weather (e.g., departures, arrivals, en route).

(6) Non-radar Scenario Complexity Workload. The worksheet on the following pages (Figure D-1) is used in determining the complexity workload for each non-radar scenario. The worksheet allows inclusion of the particular characteristics encountered in each sector for which scenarios are being developed. After establishing the desired complexity level for a given scenario, use the worksheet to arrive at the desired numerical total plus or minus three points for that scenario. Local reproduction of this worksheet is approved.

Figure D-1: Control Scenario Complexity Workload Worksheet

Center:				
Scenario Number:				
Sector number:				
Point Factor: points				
I.	FUNCTIONS	NUMBER OF FUNCTIONS	POINT VALUE	TOTAL POINTS
	A. Departure		5	
	B. Arrival		4	
	C. En Route (requiring control function)		4	
	D. En Route (no control function)		2	
	E. Emergency or Radio Failure (Problems _____)		4	
	F. Special Flights (7110.65, chapter 9)		3	
	G. Required Coordination (additional points when above functions require		1	
	Totals			

Figure D-1: Control Scenario Complexity Workload Worksheet (continued)

II.	PROBLEM CONTENT	
	A. High-Altitude Instrument Approach	
	B. Sector Radio Equipment Failure (Problems _____)	
	C. Visual Separation	
	D. Special VFR	
	E. Composite Flight Plans	
	F. Airfiles	
	G. VFR OTP Flights	
	H. Inter-Center Coordination	
	I. Intra-Center Coordination	
	J. Civil Jets (climbing or descending into/out of high altitude)	
	K. Pilot Requesting Altitude Change En Route	
	L. Revisions: 1. from adjacent centers	
	2. pilot revises estimates	
	3. pilot requests route change	
	M. Direct Route Flights	
	N. SIGMETs	
	O. NOTAMs	
	P. Non-Receipt of Position Reports (not a radio failure)	
	Q. Weather Below Minimums (requiring change in destination)	

R.	Weather Below Minimums (requiring missed approach and holding for change in weather)	
S.	Two-Way Radio Communications Failure	
T.	NAVAID Failure	
U.		
V.		
W.		
X.		
Y.		
Z.		

(a) Complexity Workload. Function values are as follows:

- | | |
|--|---|
| i. Departure | 5 |
| ii. Arrival | 4 |
| iii. En Route (requiring control function) | 4 |
| iv. En Route (no control function) | 2 |
| v. Emergency or aircraft radio failure | 4 |
| vi. Special flight | 3 |
| vii. Required coordination | 1 |

Note: Add an additional point for each required coordination function associated with the above functions.

(b) Complexity Definitions.

i. A departure is defined as an aircraft that originates IFR flight in the scenario sector. A popup or airfile en route is counted as a departure.

ii. An arrival is defined as an aircraft that terminates IFR flight within the scenario

sector. An aircraft requesting special VFR flight is counted as an arrival.

iii. “En Route (requiring control function)” refers to an aircraft that originates outside and passes through the scenario sector requiring controller action.

iv. “En Route (no control function)” refers to an aircraft that originates outside and passes through the scenario sector requiring only routine communication.

v. An en route aircraft operating at an altitude under approach control jurisdiction is counted as an en route and a coordination factor.

vi. An emergency is defined as a distress or urgency condition requiring controller action. When an emergency is planned in the scenario, use an en route aircraft.

vii. When a radio failure is planned in the scenario, use an en route aircraft.

(c) Scenario Program Example. The example in Figure D-2 shows how a training program may be designed to fulfill the requirements of this stage.

Figure D-2: Sample Non-radar Simulation Scenarios

Scenario	Complexity Points	Type
A	70	Familiarization
B	75	Familiarization
C	80	Familiarization
D	80	Familiarization
E	85	Familiarization
F	85	Familiarization
G	85	Familiarization
H	90	Familiarization
I	90	Familiarization
J	90	Familiarization
1	70	Instructional
2	75	Instructional
3	80	Instructional
4	80	Instructional
5	85	Instructional
6	90	Instructional
7	90	Evaluation-Preparatory
8	90	Evaluation (Pass/Fail)
9	95	Instructional
10	95	Instructional
11	95	Evaluation (Pass/Fail)

7. Radar Associate Instructor-led/Situational Training.

a. The facility training department must provide the following instruction:

(1) FAA nationally-developed training:

(a) Lesson Plan 50 - Fundamentals of ATC Surveillance Systems for Radar Associates.

(b) Lesson Plan 51 - Radar Data Display for Radar Associates.

(c) Lesson Plan 52 - Beacon Code Assignment for Radar Associates.

(d) Lesson Plan 53 - Radar Handoff & Point Out for Radar Associates.

(e) Lesson Plan 54 - Radar Vectoring, Speed Adjustment and Scanning for Radar Associates.

(f) Lesson Plan 55 - Transfer of Position Responsibility for Radar Associates.

(g) Unmanned Aircraft Systems, eLMS Course 60004461 or current course.

(2) Backup system operations.

(3) Sector team responsibilities.

b. Each facility must develop part-task exercises that allow developmentals to apply skills and knowledge acquired during academic instruction. The exercises must provide the developmental/CPC-IT with the opportunity to:

(1) Enter computer commands from the radar associate position.

(2) Identify symbols, data, aircraft, weather, views, etc., on situation display.

(3) Make beacon code assignments.

(4) Practice radar identification and Mode C verification procedures.

(5) Practice the transfer of radar identification.

(6) Apply knowledge of radar separation minimums.

(7) Identify when to integrate non-radar procedures into a radar environment to ensure positive separation.

(8) Perform a position relief briefing.

8. Radar Associate Simulation Training.

a. During the radar associate simulation stage of training, the developmental/CPC-IT will apply ATC procedures in accordance with JO 7110.65 and other pertinent directives. General guidelines for development and administration of simulation scenarios are listed in paragraph 6 of this section.

b. All radar associate scenarios must be conducted in a two-position sector configuration with the developmental/CPC-IT working the radar associate position. The radar position must be worked by a certified radar controller, a support specialist, or a contract instructor.

Note: Radar associate and radar training may occur concurrently, provided that each developmental/CPC-IT is provided their own instructor. If concurrent training is taking place, the radar position must be worked by a certified radar controller, a support specialist, or a contract training instructor during all evaluation scenarios.

c. Familiarization Scenarios. The developmental/CPC-IT must be given radar associate familiarization scenarios on one sector in the assigned area of specialization. The scenarios will provide a highly interactive instructional environment in which the instructor and developmental/CPC-IT will be able to discuss strategies and alternatives. These scenarios should emphasize the importance of effective interaction between the radar associate and other sector team members.

d. Radar Associate Instructional Scenarios.

(1) Instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing radar associate ATC duties in a simulated operational environment.

(2) The TA must determine (and as documented in the local training directive) the number of radar associate instructional scenarios the developmental/CPC-IT will complete. Evaluation scenarios must be administered at regular intervals during the radar associate simulation segment of training. The evaluations must be pass/fail.

(3) If the developmental/CPC-IT does not meet the requirements for successful completion of the scenario, the TA may determine that SET is warranted. The SET may include:

(a) Instructor-led training, and/or

(b) Instructional scenarios.

(4) SET must be followed by a re-evaluation scenario at the same level as that at which the failure occurred.

(5) Developmentals must be removed from training if they fail to meet the requirements for satisfactory completion of radar associate training.

e. Radar Associate/EDST Scenario Development. The following situations and procedural items must be included in the familiarization and instructional scenarios. Other items may be

added as deemed appropriate by the TA, based on their applicability in the individual sectors. Scenarios may be strip-based, EDST, or a combination.

- (1) Applying separation rules (radar and non-radar):
 - (a) Crossing, converging, and opposite direction traffic.
 - (b) Overtakes.
 - (c) Separation from adjacent airspace, obstructions, and special use airspace.
 - (d) Successive arrivals and departures.
 - (e) Simultaneous arrivals and departures.
 - (f) Arrivals with altitudes inverted.
 - (g) Domestic reduced vertical separation minima (DRVSM).
- (2) Communication and coordination:
 - (a) Hearback/readback errors.
 - (b) Transfer of control and communications.
 - (c) Communication with aircraft via a method other than direct pilot-controller communication.
 - (d) Inter/intra-facility coordination.
 - (e) Coordinate restrictions.
 - (f) Verify information.
- (3) Clearances and control information:
 - (a) IFR clearances.
 - (b) Clearance to alternate airport.
 - (c) VFR on-top (VFR/OTP).
 - (d) VFR traffic encountering IFR.
 - (e) Route change in flight.
 - (f) Arrivals and departures.
 - (g) Approaches, including high-altitude IFR approaches.

- (h) Holding.
- (i) Airfiles and VFR popups.
- (j) Pilot deviations.
- (k) Request for altitude change at assigned altitude.
- (4) Procedures:
 - (a) Interphone procedures.
 - (b) Traffic Management Initiatives (e.g., EDCT, TBFM, SWAP, Metering, Flow Control).
 - (c) Fuel dumping.
 - (d) Approach control saturation.
 - (e) Special flight operations.
 - (f) Military procedures (e.g., SAA/SUA, flight breakups, responsibility for separation of aircraft [MARSA], ALTRVs, aerial refueling).
 - (g) Areas of marginal radar coverage.
 - (h) Loss of radar requiring the use of non-radar procedures.
 - (i) Traffic alert and collision avoidance system (TCAS) resolution advisory (RA).
 - (j) Presidential handling.
 - (k) Unmanned aircraft systems (UAS).
- (5) Emergencies and equipment outages:
 - (a) Loss of communication.
 - (b) In-flight emergencies.
 - (c) Aircraft with minimum fuel.
 - (d) NAS control equipment failures (e.g., communications, NAVAIDs).
 - (e) In-flight equipment malfunctions.
 - (f) Overdue aircraft.
 - (g) Hijacking.

- (h) Loss of Mode C or transponder failure.
- (i) Unexpected aircraft performance.
- (j) Suspicious aircraft.
- (6) Weather:
 - (a) Reporting and disseminating weather information.
 - (b) Changes to routes due to weather (e.g., departures, arrivals, en route).
- (7) During the radar associate simulation stage of training, the developmental/CPC-IT will perform the following in accordance with JO 7110.65:
 - (a) Issue clearances using correct phraseology.
 - (b) Forward control information using correct phraseology.
 - (c) Record clearances and control information on strips/EDST using approved symbols and abbreviations.
 - (d) Communicate using radio and interphone procedures.
 - (e) Use effective automated/manual board management techniques.
 - (f) Demonstrate situational awareness.
 - (g) Obtain information from an aircraft in an emergency and notify the proper facilities.
 - (h) Obtain and disseminate weather information.
 - (i) Demonstrate knowledge of all applicable letters of agreement.
 - (j) Demonstrate knowledge of the assigned area of specialization.
 - (k) Give and receive a position relief briefing.

f. Radar Associate Scenario Difficulty. This section covers the development of radar associate scenarios. A radar associate must control varying volumes of traffic and resolve situations of varying complexity. Volume level is the basic criterion for scenario development.

(1) Complexity factor. Scenario complexity is based on the number of situations that require a radar associate controller to apply the various procedures in JO 7110.65 such as separation, making/receiving handoffs, VFR-weather advisories, vectoring, and emergencies.

(2) Volume-level criteria. This element refers to the hourly operations rate. The hourly operations rate is based on 100 percent traffic volume from an average period of a busy day (as

defined and validated by the facility and included in the facility training directive).

(3) Guidelines for radar associate scenarios.

(a) Conflict alert must be deactivated during every other scenario and during all evaluation scenarios.

(b) Position relief briefings must be received and given on all instructional scenarios.

(4) Scenario program example. The example in Figure D-3 shows how a training program may be designed to fulfill the requirements of this stage.

Figure D-3: Sample Radar Associate Simulation Scenarios

Scenario	Volume (%)	Type
A	70	Familiarization
B	70	Familiarization
C	75	Familiarization
D	75	Familiarization
E	75	Familiarization
1	80	Instructional
2	80	Instructional
3	80	Evaluation-Preparatory
4	80	Instructional
5	80	Evaluation (Pass/Fail)
6	85	Instructional
7	85	Instructional
8	90	Instructional
9	90	Instructional
10	90	Evaluation (Pass/Fail)
11	95	Instructional
12	95	Instructional
13	95	Instructional
14	100	Instructional
15	100	Evaluation (Pass/Fail)

9. Additional Scenarios. Following the successful completion of the evaluations and prior to the start of OJT, additional scenarios may be administered. The number and duration of scenarios will be determined by the TA based on the needs of the area of specialization.

10. Non-radar/Radar Associate/EDST Scenario Guidelines. The following guidelines are designed to assist in the development of scenarios. The guidelines also provide for standard administrative procedures. All personnel involved in the development of scenarios for use in the National En Route Traffic Training program must follow these guidelines.

a. Development Guidelines.

(1) Each scenario must be a minimum of 30 minutes in duration. In addition, 50 percent of the scenarios in this stage must be 60 minutes in duration, including all evaluation and pre-evaluation scenarios.

(2) Scenarios must progress in complexity. It is necessary to complete scenarios at the lowest level of complexity first and progressively work up to the highest.

(3) Scenarios should reflect the current operations in the area of specialization.

(4) When weather is a factor in the scenario, this must be indicated in the scenario Instructor Guide and Remote Guide to ensure that the remote position will have the necessary information.

b. Administrative Guidelines.

(1) The TA will determine the sector and the number of scenarios the developmental/CPC-IT must complete.

(2) A preparatory evaluation scenario must be administered prior to the first evaluation scenario.

(3) The instructor must assist as necessary to maintain problem continuity, except during evaluation scenarios.

(4) Developmentals cannot be evaluated on any procedures or situations that they have not had experience with in previous scenarios.

(5) The results of the developmental's performance during each scenario must be recorded on FAA Form 3120-25 and discussed with the developmental/CPC-IT (see appendix B for instructions). Forms used during the simulation scenario(s) must be retained and filed. (See chapter 5, section 1 for instructions.)

(6) If the developmental/CPC-IT does not meet the requirements for successful completion, the provisions of HRPV Volume 1: Employment (HRPV EMP) -1.14a must be followed.

c. Instructor Guide. An instructor guide must be developed for each control scenario. The

purpose of the guide is to relay instructional intent from the scenario developer to the lab instructor. The guide must be divided into three sections:

- (1) Information for instructor. This section describes the scenario content and objectives.
- (2) Instructor action. This section describes the actions required to accomplish the scenario objectives.
- (3) Developmental/CPC-IT application and technique. This section lists the information to be provided to the developmental/CPC-IT prior to the start of the scenario (e.g., scenario objectives and starting conditions).
- (4) Remote Guide. A remote guide must be developed for each control scenario. This guide provides the remote controller with instructions essential to the scenario (e.g., remote strips, scenario plus time, next-fix estimates, and initial contact times). Any pertinent remarks, such as when to declare an emergency, the type of emergency and pilot's intentions, altitude requests, destination changes, fuel problems, etc., should be noted in the remote guide as well as the instructor guide.

12. OJT. Non-radar/Radar Associate Position Operation. Through OJT, the developmental/CPC-IT must demonstrate the ability to satisfactorily perform the applicable job subtasks listed in appendix B of this order.

13. OJT Checklist. OJT checklists should be used as a mutual training tool for the OJT and the developmental/CPC-IT. When a checklist is used, the developmental/CPC-IT must be provided with the appropriate stage checklist during the initial training team meeting for that stage. Facilities may develop checklists locally. A sample OJT checklist of Radar Control is provided as an example. Completed OJT Checklist forms must be retained with other required training documentation.

Figure D-4: SAMPLE COURSE CHECKLIST


		COURSE 55054/55056 OJT CHECKLIST		
NAME:		OJTI	DEV	DATE
1.	Initiate and accept radar hand-offs and pointouts.			
a.	Transfer of radar identification.			
(1)	Physically point to target on receiving controller's display.			
(2)	Use landline voice communications.			
(3)	Use automation capabilities.			
b.	Uses proper procedures and phraseology in accomplishing hand-off, point out or issuing traffic restrictions, and relaying information.			
(1)	Primary target.			
(2)	Limited data block.			
(3)	Full data block.			
c.	Uses proper procedures in receiving a hand-off, point out, or traffic restrictions, and responding to the transferring controller.			
(1)	Primary target.			
(2)	Limited data block.			
(3)	Full data block.			
2.	Perform appropriate changeover procedures to transition to and from backup system.			
a.	Channel A/B			
b.	EBUS or other backup system/strips.			
3.	Maintain separation using prescribed standards.			
a.	Successive departures.			
(1)	Diverging courses.			
(2)	Same course departures.			
b.	Initial separation of departing and arriving aircraft.			
(1)	Utilize visual separation with a non-approach control between aircraft in controlled airspace.			

Figure D-4: SAMPLE COURSE CHECKLIST (continued)

COURSE 55054/55056 OJT CHECKLIST		Page 2		
NAME		OJTI	DEV	DATE
c.	Longitudinal separation.			
d.	Lateral separation.			
e.	Vertical separation.			
4.	Issue departure clearances.			
a.	Issue clearance items in the correct order.			
b.	Issue specific departure instructions as needed.			
c.	Use proper phraseology when issuing clearances to FSS.			
d.	Use abbreviated departure clearances when appropriate.			
5.	Provide beacon code assignments to IFR aircraft.			
a.	Issue beacon code in a departure clearance.			
6.	Provide assistance to aircraft experiencing inflight emergencies.			
a.	Uses emergency checklist.			
b.	Coordinates all pertinent information to the appropriate facilities sectors and the Front Line Manager.			
7.	Provide control to aircraft experiencing radio communication failure.			
a.	Recognize the significance of 7700/7600 codes.			
b.	Understands the different ways to contact the aircraft; i.e., FSS, Aeronautical Radio, Inc. (ARINC).			
8.	Employ holding procedures.			
a.	Clear aircraft to holding fix.			
b.	Clearance beyond the fix.			
c.	Record METER times and keep strips in correct sequence.			
d.	Loss of communications.			
9.	Recognize sector saturation and employ procedures to prevent or alleviate this control problem.			
a.	Informs the Front Line Manager			
b.	Coordinates EDCTs with towers and/or pilots when necessary			

c.	Coordinates with adjacent sectors.			
10.	Provide weather advisories.			
a.	Broadcasts SIGMETs and CWAs.			
b.	Solicits PIREPs.			
11.	EDST			
a.	Manage EDST Windows			
b.	Investigate and Prioritize alerts			
c.	Respond to color coding in aircraft list (Alerts, IAFDOF, UTM, etc.)			
d.	Utilize EDST flight data management tools (free text, speed/heading, etc.)			
e.	Amend flight plans			
f.	Effectively use trial planning			
12.	ERIDS			
13.	Maintain board management.			
a.	Uses proper strip marking procedures.			
b.	Sequences flight progress strips in chronological order of arrival over fix.			
c.	Retains only necessary and current flight progress strips and information.			
14.	Enter flight data into computer as required.			
a.	Working knowledge and functional use of QAK.			
15.	Effectively communicates over interphone or radio.			
a.	Uses proper procedures and phraseology.			
b.	Demonstrates working knowledge of VSCS and its capabilities.			
c.	Knows location of jacks for, and how to access VTABS.			
16.	Apply hijacked aircraft control procedures.			
a.	Knows the Mode 3/A Code 7500 and the proper response.			
b.	Knows the proper procedure for handling a hijacked aircraft.			
17.	Position relief briefings are in accordance with JO 7210.3, Facility Operation and Administration.			

18.	Knows procedure for recording traffic counts. (Computer and manual)			
19.	Understands duties when a Tracker is utilized.			
I certify that all items in this checklist have been completed.				
Front Line Manager			Date	
OJTI			Date	
Developmental/CPC-IT			Date	
Forward to Training Administrator when checklist is completed and signed.				

**Section 5. Stage 4: Radar Controller Training.
(Courses 55055 and 55057 or current courses)**

1. General: The purpose of this development stage is to qualify the developmental/CPC-IT to perform the full range of duties and attain certification on all radar positions of operation in an area of specialization (Course 55055).

This stage is subdivided into three types of training: instructor-led/situational training, simulation training, and OJT. Portions of this stage of training may be used for specialists who have lost their operational currency or specialists who have transferred from another facility or area of specialization. The TA must ascertain which portions of this stage will be administered based on the needs of the specialist. Pass/fail criteria must also apply in this stage of training.

An optional administration of this stage of development (Course 55057) allows for the developmental/CPC-IT to attain certification on radar positions in an area of specialization after they have certified on two radar associate positions. After successfully obtaining certification on these two sectors, the developmental/CPC-IT must be required to qualify on all remaining radar associate/radar sectors within the assigned area of specialization. The developmental/CPC-IT must be required to certify on a radar associate position before proceeding to the associated radar position. If the developmental/CPC-IT is unable to receive OJT on the next available radar position, he/she should be given OJT on the next available radar associate position. The certification process should be radar associate-radar, etc. Certification on the radar associate position will precede certification on the radar position (Log as Course 55057).

2. Prerequisite: Successful completion of Course 55053, Stage 2, Assistant Controller Training. The TA may combine Stage 3 and Stage 4 instructor-led training. However, the developmental/CPC-IT cannot start OJT on a radar position until they have completed course 55054 or 55056.

3. Location: Field facility

4. Training Length: Site-specific

5. Administration: Instructor-led training is administered using FAA nationally and facility-developed course materials for instruction of ATC procedures. This academic component of training consists of instructor-led training and adequate practice using CBI and/or TTL exercises, as applicable.

Simulation training consists of TTL or simulation lab time to administer the necessary familiarization, instructional, and evaluation scenarios.

After successful completion of instructor-led and simulation training, OJT must be conducted in the operational environment in accordance with chapter 6.

6. Instructor-Led/Situational Training.

a. The facility training department may instruct the following FAA nationally-developed training for Courses 55055 and 55057. The TA must determine, based on the needs of the

facility and the developmental/CPC-IT, if the complete lesson(s) will be instructed or if a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure training is provided to correct any deficiencies identified on the end-of-lesson exam(s), when applicable.

- (1) Lesson Plan 1 - Fundamentals of ATC Surveillance Systems
- (2) Lesson Plan 2 - Radar Data Display
- (3) Lesson Plan 3 - R-Position Equipment
- (4) Lesson Plan 4 - R-Position Command Entry
- (5) Lesson Plan 5 - Beacon Code Assignment
- (6) Lesson Plan 6 - Radar Identification
- (7) Lesson Plan 7 - Radar Handoff and Pointout
- (8) Lesson Plan 8 - Radar Separation and Safety Alerts
- (9) Lesson Plan 9 - Radar Vectoring
- (10) Lesson Plan 10 - Radar Departures and Arrivals
- (11) Lesson Plan 11 - Speed Adjustment
- (12) Lesson Plan 12 - Radar Emergencies
- (13) Lesson Plan 13 - Additional Services
- (14) Lesson Plan 14 - Transfer of Position Responsibility
- (15) Lesson Plan 15 - Radar Controller Scan
- (16) eLMS Course 60004744 (or current course) Time Based Flow Management (TBFM) En Route ATCS

b. Radar Qualification Examination.

(1) Prior to entering a simulated radar environment, the developmental/CPC-IT must pass the en route radar qualification examination obtained from eLMS Course 55514001 or current course. If the developmental/CPC-IT does not meet the requirements for successful completion of the examination, the TA may determine that SET is warranted.

(2) SET may include:

- (a) Additional instructor-led training, and/or

(b) Computer-based training.

(3) If the developmental/CPC-IT does not pass the radar qualification examination after additional training, the provisions of HRPM EMP - 1.14a must be followed.

c. Area-Specific Training.

(1) Additional basic skills training must result in the developmental/CPC-IT being able to accomplish the following:

(2) Locate and identify each radar system serving the assigned area of specialization.

(3) Describe the radar coverage and any limitation pertaining to the area of specialization and adjacent areas.

(4) Identify the radio equipment and landlines associated with the radar positions.

(5) Explain in detail applicable LOAs and any special procedures.

(6) The TA must develop an evaluation instrument to assess area-specific knowledge.

7. Simulation Training.

a. Familiarization Scenarios. These scenarios should provide a highly interactive instructional environment in which the instructor and developmental/CPC-IT will be able to discuss strategies and alternatives related to the performance of air traffic duties. The scenarios should emphasize the importance of effective interaction between the radar controller and other team members.

b. Instructional Scenarios. These scenarios provide the developmental/CPC-IT with the opportunity to practice performing radar ATC duties in a simulated operational environment.

c. General Guidelines.

(1) Given a radar sector in the assigned area of specialization, the developmental/CPC-IT will apply ATC procedures in accordance with all applicable directives.

(2) The developmental/CPC-IT must complete scenarios at a lower level of complexity first and progressively work to the highest.

(3) The results of the developmental's performance during each scenario must be recorded on FAA Form 3120-25 and discussed with the developmental/CPC-IT. (See appendix B.) Forms used during evaluation scenarios must be retained in the developmental's training folder as specified in chapter 5, section 1.

(4) Scenarios must be a minimum of 30 minutes in duration. In addition, 50 percent of the scenarios in this stage must be 60 minutes in duration, including all evaluation and pre-evaluation scenarios.

(5) The developmental/CPC-IT must be given radar familiarization scenarios on one sector in the assigned area of specialization.

(6) Instructional scenarios must be conducted in a two-position sector configuration with the developmental/CPC-IT working the radar position. The radar associate position may be worked by a certified radar controller, a support specialist, a contract training instructor, or an individual who has completed Stage 3 training. Radar associate and radar training may occur concurrently provided that each developmental/CPC-IT is provided their own instructor.

(7) If concurrent training is taking place, the radar associate position must be worked by a certified radar controller, a support specialist, a contract training instructor or an individual who has completed Stage 3 training during all evaluation scenarios.

(8) The TA must determine the sector and the number of radar simulation scenarios that the developmental/CPC-IT will complete. Periodic evaluation scenarios must be conducted to determine the developmental's progress through the completion of the instructional scenarios.

Example: The TA may require the administration of five familiarization and fifteen instructional radar scenarios, with instructional scenario numbers 5, 10, and 15 as evaluation scenarios.

(9) Evaluation scenarios must be administered at regular intervals during the instructional scenario segment of training. The evaluations must be pass/fail.

(10) A preparatory evaluation scenario must be administered prior to the first evaluation scenario.

(11) Developmentals cannot be evaluated on any procedures or situations that they have not had experience with in previous scenarios.

(12) The instructor must assist, as necessary, to keep scenario continuity, except during pass/fail evaluation scenarios.

(13) If the developmental/CPC-IT does not meet the requirements for successful completion of the scenario, the TA may determine that SET is warranted. This training may include:

- (a) Instructor-led training,
- (b) Computer-based training, and/or
- (c) Scenarios.

Note: SET will be followed by an evaluation scenario at the same level as the scenario that the developmental/CPC-IT did not complete satisfactorily.

(14) If the developmental/CPC-IT does not meet the requirements for successful completion after SET, the provisions of HRPM Volume 1: Employment (HRPM EMP) -1.14a

must be followed.

d. Guidelines for the Development of Simulation Scenarios.

(1) Complexity factors. Complexity factors are those situations which require a radar controller to apply the various procedures in JO 7110.65 and other applicable directives. See examples in appendix D, section 5. The number of complexity factors in a scenario must be increased as the volume level is increased.

(2) Volume level criteria. See appendix D, section 4, for detailed instructions.

(3) Instructor Guide and Remote Guide. See appendix D, section 4, for instructions.

(4) Conflict alert must be deactivated during every other scenario and during all evaluation scenarios.

(5) Scenarios must include unusual situations and seldom-used procedures.

(6) Scenarios should reflect the current operations in the developmental's area of specialization.

(7) Position relief briefings must be received and given on all simulation scenarios.

e. Radar Instructional Scenario Complexity Factors. The following complexity factors (situations and procedural items) should be included in the scenarios based on their applicability in the area of specialization. The TA must determine (and as documented in the local training directive) which of the following situations and procedural items will be included in the evaluation scenarios.

(1) All radar identification methods and radar termination.

(2) Vectoring (e.g., to geographical point, to final approach course, for separation, departures, off route, around weather, no-gyro, flight breakup, sequencing VFR aircraft, TBFM).

(3) Departures and arrivals simultaneously in sector.

(4) Separation (e.g., overtaking situations; crossing, converging, and opposite direction traffic, visual; from adjacent airspace, obstructions, and special activity airspace (SAA); primary to primary, beacon to beacon, and beacon to primary; radar and non-radar).

(5) Request to VFR/OTP.

(6) Request control from adjacent controller.

(7) Release control to adjacent controller.

(8) Service to VFR aircraft (e.g., encountering IFR, providing advisories, safety alerts, vectors).

- (9) Cancellation of IFR.
- (10) Inflight emergency.
- (11) Special flight operations.
- (12) Aircraft with minimum fuel and fuel dumping.
- (13) Aircraft equipment failures (e.g., communications, navigation equipment, Mode C, and/or transponder failure).
- (14) Request for altitude change.
- (15) Successive arrivals and departures.
- (16) Approach control saturation.
- (17) Arrivals with altitudes inverted.
- (18) Traffic Management Initiatives (e.g., miles in trail, reroutes, TBFM, SWAP, metering, flow control)
- (19) Military procedures (e.g., change in destination, aerial refueling, ALTRVs, formation flights, MARSAs, high-altitude penetration, IFR military training routes and VFR military training routes, etc.).
- (20) Weather (e.g., route change in flight, change in departure/arrival route, deviations, below minimums requiring missed approach and holding, etc.).
- (21) Communicating with aircraft via methods other than direct pilot-controller communication.
- (22) Marginal radar coverage.
- (23) Loss of radar requiring the use of non-radar procedures.
- (24) Control equipment failures (e.g., NAVAIDs, radar, and communications).
- (25) Handoffs and pointouts (e.g., sector to sector, facility to facility, in relation to preceding flights, etc.).
- (26) Refusal, non-compliance, and/or non-receipt of clearance, unexpected aircraft performances, erroneous readbacks, etc.
- (27) Holding (e.g., implementing and recovering from holding procedures, loss of communications, alternate airport, minimum fuel, re-identifying aircraft).
- (28) Clearances (e.g., IFR, approaches, to alternate airport, etc.).

- (29) Obtaining and disseminating weather information.
- (30) Application of approach control procedures and/or services (e.g., arrival and departure, simultaneous and successive).
- (31) Hijack.
- (32) Airfiles and popups.
- (33) Air evacuation or air ambulance (MEDEVAC).
- (34) Overdue aircraft.
- (35) TCAS RA.
- (36) NOTAMs.
- (37) Suspicious aircraft.
- (38) Other (specify).

f. Scenario Program Example. Figure D-5 shows an example of how a training program may be designed to fulfill the requirements listed above.

Figure D-5: Sample Radar Simulation Scenarios

Scenario	Volume (%)	Type
A	70	Familiarization
B	70	Familiarization
C	75	Familiarization
D	75	Familiarization
E	75	Familiarization
1	80	Instructional
2	80	Instructional
3	80	Evaluation-Preparatory
4	80	Instructional
5	80	Evaluation (Pass/Fail)
6	85	Instructional
7	85	Instructional
8	90	Instructional
9	90	Instructional
10	90	Evaluation (Pass/Fail)
11	95	Instructional
12	95	Instructional
13	95	Instructional
14	100	Instructional
15	100	Evaluation (Pass/Fail)

8. Additional Scenarios.

a. Following successful completion of the evaluations and prior to the start of OJT, additional control scenarios may be administered on each sector in the developmental's area of specialization. These scenarios are intended to introduce the developmental/CPC-IT to sector-specific operations and traffic flows.

b. The scenarios will provide a highly interactive instructional environment in which the instructor and developmental/CPC-IT will be able to discuss strategies and alternatives.

c. The number of scenarios will be determined by the TA based on the needs of the area of specialization.

d. Control scenarios may use combined sector and position configurations.

9. Recovery in ATC Operations.

a. Training must be conducted in three parts: classroom discussion with examples, performance in laboratory and/or part task scenarios, and post-scenario discussions. If possible, the training team that will instruct the student during the OJT process should also participate in the student's recovery training.

b. A minimum of four laboratory or part-task scenarios involving Recovery in ATC Operations must be administered prior to the start of OJT. These scenarios are intended to introduce the student to methods of re-establishing the correct margin of safety in response to an unsafe situation/outcome.

c. The scenarios are non-pass/fail with no time limit established. The scenarios must provide an interactive instructional environment in which the instructor and student are able to discuss methods of recovery, strategies, and alternatives that assist in re-establishing minimum separation. Post-scenario discussions should include inadequate recovery actions to mitigate the event, other recovery actions that could be taken to mitigate the event, possible controller actions that could make the event worse, and situations where no recovery actions were necessary.

d. At the TA's discretion, scenarios may include: converging aircraft, aircraft climbing through the altitude of a level aircraft, faster aircraft climbing through the altitude of a slower preceding aircraft, aircraft simultaneously climbing and descending, compression, aircraft missing the read-back of a climb or descent clearance, similar-sounding call sign aircraft, aircraft responding to a TCAS RA, loss of data blocks (target only), transposed call signs, lost communication, emergencies, etc.

10. OJT.

a. Through OJT, the developmental/CPC-IT must demonstrate the ability to satisfactorily perform the applicable job subtasks described in appendix B of this order.

b. Developmentals/CPC-ITs must receive a minimum of one hour of instruction on backup systems (e.g. VTABS, EBUS, BUEC, Emergency PTT, Guard, Standby transmitters, etc.), as determined by the TA, prior to certification on the first radar sector.

c. Developments/CPC-ITs must receive a minimum of 1 hour of instruction working the Radar Coordinator (Tracker/Hand-off) position prior to certification on their final radar position. This training must be documented on FAA Form 3120-25.

11. OJT checklists should be used as a mutual training tool for the OJTI and the development/CPC-IT. When a checklist is used, the developmental/CPC-IT must be provided with the appropriate stage checklist during the initial training team meeting for that stage. Facilities may develop checklists locally. A sample OJT checklist of Radar Control is provided as an example. Completed OJT Checklist forms must be retained with other required training documentation.

Appendix E: Flight Service (FS) Instructional Program Guide (IPG)

Section 1. Introduction

This IPG includes information about the following two components of FS qualification and certification training:

1. Initial FS Training. Includes Alaskan FS classroom training, contractor classroom training, or approved equivalent.

2. Facility FS Training. Includes facility or area qualification and certification.

Target hours for the completion of each operational position must be assigned according to the facility training directive. OJT must be assigned as specified in chapter 6. SET and other forms of training may be recommended by the individual's training team, as necessary, to provide the individual with every opportunity for success.

Performance and certification skill checks must be performed and documented as specified in chapter 6.

Section 2. Stage 1: Initial Flight Service Training**Section 2A. Air Traffic Basics (Flight Service)**
(Course 50243 or current course)

- 1. General:** Designed for newly-hired individuals with no AT experience, or for non-AT employees selected for the AT option, this course provides the necessary aviation/AT fundamental knowledge needed to prepare students to begin training in their specific AT option.
- 2. Prerequisite:** Entry qualifications established for specific hiring source.
- 3. Training Length:** 200 hours.
- 4. Administration:** Training is administered in a classroom/laboratory environment utilizing prepared instructional materials, and includes an introduction to the ATC system, publications, Federal Aviation Regulations, principles of aerodynamics, aircraft types and characteristics, fundamentals of navigation, pilot's environment, flight assistance and emergencies, wake turbulence, weather, and communications. Instruction includes classroom lecture accompanied by graphics and video, and group discussions and exercises with limited hands-on practice and demonstrations. Students are evaluated using block tests and a final comprehensive test.
- 5. Training Contents:** Course 50243 contains these areas of instruction:
 - Air Traffic Control system and the NAS
 - Teamwork in the AT control environment
 - Airports
 - Separation of aircraft
 - Notices to airmen (NOTAM)
 - Fundamentals of radar
 - Introduction to FAA orders and manuals
 - Introduction to letters of agreement (LOA) and standard operating procedures (SOP)
 - Airspace
 - Introduction to Federal Aviation Regulations
 - Federal Aviation Regulations, Part 91

- Principles of flight
- Wake turbulence
- Aircraft characteristics and recognition
- Basic air navigation
- Radio and satellite navigation
- Visual flight rules (VFR) charts and publications
- En route IFR charts
- Standard instrument departures (SID) and Standard terminal arrivals (STAR)
- Approaches
- Pilot's environment
- Introduction to emergencies
- Search and rescue
- Fundamentals of weather and aviation weather services
- Hazardous weather
- Current weather
- Pilot weather reports
- Forecasts and advisories
- Basic communications
- Strip marking
- AT control clearances

**Section 2B. Flight Service Initial Training
(Course 55255001 or current course)**

1. General: Initial training specifically for the FS option, this course is designed for students who have completed Course 50243, controllers transferring from either the terminal or en route option, or facility rated military controllers. It provides the necessary FS and weather knowledge to prepare students to begin OJT at a field FS station.

2. Prerequisite: Successful completion of Course 50043, 50143, or 50243

or

Successful completion of Stage 1 training for En Route or Terminal option

or

Full performance-level rating from a military air traffic control facility and approval by AJI-2

or

Individual meets direct entry qualifications established for specific hiring source

or

Approval by AJI-2.

3. Training Length: 44 days/344 hours.

4. Administration: Training is administered in a classroom/laboratory environment utilizing prepared instructional materials. Training is specific and fast-paced, and includes the communications systems, the operational computer system, flight data, search and rescue, weather observations, weather analysis, weather radar and weather satellite data interpretation, broadcast, aircraft orientation, inflight, and preflight. Training is focused on performance through job-simulation exercises during laboratory sessions. After successful completion of initial FSS training, the developmental is qualified to begin OJT. This course is pass/fail with an overall score of 70 percent required to pass. Although not required to pass *this* course, there are three written tests and the operational computer system examination that must be passed prior to beginning OJT. If these tests are not passed initially, they must be retaken at the facility until they are passed.

5. Training Contents: This course contains thirteen modules of instruction.

a. Instruction.

Module 1: Introduction (10 hours)

(1) Provides FS specialists an orientation to the FAA organization, the Air Traffic Organization, and contractor organizations and systems.

(2) Topics presented include human relations, general rules and procedures, the FSS mission, training requirements, and career progression.

Module 2: Weather Analysis

- (1) Fundamentals of weather needed to provide effective pilot weather briefings.
- (2) Instruction in weather basics, weather products, and the hazardous effects on flight of certain weather phenomena.
- (3) Upon completion, students take the FAA Weather Analysis Written Test.

Module 3: Weather Radar Interpretation

- (1) Introduces students to the fundamentals of weather radar.
- (2) Topics include the NWS radar network, types of radars, components of the radar, characteristics of the radar beam, and interpretation of radar reports, charts, mosaics, and local Weather Surveillance Radar displays.

Module 4: Satellite Interpretation

- (1) Emphasis is on the various cloud features that identify the locations, including altitude, of aviation weather hazards. Exercises for hands-on training.
- (2) Upon completion, students take the FAA Weather Satellite Interpretation Written Test.

Module 5: Flight Plan Processing (28 hours classroom, 16 hours lab exercises)

- (1) Students are provided with the training and skills to process and modify flight plans and transmit and edit flight movement messages.
- (2) Specific instruction in flight plan processing and handling, and Service B edit procedures. Hands-on training through practice and laboratory exercises.

Module 6: Broadcast and Weather Briefing Basics (12 hours classroom)

- (1) A basic overview of broadcast procedures and terminology, Telephone Information Briefing Service (TIBS) contents and procedures, the weather products associated with weather briefing elements, and phraseology for delivering weather products.
- (2) Hands-on training through classroom exercises.

Module 7: Preflight (24 hours classroom, 24 hours lab exercises)

- (1) Fundamentals of the three types of pilot weather briefings, incorporating alphanumeric and graphical weather and aeronautical products, and logging the briefings.
- (2) Hands-on training through the use of practice and laboratory exercises.

Module 8: Inflight (28 hours classroom, 24 hours lab exercises)

(1) Procedures for providing inflight services, requesting and relaying ATC clearances and instructions, handling emergency inflight situations, and soliciting and disseminating pilot weather reports.

(2) Hands-on training through practice and laboratory exercises.

Module 9: Aircraft Orientation (16 hours classroom, 16 lab exercises)

(1) Background information on orientation procedures. Students are introduced to the operating principles of the non-directional beacon (NDB) and very high frequency omnidirectional range (VOR). Students are taught phraseology used during emergency orientation situations.

(2) Hands-on training through practice and laboratory exercises involving simulated lost aircraft scenarios.

Module 10: Search and Rescue (14 hours classroom, 16 hours lab exercises)

(1) Procedures and responsibilities for reporting, coordinating and performing communications searches for missing/overdue aircraft.

(2) Hands-on training through practice and laboratory exercises involving simulated missing/overdue aircraft scenarios.

Module 11: NOTAMs (14 hours classroom, 12 hours lab exercises)

(1) Students are provided with the training and skills to process NOTAMs.

(2) Specific instruction in issuing and cancelling NOTAMs.

(3) Hands-on training through the use of practice and laboratory exercises.

Module 12: Weather Transmit and Data Edit (36 hours classroom)

(1) Provides students with an introduction to weather data retrieval, data entry and editing weather and Service B messages.

(2) Hands-on training through practice and laboratory exercises.

Module 13: Combined Lab Exercises (32 hours lab exercises)

(1) Provides scenario-based training in a simulated Flight Service Station environment. Students practice all the job functions normally performed at a one-person FSS, combining all elements of Flight Service operations.

(2) Hands-on training through practice and laboratory exercises.

b. Evaluation.

(1) Student proficiency is measured through the use of end-of-lesson tests, academic block tests, and three additional weather specific tests covering the following areas. Unless otherwise specified, the minimum passing score is 70 percent.

(a) Block Test I: Modules 5, 6, 7, 8.

(b) Block Test II: Modules 9, 10, 11, 12.

(c) Weather Analysis Written Test - Module 2.

(d) Weather Radar Written Test - Module 3.

(e) Weather Satellite Interpretation Written Test - Module 4.

(2) Laboratory exercises to evaluate performance skills are scheduled during Modules 5, 7, 8, 9, 10, 11 and 13.

**Section 3. Stage 2: Facility Flight Service Training
Facility or Area Qualification/Certification**

Overview: Facility Flight Service Training, Facility or Area Qualification/Certification is comprised of several courses that are administered at the field facilities. Each course is described in detail on the following pages. Some courses may not apply to all locations. Required positions and training hours are indicated in the facility training directive.

Facilities using Aeronautical Information System Replacement (AISR) for backup must include AISR equipment training.

- Area Knowledge (Course 55239): Provides the developmental with knowledge specific to the assigned facility or area necessary to begin position qualification training.
- Flight Data (Course 55242): OJT for position qualification and certification to perform flight data duties.
- NOTAM (Course 55243): OJT for position qualification and certification to perform NOTAM duties.
- Preflight (Course 55244): OJT for position qualification and certification to perform preflight duties.
- Inflight (Course 55245): OJT for position qualification and certification to perform inflight duties.
- Weather Observer (Course 55240): OJT for position qualification and certification to perform weather observer duties.
- Broadcast (Course 55241): OJT for position qualification and certification to perform broadcast duties.
- OASIS Specialist Training (Course 55248): Familiarizes the specialist with all the functions, capabilities and correct application of the operational computer system.

Section 3A. Area Knowledge
(Course 55239 or current course)

1. General: The purpose of this development stage of training is to provide the developmental with the knowledge necessary to begin position qualification training. This section provides knowledge unique to each FSS.

2. Prerequisite: Successful completion of section 2 administered by Alaskan FS classroom training, contractor academy training, or approved equivalent; or previous FSS certification. Additional prerequisites may be established by the manager and must be identified in the local training directive.

3. Objective: At the successful completion of this section of training and any required equipment training, the developmental is qualified to begin position qualification training.

4. Training Length: In accordance with local directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the manager adopts this recommendation, the developmental is processed in accordance with HRPM 1.14a or other appropriate directives.

5. Administration: A classroom environment using locally-developed training materials.

A standard Area Knowledge package must be developed for each respective flight plan area (FPA) or area of responsibility (AOR). The Area Knowledge package is divided into two sections, an “open-book” and a “closed-book” section, and at the discretion of the manager may consist of drawing maps, written exams, computer-based exams, or any combination. Answer keys must be developed for all written or computer-based exams.

This section of training is administered on a pass/fail basis. The developmental is required to complete the:

- a. Open-book examination, using available references, with a minimum score of 90 percent.
- b. Closed-book examination, without references, with a minimum score of 70 percent.

6. Examinations.

a. Open Book. Requires a general working knowledge and can include, but is not limited to, the following subjects, with associated point values assigned.

- (1) Public use (non-major) airports in the FPA or AOR.
- (2) Airways in the FPA or AOR.
- (3) ARTCC/approach control sector boundaries in the FPA or AOR.
- (4) General knowledge of adjacent FPAs or AORs.

- (5) Use of aeronautical charts and publications, both paper and computer-based.
- (6) Interphone line structure in the FPA or AOR.
- (7) Knowledge unique to the FPA or AOR.
- (8) MTR/military operations area (MOA) structure in the FPA or AOR.

b. Closed Book. Requires detailed knowledge and can include, but is not limited to, the following subjects, with associated point values assigned.

- (1) Major airports (as determined by the manager).
- (2) VOR, VOR/DME (collocated VOR and distance measuring equipment), and VORTAC (collocated VOR and tactical air navigation) locations and identifiers (not frequencies) in the FPA or AOR.
- (3) ARTCC boundaries (not sectors) in the FPA or AOR.
- (4) FSS remote communications outlet (RCO) locations in and adjacent to the FPA or AOR.
- (5) Weather radar locations in and adjacent to the FPA or AOR.
- (6) Restricted areas in the FPA or AOR.
- (7) Special flight rules areas (SFRA) in the FPA or AOR.
- (8) Prominent terrain features in the FPA or AOR (as determined by the manager).
- (9) Weather patterns applicable or unique to the FPA or AOR (as determined by the manager).
- (10) Airports with an instrument approach in the FPA or AOR.
- (11) Local directives, LOAs, and SOPs.
- (12) Knowledge of ATC radar coverage in the FPA or AOR.
- (13) Control tower and/or Class B, C, or D information in the FPA or AOR.

7. Guidelines for Developing the Area Knowledge Package. The area knowledge guidelines are items that can be added to, or deleted from, depending on the local needs.

a. Landing Areas.

- (1) City and airport name.
- (2) Location (mileage and direction).

- (3) Airport identifier.
 - (4) Longest runway, facilities, and fuel.
 - (5) Airports restricted to light aircraft due to length of runways, conditions, etc.
 - (6) Elevation and remarks.
 - (7) Jet arresting barriers.
 - (a) Type.
 - (b) Runway.
 - (8) Designated jet instrument runway.
 - (9) Runway restrictions (weight, etc.).
 - (10) Civilian open to transient military aircraft.
 - (11) Military open to civil aircraft.
 - (a) Method of obtaining approval.
 - (b) Method of obtaining arrival/departure information.
 - (12) Visual approach slope indicator (VASI) or precision approach path indicator (PAPI).
 - (13) UNICOM (universal communications, a non-government air/ground radio communications frequency that may provide airport information).
 - (a) Airports.
 - (b) Frequency.
 - (14) Two-way radio requirement.
 - (15) Search and Rescue check for overdue aircraft.
 - (a) Whom to contact.
 - (b) Method of contacting.
- b. Navigational aid (NAVAID).**
- (1) VOR, VOR/DME, VORTAC.
 - (a) Location.

- (b) Class.
 - (c) Identifier.
 - (d) Frequency.
 - (e) Unusable radials.
 - (f) Usable distance.
 - i. Low VOR (L-VOR).
 - ii. Medium VOR (M-VOR).
 - iii. High VOR (H-VOR).
 - (g) Contact information of monitoring entity.
 - (h) Issuing NOTAMs.
- (2) Non-directional beacons.
- (a) Location.
 - (b) Class.
 - (c) Identifier.
 - (d) Frequency.
 - (e) Usable distance.
 - (f) Contact information of monitoring entity.
 - (g) Issuing NOTAMs.
- (3) Radar.
- (a) FAA facilities, ARTCC and TRACON.
 - (b) RAPCON – Air Force.
 - (c) RATCF – Navy.
 - (d) IFR arrival/departure.
 - i. Location.
 - ii. Primary frequency.

- (e) Available services.
 - i. Basic radar.
 - ii. Terminal radar service area (TRSA).
 - iii. Class C.
 - iv. Class B.
 - v. Surveillance approach/precision procedures.
- (4) Instrument landing systems (ILS).
- (5) Direction finding, location, and controlling facility.
- c. Airways and airspace data.**
 - (1) Airway identification.
 - (2) Radials.
 - (3) Minimum altitudes.
 - (a) Minimum en route altitude.
 - (b) Minimum crossing altitude.
 - (c) Minimum reception altitude.
 - (4) Mileages.
 - (5) Classification of airspace within the FPA or AOR.
 - (6) Preferred routes.
- d. Topography and weather.**
 - (1) Topography (use legend on sectional charts).
 - (a) Cities and towns.
 - (b) Highways and roads.
 - (c) Relief (terrain).
 - (d) Hydrographic features.
 - (e) Miscellaneous.

(2) Weather.

(a) Types of observations.

- i. Radiosonde (sensing equipment carried aloft by weather balloons).
- ii. Hourly.
- iii. SPECI.

(b) Terrain affecting local weather.

- i. Mountains and mountain passes.
- ii. Bodies of water (Rivers, lakes, oceans).
- iii. Valleys.

(c) Area factors contributing to formation of:

- i. Fog.
- ii. Frontal weather.
- iii. Thunderstorms.
- iv. Turbulence.
- v. Winds.

(d) Forecast availability.

i. Area.

- (aa) Forecast center.
- (bb) Times of issuance.

ii. Terminal.

- (aa) Forecast center.
- (bb) Terminal locations.
- (cc) Times of issuance.

iii. Winds aloft.

- (aa) Forecast center.

(bb) Terminal locations.

(cc) Times of issuance.

iv. Inflight weather advisories.

e. Frequencies and services.

(1) FSS.

(a) Standard transmitting and receiving frequencies.

(b) Recorded weather information.

(c) RCOs.

i. Locations.

(aa) High-altitude outlets.

(bb) Low-altitude outlets.

ii. Frequencies.

(d) Airport advisory services (local or remote) and remote airport information service.

i. Location.

ii. Established frequencies.

(e) Weather cameras (Alaska).

i. Location.

ii. Access methods.

(2) ATCT TRACON, Air Force RAPCON, and Navy RATCF.

(a) Primary VHF local control frequency.

(b) Primary military VHF frequency.

(c) Primary military UHF frequency.

(d) Non-standard guarding frequency.

(3) ARTCC and CERAP (Combined Center/RAPCON).

(4) Pilot-to-forecaster service—military.

- (a) Location.
- (b) Method of obtaining.
- (c) Frequencies used.

f. Air traffic control procedures.

(1) Air traffic control clearances.

- (a) ARTCC.
 - i. Method of obtaining.
 - ii. Method of delivering.
- (b) Tower and/or approach control.
 - i. When required.
 - ii. Relay to pilot.

(2) Instrument approach procedures.

- (a) ILS.
- (b) Automatic direction finder (ADF).
- (c) VOR.
- (d) GPS (global positioning system).
- (e) Others.

(3) Standard Instrument Departure (SID)/Standard Terminal Arrival Routes (STARs).

g. Airspace restrictions and special military operations.

(1) Restricted, prohibited, warning, and caution areas.

- (a) Number.
- (b) Name.
- (c) Altitude.
- (d) Time.
- (e) Appropriate authority.

- (2) Parachute jumping areas.
 - (a) Location.
 - (b) Altitudes.
- (3) MOAs.
 - (a) Name or number.
 - (b) Altitudes.
 - (c) Hours of operation.
- (4) Military aerial refueling tracks.
 - (a) Nickname.
 - (b) Flight levels.
- (5) Controlled firing areas.
 - (a) Location.
 - (b) Altitudes affected.
- (6) MTR.
 - (a) Identification.
 - (b) Altitudes affected.
 - (c) Airway crossing location.
- (7) Joint use/military climb corridor restricted areas.
 - (a) Location.
 - (b) Controlling agency.
- (8) VFR traffic advisories by Air Force (locations where available).

h. Local procedures.

- (1) Government offices.
 - (a) FAA.
 - (b) Military.

- (c) NWS.
- (d) US Customs and Border Protection.
- (e) National or state forest service.
- (f) Others (specify).
- (2) Airports.
 - (a) Manager or airport authority.
 - (b) Method of contacting.
- (3) Air carrier offices.
 - (a) Name(s).
 - (b) Method of contacting.
- (4) Communication service.
- (5) Radio equipment.
 - (a) Main receivers.
 - (b) Standby receivers.
 - (c) Main transmitters.
 - (d) Standby transmitters.
- (6) VOR receiver checkpoints, airborne and ground-based VOR test facilities (Very High Frequency Omnidirectional Range Test (VOT)).
 - (a) Location.
 - (b) Frequency.
 - (c) Identification.
 - (d) Location of checkpoint.
 - (e) Altitude (if pertinent).
- (7) Rescue coordination center.
 - (a) Location.
 - (b) Method of contacting.

i. Emergency services and search and rescue resources.**(1) Participating agencies/facilities/offices.****(a) FAA (location, when and how to contact).**

- i. FSS.
- ii. ARTCC.
- iii. Air Traffic Control Towers (ATCT).
- iv. Approach control.
- v. Others (specify).

(b) Military (locations and when and how to contact).

- i. Air Force.
- ii. Army.
- iii. Navy.
- iv. Marine Corps.
- v. Coast Guard.
- vi. National Guard.

(c) Civilian government, other than FAA (location, when/how to contact).**i. Federal.**

- (aa) Forest Service, national and state.
- (bb) Federal Communications Commission (FCC).
- (cc) Federal Bureau of Investigation (FBI).
- (dd) Customs and Border Protection.
- (ee) Others (specify).

ii. State.

- (aa) Police.
- (bb) Aeronautical agencies.

(cc) Others (specify).

iii. City.

(aa) Police.

(bb) Fire departments.

(cc) Others (specify).

iv. County.

(aa) Police/Sheriff.

(bb) Others (specify).

(d) Others.

i. Civil Air Patrol (CAP).

ii. Pilots and fixed-base operators (FBO).

iii. Air carriers.

iv. Airport authorities.

v. Telephone operators.

vi. Emergency medical services (EMS).

vii. Others (specify).

(2) Aids used for aircraft orientation.

(a) VOR.

i. Location.

ii. Frequency.

iii. Restrictions on use (hours of operation, unusable radials, etc.).

(b) Radar (location, when and how to request service).

i. Precision approach radar.

ii. Airport surveillance radar.

iii. Air route surveillance radar.

- (c) Non-directional beacons.
 - i. Location.
 - ii. Frequency.
 - iii. Restrictions on use.
 - iv. Recommended orientation method.
 - (d) Others (specify).
- (3) Additional assistance available.
- (a) Rescue coordination center (RCC).
 - i. Ground/water rescue.
 - ii. Leading aircraft service.
 - (b) Local or state emergency management agencies.
 - (c) Flight escort service.
 - (d) Firefighting.
 - (e) Law enforcement.
 - (f) Medical.
 - (g) Others (specify).

Section 3B. Flight Data
(Course 55242 or current course)

- 1. General:** The purpose of this development stage of training is to qualify and certify the developmental for flight data position duties at the assigned location.
- 2. Prerequisite:** Satisfactory completion of section 3A (Area Knowledge), and the appropriate specialist course(s) corresponding to the all operational equipment used at the flight data position. Additional prerequisites may be established by the manager and are identified in the local training directive.
- 3. Objective:** At the successful completion of this section of training, the developmental must be certified to perform all flight data position duties at the assigned location.
- 4. Training Length:** Flight data position qualification/certification must be completed in accordance with the local training directive. This course may include NOTAM duties where applicable.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the manager adopts this recommendation, the developmental is processed in accordance with HRPM 1.14a or other appropriate directives.

- 5. Administration:** This section of training is normally administered in an operational environment using OJT and the actual operational equipment.

This section of training is administered on a pass/fail basis.

Section 3C. NOTAM
(Course 55243 or current course)

1. General: The purpose of this development stage of training is to qualify and certify the developmental for the NOTAM position duties at the assigned location.

This course may be combined with other position qualification, such as flight data, depending on local configuration of NOTAM duties.

2. Prerequisite: Satisfactory completion of section 3A (Area Knowledge) and the appropriate specialist course(s) corresponding to all operational equipment used at the NOTAM position. Additional prerequisites may be established by the manager and must be identified in the local training directive.

3. Objective: At the successful completion of this section of training, the developmental must be certified to perform NOTAM position duties.

4. Training Length: NOTAM position qualification must be completed in accordance with the local training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the manager adopts this recommendation, the developmental is processed in accordance with HRPM 1.14a or other appropriate directives.

5. Administration: This section of training is normally administered in an operational environment using OJT and the actual operational equipment.

This section of training is administered on a pass/fail basis.

Section 3D. Preflight
(Course 55244 or current course)

- 1. General:** The purpose of this development stage of training is to qualify and certify the developmental for preflight position duties at the assigned location.
- 2. Prerequisite:** The developmental must have taken and passed the FAA Weather Analysis Test, Weather Satellite Test and Radar Test. Satisfactory completion of section 3A (Area Knowledge) and the appropriate specialist course(s) corresponding to all operational equipment used at the preflight position is also required. Additional prerequisites may be established by the manager and must be identified in the local training directive.
- 3. Objective:** At the successful completion of this section of training, the developmental will be certified to perform all preflight position duties at the assigned location.
- 4. Training Length:** Preflight position qualification/certification must be completed in accordance with the local training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the manager adopts this recommendation, the developmental is processed in accordance with HRPM 1.14a or other appropriate directives.

- 5. Administration:** This section of training is normally administered in an operational environment using OJT and the actual operational equipment.

Satisfactory completion of the preflight training is accomplished when the developmental has successfully passed the FAA oral Pilot Weather Briefing (PWB) Practical Examination, been issued a FAA PWB Certificate of Authority, and has been certified by the FSS manager (or designee) on the preflight position.

This section of training is administered on a pass/fail basis.

Section 3E. Inflight
(Course 55245 or current course)

- 1. General:** The purpose of this development stage of training is to qualify and certify the developmental for inflight position duties at the assigned location.
- 2. Prerequisite:** Satisfactory completion of section 3A (Area Knowledge) and the appropriate specialist course(s) corresponding to all operational equipment used at the inflight position. The developmental must hold an FAA PWB Certificate of Authority. Additional prerequisites may be established by the manager and must be identified in the local training directive.
- 3. Objective:** At the successful completion of this section of training, the developmental will be certified to perform inflight position duties at the assigned location.
- 4. Training Length:** Inflight position qualification/certification must be completed in accordance with the local training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the manager adopts this recommendation, the developmental is processed in accordance with HRPM 1.14a or other appropriate directives.

- 5. Administration:** This section of training is normally administered in an operational environment using OJT and the actual operational equipment.

The developmental must demonstrate lost aircraft orientation procedures before being certified on the inflight position. A minimum of one satisfactory orientation for each available resource—VOR and ADF—is required.

Certification cannot be completed in this section prior to certification in section 3E (Preflight).

This section of training is administered on a pass/fail basis.

Section 3F. Weather Observer
(Course 55240 or current course)

1. General: The purpose of this development stage of training is to qualify and certify the developmental for weather observer position duties at the assigned location.

The Weather Observer Examination is taken at the end of LAWRS Course 60004715 or current course. A score below 80 percent will require retesting prior to certification. The developmental may start OJT prior to passing the Weather Observer Examination.

2. Prerequisite: Satisfactory completion of section 3A (Area Knowledge) and LAWRS Course 60004715 or current course. Additional prerequisites may be established by the manager and are identified in the local training directive.

3. Objective: At the successful completion of this section of training, the developmental will be certified to perform all weather observer position duties at the facility.

4. Training Length: Weather observer position qualification/certification must be completed in accordance with the local training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the manager adopts this recommendation, the developmental is processed in accordance with HRPM 1.14a or other appropriate directives.

5. Administration: This section of training is normally administered in an operational environment using OJT and the actual facility equipment.

This section of training is administered on a pass/fail basis.

Section 3G. Broadcast
(Course 55241 or current course)

1. General: The purpose of this development stage of training is to qualify and certify the developmental for broadcast position duties at the assigned location.

Academy or approved equivalent training provided the basic knowledge and skills required for operation of a broadcast position under simulated conditions.

2. Prerequisite: Satisfactory completion of section 3A (Area Knowledge) and the appropriate specialist course(s) corresponding to all operational equipment used at the broadcast position. Additional prerequisites may be established by the manager and must be identified in the local training directive.

3. Objective: At the successful completion of this section of training, the developmental will be certified to perform all broadcast position duties at the assigned location.

4. Training Length: Broadcast position qualification/certification must be completed in accordance with the local training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the manager adopts this recommendation, the developmental is processed in accordance with HRPM 1.14a or other appropriate directives.

5. Administration: This section of training is normally administered in an operational environment using OJT and the actual operational equipment.

This section of training is administered on a pass/fail basis.

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Appendix F. Terminal Instructional Program Guide (IPG)

Section 1. Introduction.

This IPG includes information about the following seven development stages:

- 1.** FAA Academy Training (Courses 50043, 50046, 50055001, 50034, and 50056001 or current courses)
- 2.** FD (Course 55060, or current course)
- 3.** CD (Course 55061, or current course)
- 4.** Ground Control (GC) (Course 55062, or current course)
- 5.** Local Control/Cab Coordinator (LC/CC) (Course 55063, or current course)
- 6.** Non-radar/Handoff/Coordinator (NR/HO/CI) (Course 55064, or current course)
- 7.** Radar Control (RC) (Course 55065, or current course)

Note: Stages 2 through 7 are intended to be taught sequentially; however, the instructional process is designed to give facilities the flexibility to tailor the training program to the needs of the individuals in training and the facility. This will permit a more effective and successful training experience. A Facility Manager, or his/her representative, may determine the appropriate sequencing of these development stages: e.g., Stage 2 and Stage 4 must be completed prior to or simultaneously with Stage 5; Stage 6 must be completed prior to or simultaneously with Stage 7; and all development stages must be completed prior to promotion to CPC.

Section 2. Stage 1: FAA Academy Training.**Section 2A. Air Traffic Basics (Terminal)
(Course 50043 or current course)**

- 1. General:** Designed for individuals with no air traffic experience, this course provides the fundamental aviation/air traffic knowledge needed for developmentals to begin training in the Terminal option.
- 2. Prerequisite:** Entry qualifications established for specific hiring source.
- 3. Location:** FAA Academy.
- 4. Training Length:** 200 hours.
- 5. Administration:** An instructor-led environment which includes the following topics: introduction to the ATC system, publications, Federal Aviation Regulations (FAR), principles of aerodynamics, aircraft types and characteristics, fundamentals of navigation, pilot's environment, flight assistance and emergencies, wake turbulence, weather, and communications. Instructor-led lectures are accompanied by graphics and video, as well as group discussions and exercises with limited hands-on practice and demonstrations.
- 6. Evaluation:** Student proficiency is measured through academic block exams plus a final comprehensive academic exam. A passing score of 70 percent is required on the final comprehensive exam. No retakes are permitted.

Note: For additional or more specific information, contact the Office of Safety and Technical Training (AJI-2).

Section 2B. Initial Tower Cab Training
(Course 50046 or current course)

- 1. General:** Designed for Terminal ATC students who will be assigned to Terminal facilities, this course consists of classroom and laboratory instruction in Tower Cab (TC) procedures. Tower Visibility Exam and others are administered during the course.
- 2. Prerequisite:** Successful completion of the Air Traffic Basics (Terminal) course or the individual has met the direct entry qualifications established for specific hiring source.
- 3. Location:** FAA Academy
- 4. Training Length:** 296 hours
- 5. Administration:** About 30 percent of the course is devoted to academic instruction and the remaining 70 percent is hands-on laboratory training in three different lab environments: Tabletops, Tower 3D, and Tower Simulation System (TSS).
- 6. Evaluation:** An overall score of 70 percent or greater is required for successful completion of the academic and performance evaluations.

Note: For additional or more specific information, contact the Office of Safety and Technical Training (AJI-2).

**Section 2C. Terminal Basic Radar Training
(Course 50034 or current course)**

- 1. General:** The purpose of this development stage is to train controllers in radar approach control skills in a simulated environment.
- 2. Prerequisite:** Initial hire for TRACON-only facility or successful completion of the following courses: Flight Data (FD), CD, Ground Control (GC), and Local Control/Cab Coordinator (LC/CC).
- 3. Location:** FAA Academy
- 4. Training Length:** 176 hours
- 5. Administration:** This training is administered in a classroom/laboratory environment and simulated airspace. Training is primarily oriented to procedural studies and demonstration/evaluation of air traffic control scenarios.
- 6. Evaluation:** An overall score of 70 percent is required for successful completion of the academic and performance evaluations.

Note: For additional or more specific information, contact the Office of Safety and Technical Training (AJI-2).

**Section 2D. TRACON Skill Enhancement Workshop (TSEW)
(Course 50056001 or current course)**

- 1. General:** This workshop provides advanced training for developmentals/CPC-ITs assigned to Level 9, 10, 11, and 12 radar facilities.
- 2. Prerequisite:** Successful completion of Terminal Basic Radar Training or individual meets direct entry qualifications established for specific hiring source.
- 3. Location:** FAA Academy
- 4. Training Length:** 120 hours
- 5. Administration:** The workshop provides developmentals who have successfully completed the Terminal Basic Radar Training course with additional practice of desired controller skill sets including: vectoring; aircraft recognition and understanding of aircraft performance characteristics; issuing clearances of all types; scanning projecting ahead and maintaining positive control; separation methods and positive control; speed control, sequencing skills, and managing compression; and keyboard entry skills. These skills will be reinforced through classroom lecture, discussion, and high-fidelity simulation exercises using TRACON scenarios with traffic complexity levels of ten and above.

Note: For additional or more specific information, contact the Office of Safety and Technical Training (AJI-2).

Section 3. Stage 2: Flight Data Position Training.
(Course 55060 or current course)

1. General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of the Flight Data position within the ATCT and/or TRACON to attain certification on those positions.

This stage of training is administered in two parts: instructor-led training and OJT. The instructor-led training uses facility-prepared instructional materials to supplement the nationally-prepared materials. When training CPCs who have lost operational currency or have transferred from another facility or area of specialization, the TA must decide which portions of the instructor-led and simulation training will be administered based on the needs of the specialist. Pass/fail criteria must apply in this stage of training.

2. Prerequisite: Successful completion of Stage 1 or individual meets direct entry qualifications established for specific hiring source.

3. Location: Field facility.

4. Training Length: Site specific.

5. Administration: Facilities with limited training resources must utilize FAA nationally-developed lesson plans and facility-developed self-study materials that will cover all of the required local knowledge and procedures. Contractor-supported training should be developed to facilitate support of training initiatives, as required. Instructor-led training is administered using nationally and/or facility-developed lesson plans and conducted under the direction of the TA. Facility lesson plans must be developed for:

- Tower Cab-airport and/or TRACON position-airspace layout.
- Local Standard Operating Procedures (SOP) and Letters of Agreement (LOA).
- Equipment operations.

After successful completion of instructor-led/simulation training (as appropriate), OJT must be conducted in accordance with chapter 6 of this order.

Note: Facilities may delay FD/radar FD OJT until completion of CD and/or GC-LC/CC instructor-led, Stage 6 and 7 instructor-led and simulation training.

6. Instructor-led Training. The individual must successfully demonstrate the skills listed below in accordance with JO 7110.65, JO 7210.3 and local directives, and must pass an examination with a score of 90 percent or higher (unless otherwise stipulated) on the material. Locally prepared evaluations must be administered, as applicable.

Note: The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) must be instructed or if a review of the lessons is sufficient. This can be determined by administering an exam. If the developmental/CPC-IT passes the exam on

one or more of the lessons with a score of 95 percent or higher, he or she may be excused from taking the other lesson(s).

a. Tower Flight Data: Airport Diagram/ATCT Airspace.

Note: The TA must determine which portions of the following items to administer in the instructor-led portion based on facility specific Flight Data functions.

(1) Airport Diagram. Given an airport diagram depicting the location of runways, taxiways, NAVAIDS, air carrier/air taxi/general aviation ramps and special operations areas, as applicable, the developmental/CPC-IT must:

- (a) Label each runway, indicating length, width, and magnetic heading.
- (b) Label all taxiways, ramp areas, and Special Operations areas.
- (c) Label any airport NAVAIDS, including ILS critical areas, as applicable.

(2) ATCT Airspace. Given the ATCT airspace diagram depicting the location of NAVAID, Tower airspace boundaries, and special use airspace, as applicable, the developmental/CPC-IT must:

- (a) Label each NAVAID/fix with its correct identifier (including the first NAVAID outside the Tower airspace).
- (b) Label sector boundaries, both inter- and intra-facility.
- (c) Label special use airspace, as applicable.
- (d) Label other items as identified by the TA.

b. TRACON Flight Data: TRACON Airspace.

Note: The TA must determine (and as documented in the local training directive) which portions of the following items are to be administered in the instructor-led portion based on facility-specific Flight Data functions.

Given a TRACON airspace diagram depicting the location of NAVAIDs, sector boundaries, and special use airspace, as applicable, the developmental/CPC-IT must:

- (1) Label each NAVAID/fix with its correct identifier (including the first NAVAID outside the TRACON airspace) and all associated Victor/Jet airways, SIDS/STARS;
- (2) Label sector boundaries, both inter- and intra-facility;
- (3) Label special use airspace, as applicable; and
- (4) Label other items as identified by the TA.

c. Operating Communication System. Given a simulated (if available) position containing a communication console system, the developmental/CPC-IT must:

- (1) Place outgoing calls:
 - (a) Locate the interphone jack/dual jack module at the handoff position;
 - (b) Locate the interphone and radio jacks/dual jack module at the controller position;
 - (c) Identify and state the function of a headset versus a handset;
 - (d) Identify and state the function of the operating communication console system;
 - (e) Identify and state the function of the key panel module and release keys;
 - (f) Place direct access calls; and
 - (g) Place override calls.
- (2) Receive incoming calls:
 - (a) Identify the basic components of the system on which incoming calls are received;
 - (b) Identify the audio/visual signals for an incoming call; and
 - (c) Identify how to answer, transfer, hold, and/or over-ride calls.

d. Flight Data Position (Non-automated). The TA may determine, based on the configuration of the ATCT and/or TRACON, that no training is required on the non-automated mode of the flight data position. At the TA's discretion, and given an operational position, flight progress strips and flight plan information, the developmental/CPC-IT must identify the full range of flight data duties in the non-automated mode, including:

- (1) Post and forward flight plan information.
- (2) Apply flight data procedures applicable to the ATCT and/or TRACON.
- (3) Format the Automated Terminal Information Services (ATIS) for non-digital applications, if applicable.
- (4) Place the strips in the appropriate bay for the receiving positions.

e. Flight Data Position (Automated). Given a simulated (if available) position in an automated environment that contains a computer entry device, the developmental/CPC-IT must:

- (1) Identify and state the function of the:
 - (a) FDIO keyboard and subsequent printer.

(b) Digital Automated Terminal Information Services (D-ATIS) format applications, if applicable.

(c) Information display system (IDS) display, if applicable.

(2) Prepare and enter computer messages in correct format.

(3) Respond to computer-generated messages.

(4) If applicable, pick up and sequence the strips and deliver them in the appropriate bay for the receiving positions.

7. Lesson Plans.

The following FAA nationally-developed training must be taught via instructor-led training, CBI, or self-study, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT. The TA must determine (and as documented in the local training directive), based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) will be instructed or a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure that training is provided to correct deficiencies identified on the end-of-lesson exam(s), when applicable.

a. FAA National Lesson Plans

- (1) Lesson 1 Introduction to Air Traffic Control Facilities
- (2) Lesson 2 Compiling Statistical Data
- (3) Lesson 3 Preparing and Distributing Flight Data
- (4) Lesson 4 Communications Procedures
- (5) Lesson 5 Current Weather
- (6) Lesson 6 Forecast Weather and Advisories
- (7) Lesson 7 Pilot Weather Report (PIREP)
- (8) Lesson 8 Unusual Situations
- (9) Lesson 9 Receiving and Relaying Notice to Airmen (NOTAM) Information
- (10) Lesson 10 Automatic Terminal Information Service (ATIS)
- (11) Lesson 11 Recorders
- (12) Lesson 12 Monitoring Navigational Aids

(13) Lesson 13 Flight Data Input/Output (FDIO) System

(14) Lesson 14 Tower Visibility

- b. eLMS Course 60004461 (or current course) Unmanned Aircraft Systems (UAS)
- c. eLMS Course 60004971 (or current course) Time Based Flow Management (TBFM) Terminal ATCS
- d. Reference Manual/Guide TM-4-1: FDIO System User Manual
- e. Reference Manual/Guide AC-00-45: Aviation Weather Services
- f. Reference Manual/Guide METAR: Aviation Routine Weather Report
- g. Reference Manual/Guide Communications Console
- h. Reference Manual/Guide FDIO CBI

8. Instructor-Led Training Evaluation.

- a. Locally prepared evaluations must be administered on the following items, as applicable:

- (1) The Tower CAB-airport and/or TRACON position-airspace layout.
- (2) Processing flight data in the non-automated and automated modes.
- (3) Computer message entry.

b. Additional evaluations may be developed to evaluate the developmental's/CPC-IT's progress, as deemed necessary to meet facility and/or individual training needs.

If the individual is not successful on the instructor-led evaluation, the provisions of the most recent Human Resources Policy Manual must be followed.

Note: A training review board is not required for instructor-led or simulation training failure.

9. OJT. Through OJT, the developmental/CPC-IT must demonstrate the ability to satisfactorily perform the applicable job subtasks described in appendix B of this order.

10. OJT Checklist. OJT checklists should be used as a mutual training tool for the OJTI and the developmental/CPC-IT. When a checklist is used, the developmental/CPC-IT must be provided with the appropriate stage checklist during the initial training team meeting for that stage. Facilities may develop checklists locally. A sample OJT checklist of Radar Control is provided as an example. Completed OJT Checklist forms must be retained with other required training documentation.

**Section 4. Stage 3: CD Position Training
(Course 55061 or current course)**

1. General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of the CD position within the ATCT and/or TRACON and to attain certification on those positions.

This stage of training is administered in three parts: instructor-led training, simulation (if available and is optional), and OJT. The instructor-led training uses facility-prepared instructional materials to supplement the FAA nationally-prepared materials. When training CPCs who have lost operational currency or have transferred from another facility or area of specialization, the TA must decide which portions of the instructor-led and simulation training will be administered based on the needs of the specialist. Pass/fail criteria must apply in this stage of training.

2. Prerequisite: Successful completion of Stage 1 or individual met entry qualifications established for specific hiring source.

3. Location: Field facility.

4. Training Length: Site specific.

5. Administration: Facilities with limited training resources must utilize FAA nationally-developed lesson plans and facility-developed self-study materials that will cover all of the required local knowledge and procedures. Contractor-supported training should be developed to facilitate support of training initiatives, as required. Instructor-led training is administered using nationally and/or facility-developed lesson plans and conducted under the direction of the TA. Facility lesson plans must be developed for:

- Airport layout and/or TRACON airspace.
- Standard Operating Procedures (SOPs) and Letters of Agreement (LOAs)
- Equipment operations.

After successful completion of instructor-led/simulation training (as appropriate), OJT must be conducted in accordance with chapter 6 of this order.

Note 1: Facilities may delay CD OJT until the completion of FD-GC-LC/CC instructor-led and simulation training.

Note 2: Unless operational requirements do not permit, facilities must provide at least one airport operations area tour as part of OJF and/or OJT requirements.

6. Instructor-Led Training. The individual must successfully demonstrate the skills listed below in accordance with JO 7110.65, JO 7210.3, and local directives, and must pass an examination with a score of 90 percent or higher (unless otherwise stipulated) on the material. Locally prepared evaluations must be administered, as applicable.

Note 1: The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) must be instructed or whether a review of the lessons is sufficient. This can be determined by administering an exam. If the developmental/CPC-IT passes the exam on one or more of the lessons with a score of 95 percent or higher, he or she may be excused from taking the other lessons.

Note 2: The following FAA nationally developed training must be taught via instructor-led, CBI, or self-study, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT. The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) will be instructed or a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure that training is provided to correct deficiencies identified on the end-of-lesson exam(s).

a. Part 1—CD. FAA National Lessons.

- (1) State the functions of the CD position.
- (2) List the conditions for which departure clearances or departure instructions would be issued.
- (3) List IFR departure clearance items in sequence.
- (4) State when the term “ATC” must be used as a clearance prefix.
- (5) Define clearance limit.
- (6) Describe a NAVAID fix, as determined by reference to a radial and distance from VORTAC when the fix is not named.
- (7) State when the directions of a takeoff/turn or initial heading to be flown may be specified.
- (8) State the standard phraseology used when necessary to assign a crossing altitude that differs from the SID altitude.
- (9) State the requirement that is applicable when route or altitude in a previously issued clearance is amended.
- (10) State the standard phraseology used to assign frequency and beacon code information to departing IFR aircraft.
- (11) Match beacon codes with the appropriate IFR departure categories.
- (12) List the conditions that must be met in order to issue an abbreviated departure clearance.
- (13) State the conditions and standard phraseology used to issue SVFR clearances.

- (14) State the conditions and standard phraseology used to issue a VFR/OTP clearance.
- (15) Select the provisions that should be included in gate hold procedures.
- (16) Select the provisions that should be included in pre-taxi clearance procedures.

b. Part 2—Site-Specific CD.

- (1) Describe the procedures and phraseology pertaining to:
 - (a) Gate hold procedures; and
 - (b) Delivery of clearances.
- (2) Explain the procedures and coordination requirements for:
 - (a) Processing flight progress strips;
 - (b) Processing flight plans (jet routes, prop routes, etc.); and
 - (c) Processing clearance requests.
- (3) Explain the application of all position-related items in:
 - (a) Letters of Agreement (LOA);
 - (b) Directives; and
 - (c) Position binders.
- (4) Equipment
 - (a) Demonstrate Automated Radar Terminal System (ARTS)/Standard Terminal Automation Replacement System (STARS) data entry functions (if applicable);
 - (b) Terminal data link system, if applicable:
 - i. Explain the requirements for participation in pre-departure clearance (PDC);
 - ii. Identify the processing of clearances through PDC; and
 - iii. Issue clearances through PDC.
- (5) Position Relief Briefing Procedures. Describe the procedures for conducting/receiving position relief briefings.

7. Lesson Plan. The following FAA nationally-developed training must be taught via instructor-led, CBI, or self-study, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT. The TA must determine, based on the needs of the facility and the

developmental/CPC-IT, whether the complete lesson(s) will be instructed or a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure that training is provided to correct deficiencies identified on the end-of-lesson exam(s).

- a. National Lesson Plan TS-3-1: CD.

8. Instructor-led Training Evaluation. Locally prepared evaluations must be administered on the following items, as applicable:

- a. Information contained in the Part 1 national lesson plan.
- b. Clearances and issuing various clearances.
- c. Weather and issuing weather.
- d. ARTS/STARS keyboard entries.
- e. PDC equipment and procedures.
- f. Local airport information.
- g. Local strip marking.
- h. Knowledge of Tower En Route clearance compositions and associated LOAs.

Note: A training review board is not required for instructor-led or simulation training failure.

9. Simulation Training (if available, and is optional).

a. **General.** The developmental/CPC-IT will apply ATC procedures in accordance with all applicable directives.

(1) The developmental/CPC-IT must complete scenarios at a lower level of complexity first and progressively work to the highest level.

(2) The results of the developmental's/CPC-IT's performance during each scenario must be recorded on FAA Form 3120-25 and discussed with the developmental/CPC-IT (see appendix B). Forms used during evaluation scenarios must be retained in the developmental's/CPC-IT's training folder, as specified in chapter 5, section 4.

(3) Up to 1 hour must be allotted for the control problems. This does not include the time spent for briefing and critique. The instructor is not precluded from terminating the simulated problem prior to the time indicated if it has been determined that the maximum instructional benefit of the problem has been derived.

(4) The TA must determine the number of instructional scenarios the developmental/CPC-IT will complete. Evaluation scenarios must be administered at regular intervals during the simulation segment of training. Simulation scenarios will be counted as

simulation hours. A minimum and maximum number of simulation hours should be established in the local training directive.

(a) Familiarization Scenarios. The developmental/CPC-IT must be given CD familiarization scenarios that cover all CD positions in the facility. These scenarios should emphasize the importance of effective interaction between the CD position and other Tower team members.

Example: The first two Familiarization Scenarios should also place additional emphasis on equipment (e.g., buttonology, keyboarding).

(b) Instructional Scenarios. Instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing CD ATC duties in a simulated operational environment.

(c) Simulation Evaluation. Evaluation scenarios must be administered at regular intervals during the instructional scenario segment of training. The evaluations must be pass/fail.

i. A preparatory evaluation scenario must be administered prior to the first evaluation scenario.

ii. Developmentals/CPC-ITs must not be evaluated on any procedures or situations that they have not had experience with in previous scenarios.

iii. The instructor must assist, as necessary, to maintain scenario continuity, except during pass/fail evaluation scenarios.

iv. Instructions on documenting and grading the evaluation are contained in appendix B. The following chart must be used to grade the scenarios:

Maximum Errors Allowed Per Scenario by Job Task

Job Task	Maximum Errors
Separation	0
Coordination	2
Control Judgment	5
Methods and Procedures	5
Equipment, Communication and Other	5

(5) If the developmental/CPC-IT does not meet the requirements for successful completion of an evaluation scenario, the TA may determine that SET is warranted. The SET

may include:

- (a) Instructor-led training and/or
- (b) Instructional scenarios.

Note: SET must be followed by an evaluation scenario at the same complexity level as the scenario that the developmental/CPC-IT was unsuccessful.

(6) If the developmental/CPC-IT does not meet the requirements for successful completion after SET, the provisions of the most recent Human Resources Policy Manual must be followed. A Training Review is not required for instructor-led or simulation training failure.

b. Scenario Development. The following situations and procedural items must be included in the familiarization and instructional scenarios if applicable to the facility/position. Other items may be added as deemed appropriate by the TA, based on their applicability to the individual position:

- (1) Issue an IFR clearance.
- (2) Issue a Special Visual Flight Rules (SVFR) clearance.
- (3) Issue an IFR clearance to maintain VFR conditions on top (VFR/OTP).
- (4) Utilize Pre-Departure Clearances/Tower Data Link Services (PDC/TDLS) equipment.
- (5) Correct improper routing.
- (6) Assign correct Tower En Route Control (TEC) routes.
- (7) Demonstrate proper strip marking.
- (8) Process flight progress strips.
- (9) Issue IFR, SVFR, or VFR/OTP clearances using standard phraseology.
- (10) Implement Gate Hold procedures.
- (11) Process flight progress strips.
- (12) Record clearances and control information on strips, using approved symbols and abbreviations.
- (13) Communicate using radio and interphone procedures.
- (14) Use effective board management techniques.
- (15) Demonstrate situational awareness.

(16) Demonstrate knowledge of all applicable letters of agreement.

(17) Give and receive a position relief briefing both before and after a scenario.

c. Scenario Difficulty. This section covers the development of scenarios. A developmental/CPC-IT must control varying volumes of traffic and resolve situations of varying complexity. Volume level is the basic criterion for scenario development.

(1) Complexity factor. Scenario complexity is based on the number of situations that require CD to apply the various procedures in JO 7110.65, such as issuing clearances, ensuring accurate readback of control instructions, and processing flight progress strips.

(2) Position relief briefings must be received (before) and given (after) each instructional scenario.

(3) Scenario program example. The example in Figure F-1, Sample Simulation Scenarios, shows how a training program may be designed to fulfill the requirements of this stage.

Figure F-1: Sample Simulation Scenarios

Scenario	Volume (%)	Type
A	50	Familiarization
B	70	Familiarization
C	75	Familiarization
D	75	Familiarization
E	75	Familiarization
1	80	Instructional
2	80	Instructional
3	80	Evaluation-Preparatory
4	80	Instructional
5	80	Evaluation (Pass/Fail)
6	85	Instructional
7	85	Instructional
8	90	Instructional
9	90	Instructional
10	90	Evaluation (Pass/Fail)
11	95	Instructional
12	95	Instructional
13	95	Instructional
14	100	Instructional
15	100	Evaluation (Pass/Fail)
16	110	Instructional

d. Additional Scenarios.

(1) Following successful completion of the evaluations and prior to the start of OJT, additional control scenarios may be administered on each sector in the developmental's/CPC-IT's area of specialization. These scenarios are intended to introduce the developmental/CPC-IT

to sector-specific operations and traffic flows.

(2) The scenarios will provide a highly interactive instructional environment in which the instructor and developmental/CPC-IT will be able to discuss strategies and alternatives.

(3) The number of scenarios will be determined by the TA based on the needs of the facility.

(4) Control scenarios may use combined sector and position configurations.

10. OJT. Through OJT, the developmental/CPC-IT must demonstrate the ability to perform the applicable job subtask described in appendix B of this order successfully.

11. OJT Checklist. OJT checklists should be used as a mutual training tool for the OJTI and the developmental/CPC-IT. When a checklist is used, the developmental/CPC-IT must be provided with the appropriate stage checklist during the initial training team meeting for that stage. Facilities may develop checklists locally. A sample OJT checklist of Radar Control is provided as an example. Completed OJT Checklist forms must be retained with other required training documentation.

**Section 5. Stage 4: Ground Control Position Training.
(Course 55062 or current course)**

1. General: The purpose of this stage is to prepare the developmental CPC-IT to perform independently (under general supervision) all duties of the Ground Control (GC) position within the ATCT and to attain certification on those positions.

This stage of training is administered in three parts: instructor-led training, simulation (if available), and OJT. The instructor-led training will use facility-prepared instructional materials to supplement the FAA nationally-prepared materials. When training CPCs who have lost operational currency or have transferred from another facility or area of specialization, the TA must decide which portions of the instructor-led and simulation training will be administered based on the needs of the specialist. Pass/fail criteria must apply in this stage of training.

2. Prerequisite: Successful completion of Stage 1 or individual met entry qualifications established for specific hiring source.

3. Location: Field facility.

4. Training Length: Site specific.

5. Administration: Facilities with limited training resources must utilize FAA nationally-developed lesson plans and facility-developed self-study materials that will cover all of the required local knowledge and procedures. Instructor-led training is administered using nationally and/or facility-developed lesson plans and conducted under the direction of the TA. Facility lesson plans must be developed for:

- a. Airport layout
- b. Local Procedures
- c. Equipment Operations

After successful completion of instructor-led/simulation training (as appropriate), OJT must be conducted in the operational environment in accordance with chapter 6 of this order.

Note 1: Facilities may delay GC OJT until completion of LC/CC instructor-led and simulation training.

Note 2: High-fidelity simulators (e.g., Tower Simulation Systems (TSS)) are the preferred method of conducting simulation training, utilizing locally developed scenarios as described in this section on a pass/fail basis. All Towers with access to a TSS must conduct simulation training using the TSS prior to starting OJT. Towers unable to access the TSS may use table-top/CAB LAB simulation.

Exception: Table-top/CAB LAB simulation training is not subject to the pass/fail evaluation.

Note 3: The Terminal District Manager, in coordination with AJI-2, is responsible to determine

which facilities have access to the TSS.

Note 4: Facilities with the capabilities to do so should require airport operation tours as part of the OJT/OJF requirements.

6. Instructor-led Training. The individual must successfully demonstrate the skills listed below in accordance with JO 7110.65, JO 7210.3, and local directives, and must pass an examination with a score of 90 percent or higher (unless otherwise stipulated) on the material. Locally prepared evaluations must be administered, as applicable.

Note 1: The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) must be instructed or whether a review of the lessons is sufficient. This can be determined by administering an exam. If the developmental/CPC-IT passes the exam on one or more of the lessons with a score of 95 percent or higher, he or she may be excused from taking the other lessons.

Note 2: The following FAA nationally-developed training must be taught via instructor-led, CBI, or self-study, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT. The TA must determine, whether the complete lesson(s) will be instructed or a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure that training is provided to correct deficiencies identified on the end-of-lesson exam(s).

a. Part 1—Ground Control. FAA National Lesson Plans.

- (1) Aircraft recognition and characteristics.
- (2) ILS Critical Area.
- (3) Console instruments.
- (4) Ground control procedures.
- (5) Taxi information and clearances.
- (6) Emergency procedures and unusual situations.

b. Part 2—Site-Specific Ground Control. FAA National Lesson Plans.

(1) Position-associated equipment. The individual must use and apply procedures for ground control position equipment, including:

- (a) Radio/telephone main and standby equipment.
- (b) NOTAM, Pilot Weather Reports (PIREP), and weather-posting locations.
- (c) FDIO printer and keyboard.
- (d) Digital Automatic Terminal Information Service (D-ATIS)/ATIS recording

equipment.

(e) Runway Visual Range (RVR) digital panel, RVR meter, and/or Runway Visibility Value (RVV) meter.

(f) Visibility chart.

(g) Status Information Area (SIA).

(h) Light gun.

(i) Bright Radar Indicator Tower Equipment (BRITE)/ Digital BRITE (DBRITE)/Tower Display Workstation (TDW).

(j) Airport Surface Detection Equipment (ASDE and ASDE-X).

(k) Airport lighting systems.

(l) Approach lighting systems.

(m) Obstruction lighting.

(n) Personnel safety equipment.

(o) ARTS/STARS keyboard.

(2) Airport Diagram. The individual must be able to:

(a) Indicate airport elevation and point of reference.

(b) Identify landing and takeoff areas as follows:

i. Runways, including:

(aa) Number and magnetic heading.

(bb) Surface composition (other than hard surface).

(cc) Marking special or restrictive use.

(dd) Length and width.

(ee) Distance remaining from intersections.

(ff) Lighted or unlighted, arresting barriers/cable systems.

ii. Helicopter pad(s), including:

(aa) Location(s).

(bb) Identification.

(cc) Marking.

(c) Identify the following areas and indicate whether they are movement areas or non-movement areas:

i. Taxiways:

(aa) Width.

(bb) Number and identification.

(cc) Lighted or unlighted.

(dd) Restrictions.

ii. Ramp and gate locations:

(aa) Itinerant.

(bb) Air taxi.

(cc) Fixed-Base Operations (FBO).

(dd) Air carrier.

(ee) Military.

(ff) Cargo.

(gg) Helicopter.

(hh) Restrictions.

iii. Special-use areas:

(aa) Run-up and “jet blast walls.”

(bb) Compass rose.

(cc) Bomb detection.

(dd) Explosive cargo.

(ee) Very high frequency omnidirectional range (VOR) checkpoints.

iv. Critical areas.

v. Special taxi routes.

- (aa) Surface movement guidance control.
 - (bb) Preferred taxi routes.
 - (cc) Inbound.
 - (dd) Outbound.
- (d) Identify structures and support facilities, including:
 - i. Emergency equipment.
 - ii. Hangars:
 - (aa) Fixed base.
 - (bb) Air carrier.
 - (cc) Military.
 - (dd) Private.
 - iii. Building and facilities—terminals:
 - (aa) Main.
 - (bb) Air carrier.
 - (cc) Itinerant and air taxi.
 - (dd) Military.
 - (ee) Cargo.
 - iv. Facilities:
 - (aa) Tower.
 - (bb) Radar site.
 - (cc) Transmitter and receiver site.
 - (dd) Transmissometer site.
 - (ee) Flight Service Station.
 - (ff) Flight Standards field elements.
 - (gg) Technical operations field elements.

(hh) Airport district office.

v. Customs.

vi. Security.

(aa) Airport management.

(bb) Offices.

(cc) Maintenance.

vii. Weather Service Office.

(3) Procedures.

(a) The individual must explain the application of procedures contained in the following publications as they pertain to the ground control position:

i. FAA orders and/or handbooks.

ii. Facility directives and memoranda.

iii. Letters of Agreement (LOA).

iv. Reading binder.

v. Aeronautical Information Manual (AIM).

(b) Describe procedures for conducting/receiving position relief briefings.

7. Lesson Plans. The following FAA nationally-developed training must be taught via instructor-led training, CBI, or self-study, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT. The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) will be instructed or a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure that training is provided to correct deficiencies identified on the end-of-lesson exam(s).

a. Lesson plan 1 Aircraft Recognition and Characteristics

b. Lesson plan 2 ILS Critical Area

c. Lesson plan 3 Console Instruments

d. Lesson plan 4 Ground Control Procedures

e. Lesson plan 5 Taxi Information and Clearances

f. Lesson plan 6 Emergency Procedures and Unusual Situations

8. Instructor-led Training Evaluation.

a. Locally prepared evaluations must be administered on the following items, as applicable:

- (1) Information contained in the Part 1 FAA national lesson plans.
- (2) Airport Layout/Diagram.
- (3) Local equipment and procedures.

b. Additional evaluations may be developed to evaluate the developmental's/CPC-IT's progress, as deemed necessary, to meet facility and/or individual training needs.

Note 1: If the individual is not successful with the final graded exam, the provisions of the most recent Human Resources Policy Manual must be followed.

Note 2: A training review board is not required for instructor-led or simulation training failure.

9. Simulation Training. Simulation training is administered at Terminal facilities using the capabilities of the simulation equipment. This provides the developmental/CPC-IT an opportunity to learn and demonstrate, under simulated conditions, all the knowledge and skills required of a CPC.

a. **General.**

(1) The TA will determine the number of tower simulation training scenarios that the individual must complete. Periodic evaluation scenarios will be conducted to determine the individual's progress through the completion of the scenarios.

Example: The TA may require the administration of 18 simulation training Ground Control scenarios with numbers 6, 10, 14, and 18 as pass/fail evaluations.

(2) It is necessary to complete instructional scenarios at the lowest complexity level first and to progressively work up to the highest. Scenarios at a given complexity level may be administered in any order to provide variation. The developmental/CPC-IT will be required to complete training on a given set of control scenarios similar to those in the operational position. This requirement will ensure the developmental's/CPC-IT's exposure to the many prescribed special events and control situations that could occur.

(3) Simulation scenarios will be counted as simulation hours. A minimum and maximum number of simulation hours should be established in the local training directive.

(4) Up to 1 hour must be allotted for the control scenarios. This does not include the time spent for briefing and critique. The instructor is not precluded from terminating the simulated scenario prior to the time indicated if it has been determined that the maximum instructional benefit of the scenario has been derived.

(5) The results of the individual's performance during each scenario must be recorded on FAA Form 3120-25 and discussed with the individual. (See appendix B.) Forms used during the evaluation scenario must be retained and filed in the individual's training folder.

b. Control Problem Development.

(1) Definitions.

(a) Volume level - A factor expressed as a percentage of the traffic worked during a typical busy period.

(b) Complexity - The number of situations that require thought to resolve an issue or conflict.

(2) General Objectives. To achieve standardization of volume level and problem complexity for all field facilities, the following problem development procedures have been established:

(a) Instructional scenarios must be developed for an operational position starting at the 50 percent volume level and progressively increasing to the 110 percent volume level. The additional 10 percent must be added to ensure that the developmental/CPC-IT encounters a greater volume of traffic than he/she will normally be expected to control.

(b) The formula is based on 110 percent traffic volume from an average period of a busy day (as defined and validated by the facility).

(c) To protect scenario integrity, some variations of the scenarios should be made. Changes in aircraft identifications, equipment types, altitudes, and times are usually adequate for developing scenario variations. Selecting random aircraft for special situations will also add depth to scenario variations.

(d) The instructor must determine the weather, flight conditions, ground vehicle traffic, and any abnormal conditions that may affect the overall scenario complexity and controller workload. The instructor must simulate these conditions as closely as possible to add realism to the scenario.

(e) The instructor must randomly incorporate pilot readback errors throughout the control scenarios. These are intentional readback errors made by ghost pilots to the developmental/CPC-IT in order to evaluate the developmental's/CPC-IT's listening skills.

(f) All instructional scenarios must have specific objectives and be directed toward developing the knowledge and ability of those receiving the training. The instructor must ensure that all scenario objectives are met.

(g) The instructor must introduce operations or situations that directly relate to scenario complexity. Normally it is more effective to introduce these complexity factors at a lower volume level to facilitate learning the associated procedure. If normal operational requirements dictate predetermined changes in runway or airspace configurations or changes in

services provided at an operational position which affect complexity, separate scenarios should be administered for each change. Each scenario must state objectives, volume level, and complexity factors.

(h) Positive and methodical steps must be taken when developing simulated tower instructional scenarios. Complexity, special control events, abnormal traffic situations, weather conditions, script development, and instructor guides need to be considered to achieve the desired objectives.

c. Simulation Training Scenario Objectives. Each scenario may contain one or more of the duties listed below. By the completion of this training, the developmental/CPC-IT must have independently performed all applicable duties.

- (1) Coordinate with Local Control (LC) for runway crossings/usage.
- (2) Issue progressive taxi instructions.
- (3) Use intersection departure procedures and phraseology.
- (4) Issue hold short instructions.
- (5) Issue abbreviated transmissions.
- (6) Ensure readback/hearback.
- (7) Ensure vehicles/aircraft hold short of runway.
- (8) Utilize ASDE-X/ASDE/Airport movement area safety system procedures.
- (9) Preclude aircraft movement in the ILS critical areas, as appropriate.
- (10) Provide current ATIS/weather information.
- (11) Request PIREP for braking action, low level wind shear, visibility, etc.
- (12) Issue Significant Meteorological Information (SIGMET)/Hazardous in-flight weather advisory service.
- (13) Understand the priority of duty.
- (14) Issue traffic management instructions (e.g., EDCT, TBFM, SWAP, metering, flow control).
- (15) React appropriately to emergency or unusual situations (e.g., observing a cargo door ajar or smoke from an engine).
- (16) Respond to suspicious activity/man-portable air defense systems (MANPADS).
- (17) Apply additional facility-identified procedures.

Note: The guidelines listed above have proven to be most effective when developing control scenarios. There may be other methods, such as selecting 1 hour's traffic from the actual position and administering it as a control scenario. There are pitfalls to this type of scenario development, however, because of the wide variation among traffic situations and because real traffic, as experienced from one position, does not always include typical air traffic occurrences.

d. Simulation Evaluation.

(1) Simulation evaluation scenarios must be administered at regular intervals during the simulation segment of training. The evaluations must be conducted on a pass/fail basis.

(2) Instructions on documenting and grading the evaluation are contained in appendix B. The following chart must be used to grade the scenarios:

Maximum Errors Allowed Per Scenario by Job Task

Job Task	Ground
Separation	0
Coordination	2
Control Judgment	5
Methods and Procedures	5
Equipment, Communication and Other	5

(3) If the individual does not meet the requirements for successful completion of the scenario, the TA may determine that SET is warranted. The SET may include:

- (a) Instructor-led training,
- (b) CBI lessons, and/or
- (c) Instructional scenarios.

(4) SET must be followed by a re-evaluation scenario at the same level of difficulty (complexity and volume) as that at which the failure occurred.

(5) If the individual does not pass the final graded evaluation scenario, the provisions of the most recent Human Resources Policy Manual must be followed. A training review board is not required for instructor-led or simulation training failure.

e. Scenario Development. The following situations and procedural items must be included in the familiarization and instructional scenarios if applicable to the facility/position. Other items may be added as deemed appropriate by the TA, based on their applicability in the individual position:

- (1) Coordinate with LC for runway crossings/usage.

- (2) Issue progressive taxi instructions.
- (3) Implement intersection departure procedures and phraseology.
- (4) Issue hold short instructions.
- (5) Use abbreviated transmissions.
- (6) Ensuring readback/hearback.
- (7) Ensure vehicles/aircraft hold short of runway.
- (8) Use airport movement area safety system procedures and equipment: ASDE/ASDE-X/Airport Movement Area Safety System (AMASS).
- (9) Protect ILS critical areas.
- (10) Provide current ATIS/weather information.
- (11) Request PIREP for braking action, low level wind shear, visibility, etc.
- (12) Issue SIGMET/Hazardous in-flight weather advisory service.
- (13) Actively scan.
- (14) Understand priority of duty.
- (15) Issue traffic management instructions (e.g., EDCT, TBFM, SWAP, metering, flow control).
- (16) Handle emergency or unusual situations (e.g., observing a cargo door ajar or smoke from an engine).
- (17) Respond to suspicious activity/Man-Portable Air Defense Systems (MANPADS).
- (18) Apply additional facility-identified procedures.

f. Scenario Application. During the ground control simulation stage of training, the developmental/CPC-IT will perform the following in accordance with JO 7110.65:

- (1) Separate aircraft from protected runways/critical areas and other aircraft.
- (2) Issue clearances using correct phraseology.
- (3) Forward control information using correct phraseology.
- (4) Record clearances and control information on strips, using approved symbols and abbreviations.

- (5) Communicate using radio and interphone procedures.
- (6) Use effective board management techniques.
- (7) Demonstrate situational awareness.
- (8) Obtain information from an aircraft in an emergency and notify the proper facilities.
- (9) Obtain and disseminate weather information.
- (10) Demonstrate knowledge of all applicable Letters of Agreement.
- (11) Demonstrate knowledge of the assigned area of specialization.
- (12) Position relief briefings must be received (before) and given (after) each instructional scenario.

g. Scenario Difficulty. This section covers the development of scenarios. A developmental/CPC-IT must control varying volumes of traffic and resolve situations of varying complexity. Volume level is the basic criteria for scenario development.

(1) Complexity factor. Scenario complexity is based on the number of situations that require the developmental/CPC-IT to apply the various procedures in JO 7110.65, such as ensuring separation, issuing taxi instructions, ensuring accurate readback of control instructions, and handling emergencies.

(2) Volume level criteria. This element refers to the hourly operations rate. The hourly operations rate is based on 100 percent traffic volume from an average period of a busy day (as defined and validated by the facility and included in the facility training directive).

The TA must determine the number of instructional scenarios the developmental/CPC-IT will complete. Evaluation scenarios must be administered at regular intervals during the simulation segment of training.

(a) Familiarization Scenarios. The developmental/CPC-IT must be given familiarization scenarios. These scenarios should emphasize the importance of effective interaction between the position and other Tower and/or TRACON team members.

Example: The first two Familiarization Scenarios should also place additional emphasis on equipment (e.g., buttonology, keyboarding).

(b) Instructional Scenarios. Instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing position duties in a simulated operational environment.

(c) Simulation Evaluation. Evaluation scenarios must be administered at regular intervals during the instructional scenario segment of training. The evaluations must be pass/fail.

- i. A preparatory evaluation scenario must be administered prior to the first

evaluation scenario.

ii. Developmentals/CPC-IT's must not be evaluated on any procedures or situations that they have not had experience with in previous scenarios.

iii. The instructor must assist, as necessary, to maintain scenario continuity, except during pass/fail evaluation scenarios.

(3) Position relief briefings must be received before and given after each instructional scenario.

(4) Scenario program example. The example in Figure F-2, Sample Simulation Scenarios shows how a training program may be designed to fulfill the requirements of this stage.

Figure F-2: Sample Simulation Scenarios

Scenario	Volume (%)	Type
A	50	Familiarization
B	70	Familiarization
C	75	Familiarization
D	75	Familiarization
E	75	Familiarization
1	80	Instructional
2	80	Instructional
3	80	Evaluation-Preparatory
4	80	Instructional
5	80	Evaluation (Pass/Fail)
6	85	Instructional
7	85	Instructional
8	90	Instructional
9	90	Instructional
10	90	Evaluation (Pass/Fail)
11	95	Instructional
12	95	Instructional
13	95	Instructional
14	100	Instructional
15	100	Evaluation (Pass/Fail)
16	110	Instructional

h. Additional Scenarios.

(1) Following successful completion of the evaluations and prior to the start of OJT, additional control scenarios may be administered on each sector in the developmental's/CPC-IT's area of specialization. These scenarios are intended to introduce the developmental/CPC-IT

to sector-specific operations and traffic flows.

(2) The scenarios will provide a highly interactive instructional environment in which the instructor and the developmental/CPC-IT will be able to discuss strategies and alternatives.

(3) The number of scenarios will be determined by the TA based on the needs of the facility.

(4) Instructional scenarios may use combined sector and position configurations.

10. OJT. Through OJT, the developmental/CPC-IT must demonstrate the ability to satisfactorily perform the applicable job subtasks described in appendix B of this order.

11. OJT Checklist. OJT checklists should be used as a mutual training tool for the OJTI and the developmental/CPC-IT. When a checklist is used, the developmental/CPC-IT must be provided with the appropriate stage checklist during the initial training team meeting for that stage. Facilities may develop checklists locally. A sample OJT checklist of Radar Control is provided. Completed OJT Checklist forms must be retained with other required training documentation.

**Section 6. Stage 5: Local Control/Cab Coordinator Position Training.
(Courses 55063 or current course)**

1. General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of the Local Control (LC) and Cab Coordinator (CC) positions within the ATCT and to attain certification on those positions.

This stage of training is administered in three parts: instructor-led training, simulation, and OJT. The instructor-led training uses facility-prepared instructional materials to supplement the FAA nationally-prepared materials. When training CPC who have lost operational currency or have transferred from another facility or area of specialization, the TA must decide which portions of the instructor-led and simulation training will be administered based on the needs of the specialist. Pass/fail criteria must apply in this stage of training.

2. Prerequisite: Successful completion of Stage 2 Classroom Training.

3. Location: Field facility.

4. Training Length: Site specific.

5. Administration: Facilities with limited training resources must utilize FAA nationally-developed lesson plans and facility-developed self-study materials that will cover all of the required local knowledge and procedures. Contractor-supported training should be developed to facilitate support of training initiatives, as required. Instructor-led training is administered using nationally and/or facility-developed lesson plans and conducted under the direction of the TA. Facility lesson plans must be developed for:

- a. Airport layout and Tower airspace layout.
- b. Local procedures.
- c. Equipment operations.

After successful completion of instructor-led/simulation training (as appropriate), OJT must be conducted in the operational environment in accordance with chapter 6 of this order.

Note 1: Facilities may delay GC OJT until completion of LC-CC instructor-led and simulation training.

Note 2: High-fidelity simulators (e.g., TSS) are the preferred method of conducting simulation training, utilizing locally developed scenarios as described in this section on a pass/fail basis. All Towers with access to a TSS must conduct simulation training using the TSS prior to starting OJT. Towers unable to access the TSS may use table-top/CAB LAB simulation.

Exception: Table-top/CAB LAB simulation training is not subject to the pass/fail evaluation.

Note 3: The Terminal District Manager, in coordination with AJI-2, is responsible to determine which facilities have access to the TSS.

6. Instructor-Led Training. The individual must successfully demonstrate the skills listed below in accordance with JO 7110.65, JO 7210.3, and local directives, and must pass an examination with a score of 90 percent or higher on the material. Locally prepared evaluations must be administered, as applicable.

Note 1: The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) must be instructed or whether a review of the lessons is sufficient. This can be determined by administering an exam. If the developmental/CPC-IT passes the exam on one or more of the lessons with a score of 95 percent or higher, he or she may be excused from taking the other lessons.

Note 2. The following FAA nationally-developed training must be taught via instructor-led training, CBI, or self-study, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT. The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) will be instructed or a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure that training is provided to correct deficiencies identified on the end-of-lesson exam(s).

a. Part 1—FAA Nationally-Developed Lesson Plans.

- (1) General Control.
- (2) Local Control Duties and Responsibilities.
- (3) Airport Lighting.
- (4) Wake Turbulence.
- (5) VFR Arrival Procedures.
- (6) VFR Departure Procedures.
- (7) IFR Arrival and Departure Procedures.
- (8) Visual Separation, VFR-ON-TOP and Special VFR.
- (9) Helicopter Aerodynamics and Operations.
- (10) Special Operations.
- (11) Emergency Procedures.
- (12) BRITE.
- (13) DBRITE/TDW.
- (14) Wind Effects.

(15) Low Level Wind Shear Alert (LLWAS).

(16) TDWR and LLWAS-NE/RS.

(17) Hazardous Weather.

b. Part 2—Site-Specific.

(1) Introduction/Overview. The individual must be provided pertinent information concerning and must explain the correct application of procedures contained in the following as they pertain to the position.

(a) Terminal area local procedures.

(b) LOAs, facility directives, orders, notices, aircraft performance characteristics, and position description and responsibilities.

(c) Position associated equipment.

(d) Describe procedures for conducting/receiving position relief briefings.

(2) Separation minimums.

(3) Heavy jet/wake turbulence separation procedures.

(4) Control Procedures.

(5) Runway Use.

(6) Helicopter Operations.

(7) SVFR/VFR ON TOP.

(8) Emergency procedures and unusual situations.

(9) BRITE/DBRITE/TDW.

(10) Wind effects and wind shear detection equipment.

(11) Cold Temperature Compensation, if applicable.

(12) Missed approach procedures and altitudes.

(13) Special/Military Operations.

c. Additional evaluations may be developed to evaluate the developmental's/CPC-IT's progress, as deemed necessary, to meet facility and/or individual training needs.

Note 1: If the individual does not pass the final graded instructor-led evaluation the provisions

of the most recent Human Resources Policy Manual must be followed.

Note 2: A training review board is not required for instructor-led or simulation training failure.

7. Instructor-led Training Evaluation.

a. Locally prepared evaluations must be administered on the following items, as applicable:

- (1) Information contained in the FAA nationally-developed lesson plans.
- (2) Airport Layout/Diagram and Airspace.
- (3) Local equipment and procedures.

b. Additional evaluations may be developed to evaluate the developmental's/CPC-IT's progress, as deemed necessary, to meet facility and/or individual training needs.

Note 1: If the individual does not pass the final graded instructor-led evaluation the provisions of the most recent HPRM must be followed.

Note 2: A training review board is not required for instructor-led or simulation training failure.

8. Simulation Training.

Simulation training is being administered at terminal facilities using the capabilities of the simulation equipment. This gives the developmental/CPC-IT an opportunity to learn and demonstrate, under simulated conditions, all the knowledge and skills required of a CPC.

a. General.

(1) At facilities where simulation equipment is available, the TA will determine the number of simulation training scenarios that the individual must complete. Periodic evaluation scenarios will be conducted to determine the individual's progress through the completion of the scenarios.

Example: The TA may require the administration of 18 simulation training Local Control scenarios, with numbers 6, 10, 14, and 18 as pass/fail evaluations.

(2) It is necessary to complete scenarios at the lowest complexity level first and to progressively work up to the highest level. Scenarios at a given complexity level may be administered in any order to provide variation. The developmental/CPC-IT will be required to complete training on a given set of instructional scenarios similar to those in the operational position. This requirement will ensure the developmental's/CPC-IT's exposure to the many prescribed special events and control situations that could occur.

(3) Simulation scenarios will be counted as simulation hours. A minimum and maximum number of simulation hours should be established in the local training directive.

(4) Up to 1 hour must be allotted for the instructional scenarios. This does not include the

time spent for briefing and critique. The instructor is not precluded from terminating the simulated scenario prior to the time indicated if it has been determined that the maximum instructional benefit of the scenario has been derived.

(5) The results of the individual's performance during each scenario must be recorded on FAA Form 3120-25 and discussed with the individual. (See appendix B.) Forms used during the evaluation scenario must be retained and filed in the individual's training folder.

b. Instructional Scenario Development.

(1) Definitions.

(a) Volume level - A factor expressed as a percentage of the traffic worked during a typical busy period.

(b) Complexity - The number of situations that require thought to resolve an issue or conflict.

(2) General Objectives. To achieve standardization of volume level and scenario complexity for all field facilities, the following instructional scenarios development procedures have been established:

(a) Instructional scenarios must be developed for an operational position starting at the 50 percent volume level and progressively increasing to the 110 percent volume level. The additional 10 percent must be added to ensure that the developmental/CPC-IT encounters a greater volume of traffic than he/she will normally be expected to control.

(b) The formula is based on 110 percent traffic volume from an average period of a busy day (as defined and validated by the facility).

(c) To protect scenario integrity, some variations of the scenario should be made. Changes in aircraft identifications, equipment types, altitudes, and times are usually adequate for developing scenario variations. Selecting random aircraft for special situations will also add depth to scenario variations.

(d) The instructor must determine the weather, flight conditions, VFR traffic, and any abnormal conditions that may affect the overall scenario complexity and controller workload. The instructor must simulate these conditions as closely as possible to add realism to the scenario.

(e) The instructor must randomly incorporate pilot readback errors throughout the instructional scenarios. These are intentional readback errors made by ghost pilots to the developmental/CPC-IT in order to evaluate the developmental's/CPC-IT's listening skills.

(f) All instructional scenarios must have specific objectives and be directed toward developing the knowledge and ability of those receiving the training. The instructor must ensure that all scenario objectives are met.

(g) The instructor must introduce operations or situations that directly relate to scenario complexity. Normally it is more effective to introduce these complexity factors at a lower volume level to facilitate learning the associated procedure. If normal operational requirements dictate predetermined changes in runway or airspace configurations or changes in services provided at an operational position which affect complexity, separate scenarios should be administered for each change. Each scenario must state objectives, volume level, and complexity factors.

(h) Positive and methodical steps must be taken when developing simulated tower instructional scenario. Complexity, special control events, abnormal traffic situations, weather conditions, script development, and instructor guides need to be considered to achieve the desired scenario objectives.

Note: The guidelines listed above have proven to be most effective when developing control instructional scenarios. There may be other methods, such as selecting 1 hour's traffic from the actual position and administering it as an instructional scenario. There are pitfalls to this type of scenario development, however, because of the wide variation among traffic situations and because real traffic, as experienced from one position, does not always include typical air traffic occurrences.

c. Simulation Training Scenario Objectives. Each scenario may contain one or more of the duties listed below. By the completion of this training, the developmental/CPC-IT must have independently performed all applicable duties.

- (1) Demonstrate appropriate separation:
 - (a) Separation between arrival and departure aircraft.
 - (b) Simultaneous operations on parallel runways.
 - (c) Intersecting runways.
 - (d) Successive departure aircraft.
 - (e) Helicopter operations.
 - (f) Visual separation.
- (2) Land and hold short operations (LAHSO).
- (3) Line Up and Wait (LUAW) procedures.
- (4) Wake Turbulence Separation.
- (5) Canceling approach clearance and subsequent coordination with radar.
- (6) Initiate a go-around and subsequent coordination with radar.
- (7) Correctly instruct aircraft where to enter traffic pattern.

- (8) Coordination with Ground Control for Runway crossing/usage.
- (9) Scanning.
- (10) Solicit Pilot Weather Reports (PIREP) when appropriate.
- (11) Issue traffic management instructions (e.g., EDCT, TBFM, SWAP, metering, flow control).
- (12) Apply appropriate radio failure procedures.
- (13) Recognize an aircraft with an inoperative transponder.
- (14) Resolve an emergency situation.
- (15) Recognize weather on a BRITE/TDW display and advise aircraft concerned.
- (16) Provide appropriate position relief briefing.
- (17) Respond appropriately to suspicious activity/MANPADS.
- (18) Apply additional facility-identified procedures.

d. Simulation Evaluation.

- (1) Simulation evaluation scenarios must be administered at regular intervals during the simulation segment of training. The evaluations must be conducted on a pass/fail basis.
- (2) Instructions on documenting and grading the evaluation are contained in appendix B. The following chart must be used to grade the scenarios:

Maximum Errors Allowed Per Scenario by Job Task

Job Task	Local
Separation	0
Coordination	2
Control Judgment	5
Methods and Procedures	5
Equipment, Communication, and Other	5

- (3) If the individual does not meet the requirements for successful completion of the scenario, the TA may determine that SET is warranted. The SET training may include:

- (a) Instructor-led training.
- (b) CBI lessons.
- (c) Instructional scenarios.

(4) SET must be followed by a re-evaluation scenario at the same level of difficulty (complexity and volume) as that at which the failure occurred.

(5) If the individual does not pass the final graded evaluation scenario, the provisions of the most recent Human Resources Policy Manual must be followed.

Note: A training review board is not required for instructor-led or simulation training failure.

e. Scenario Development. The following situations and procedural items must be included in the familiarization and instructional scenarios if applicable to the facility/position. Other items may be added as deemed appropriate by the TA, based on their applicability to the individual position:

- (1) Applying separation rules:
 - (a) Same runway separation.
 - (b) Overtakes.
 - (c) Separation from adjacent airspace and obstructions.
 - (d) Successive arrivals and departures.
 - (e) Simultaneous arrivals and departures.
 - (f) Wake Turbulence.
 - (g) Visual Separation.
 - (h) Special VFR/VFR ON-TOP separation.
- (2) Communication and coordination:
 - (a) Hearback/readback errors
 - (b) Transfer of control and communications.
 - (c) Inter- and intra-facility coordination.
 - (d) Coordinate restrictions.
- (3) Clearances and control information.

(4) Procedures:

- (a) Local Standard Operation Procedures (SOP).
- (b) Traffic management initiatives (e.g., EDCT, TBFM, SWAP, metering, flow control)

(5) Emergencies and Equipment Outages:

- (a) Loss of communication.
- (b) In-flight emergencies.
- (c) Aircraft with minimum fuel.
- (d) Hijacking Procedures

(6) Weather:

- (a) Reporting and disseminating weather information.
- (b) Runway Visual Range/Runway Visibility Value (RVR/RVV), if applicable.

f. Scenario Application. During the simulation stage of training, the developmental/CPC-IT will perform the following in accordance with JO 7110.65:

- (1) Separate aircraft from protected runways/critical areas and other aircraft.
- (2) Issue clearances using correct phraseology.
- (3) Forward control information using correct phraseology.
- (4) Record clearances and control information on strips, using approved symbols and abbreviations.
- (5) Communicate using radio and interphone procedures.
- (6) Use effective board management techniques.
- (7) Demonstrate situational awareness.
- (8) Obtain information from an aircraft in an emergency and notify the proper facilities.
- (9) Obtain and disseminate weather information.
- (10) Demonstrate knowledge of all applicable Letters of Agreement.
- (11) Demonstrate knowledge of the assigned area of specialization.
- (12) Position relief briefings must be received (before) and given (after) each instructional

scenario.

g. Scenario Difficulty. This section covers the development of scenarios. A developmental/CPC-IT must control varying volumes of traffic and resolve situations of varying complexity. Volume level is the basic criteria for scenario development.

(1) Complexity factor. Scenario complexity is based on the number of situations that require the developmental/CPC-IT to apply the various procedures in JO 7110.65, such as ensuring separation, issuing taxi instructions, ensuring accurate readback of control instructions, and handling emergencies.

(2) Volume level criteria. This element refers to the hourly operations rate. The hourly operations rate is based on 100 percent traffic volume from an average period of a busy day (as defined and validated by the facility and included in the facility training directive).

The TA must determine the number of instructional scenarios the developmental/CPC-IT will complete. Evaluation scenarios must be administered at regular intervals during the simulation segment of training.

(a) Familiarization Scenarios. The developmental/CPC-IT must be given familiarization scenarios. These scenarios should emphasize the importance of effective interaction between the position and other Tower and/or TRACON team members.

Example: The first two Familiarization Scenarios should also place additional emphasis on equipment (e.g., buttonology, keyboarding).

(b) Instructional Scenarios. Instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing position duties in a simulated operational environment.

(c) Simulation Evaluation. Evaluation scenarios must be administered at regular intervals during the instructional scenario segment of training. The evaluations must be pass/fail.

i. A preparatory evaluation scenario must be administered prior to the first evaluation scenario.

ii. Developmentals/CPC-ITs must not be evaluated on any procedures or situations that they have not had experience with in previous scenarios.

iii. The instructor must assist, as necessary, to maintain scenario continuity, except during pass/fail evaluation scenarios.

(3) Position relief briefings must be received before and given after each instructional scenario.

(4) Scenario program example. The example in Figure F-3, Sample Simulation Scenarios shows how a training program may be designed to fulfill the requirements of this stage.

Figure F-3: Sample Simulation Scenarios

Scenario	Volume (%)	Type
A	50	Familiarization
B	70	Familiarization
C	75	Familiarization
D	75	Familiarization
E	75	Familiarization
1	80	Instructional
2	80	Instructional
3	80	Evaluation-Preparatory
4	80	Instructional
5	80	Evaluation (Pass/Fail)
6	85	Instructional
7	85	Instructional
8	90	Instructional
9	90	Instructional
10	90	Evaluation (Pass/Fail)
11	95	Instructional
12	95	Instructional
13	95	Instructional
14	100	Instructional
15	100	Evaluation (Pass/Fail)
16	110	Instructional

h. Additional Scenarios.

(1) Following successful completion of the evaluations and prior to the start of OJT, additional control scenarios may be administered on each sector in the developmental's/CPC-

IT's area of specialization. These scenarios are intended to introduce the developmental/CPC-IT to sector-specific operations and traffic flows.

(2) The instructional scenarios will provide a highly interactive instructional environment in which the instructor and the developmental/CPC-IT will be able to discuss strategies and alternatives.

(3) The number of scenarios will be determined by the TA based on the needs of the facility.

(4) Instructional scenarios may use combined sector and position configurations.

i. Recovery in ATC Operations.

(1) Training must be conducted in three parts: classroom discussion with examples, performance in laboratory and/or part task scenarios, and post-scenario discussions. If possible, the training team that will instruct the student during OJT should also participate in the student's recovery training.

(2) A minimum of four laboratory or part-task scenarios involving Recovery in ATC Operations must be administered prior to the start of OJT. These scenarios are intended to introduce the student to methods of re-establishing the correct margin of safety in response to an unsafe situation/outcome.

(3) The scenarios are non-pass/fail with no time limit established. The scenarios must provide an interactive instructional environment in which the instructor and student are able to discuss methods of recovery, strategies, and alternatives that assist in re-establishing minimum separation. Post-scenario discussions should include inadequate recovery actions to mitigate the event, other recovery actions that could be taken to mitigate the event, possible controller actions that could make the event worse, and situations where no recovery actions were necessary.

(4) At the TA's discretion, scenarios may include: runway incursions, runway excursions, aircraft on converging runways, missed approach, departures and go-arounds, compression, turns to final, hear-back/read-back, similar sounding call-signs, airport construction, loss of data blocks (target only), transposed call signs, lost communication, receiver only/light gun signals, emergencies, etc.

9. OJT. Through OJT, the developmental/CPC-IT must demonstrate the ability to satisfactorily perform the applicable job subtasks described in appendix B of this order.

10. OJT Checklist. OJT checklists should be used as a mutual training tool for the OJTI and the developmental/CPC-IT. When a checklist is used, the developmental/CPC-IT must be provided with the appropriate stage checklist during the initial training team meeting for that stage. Facilities may develop checklists locally. A sample OJT checklist of Radar Control is provided. Completed OJT Checklists must be retained with other required training documentation.

Section 7. Stage 6: Non-Radar Training.
(Courses 55064 or current course)

1. General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of Non-Radar (NR) on all sectors within the TRACON and to attain certification on those positions if required.

2. Exception: Facilities whose procedures preclude them from providing non-radar control are exempt from non-radar controller training. In those facilities that have sectors where lack of radar coverage or existing procedures require only occasional use of non-radar procedures, the TA must ensure that the developmental/CPC-IT understands the capabilities of the back-up systems.

Note: Each radar facility must develop and administer radar-to-non-radar transition scenarios, consistent with operational needs, as contained within local emergency contingency directives. Emphasis will be placed on transition from the primary source of radar information to the backup radar and vice versa. Training must ensure that personnel are able to demonstrate knowledge of the procedures used to transition to the backup radar and that personnel can apply separation standards applicable to that mode. Other items may be added as deemed appropriate by the TA, based on their applicability to the individual position.

This stage of training is administered in three parts: instructor-led training, simulation (if available), and OJT. When training CPCs who have lost operational currency or have transferred from another facility or area of specialization, the TA must decide which portions of the instructor-led and simulation training will be administered based on the needs of the specialist. Pass/fail criteria must apply in this stage of training.

3. Prerequisite: Successful completion of Terminal Basic Radar (course 50034 or current course), or individual meets direct entry qualifications established for specific hiring source.

Note: TAs may assign individuals to the RC/HO/CI training track simultaneously with the NR training track, based on the facility's needs.

4. Location: Field facility.

5. Training Length: Site specific.

6. Administration: Facilities with limited training resources must utilize FAA nationally-developed lesson plans and facility-developed self-study materials that will cover all of the required local knowledge and procedures. Contractor-supported training should be developed to facilitate support of training initiatives, as required. Instructor-led training is administered using nationally and/or facility-developed lesson plans and conducted under the direction of the TA. Facility lesson plans must be developed for:

- a. Airspace layout.
- b. Local procedures.

c. Equipment operations.

After successful completion of instructor-led/simulation training (as appropriate), OJT must be conducted in the operational environment in accordance with chapter 6 of this order.

Note 1: Facilities may delay NR OJT until completion of RC instructor-led and simulation training.

Note 2: High-fidelity simulators (e.g., AT Coach, Enhance Target Generator (ETG)) are the preferred method of conducting simulation training, utilizing locally developed scenarios as described in this section on a pass/fail basis. All facilities must conduct simulation training prior to starting OJT.

7. Instructor-Led Training. The individual must successfully demonstrate the skills listed below in accordance with JO 7110.65, JO 7210.3, and local directives, and must pass an examination with a score of 90 percent or higher (unless otherwise stipulated) on the material. Locally prepared evaluations must be administered, as applicable.

a. Part 1—General.

- (1) Draw the terminal area map.
- (2) Apply separation standards.
- (3) Apply approach/departure procedures and minimum instrument approach altitudes.
- (4) Issue clearances, advisories, and control information using approved phraseology and proper format.
- (5) Review flight data for accuracy.
- (6) Relay weather reports and Notices to Airmen (NOTAMs).
- (7) Receive and post flight progress reports.
- (8) Analyze traffic situations for potential conflicts.
- (9) Apply inter-facility/intra-facility coordination requirements.
- (10) Provide flight assistance services.

b. Part 2—Site-Specific Equipment and Procedures.

(1) Position-associated equipment. Use and apply procedures for backup radar or non-radar approach control position equipment.

(2) Procedures.

- (a) Explain the application of procedures contained in the following publications as

they pertain to the backup radar or non-radar terminal control position:

- i. FAA orders and/or handbooks.
- ii. Facility directives and memoranda.
- iii. Letters of Agreement (LOA).
- iv. Position binders.
- v. AIM.

(b) Describe procedures for conducting/receiving briefings before and after position relief.

c. Part 3—Evaluation. Terminal control information.

(1) Given an unlabeled chart of local area depicting low-altitude and high-altitude airway structures and Navigation Aid (NAVAID) symbols, and in accordance with local directives, draw and identify:

- (a) All items required on the flight data area map.
- (b) Primary and secondary holding fixes.
- (c) Holding patterns and altitudes.
- (d) Minimum safe altitudes.

(2) Given unlabeled approach plates, fill in or label the following:

- (a) Transitions.
- (b) Transition altitudes.
- (c) Initial altitude at approach fix.
- (d) Procedure turn—direction from course.
- (e) Final altitude until Final Approach Fix (FAF).
- (f) Heading—final approach course.

(g) Minimum Descent Altitude (MDA), Height Above Touchdown (HAT), Height Above Airport (HAA), and Decision Height (DH).

- (h) Missed approach.
- (i) Weather minimums.

8. Lesson Plans.

Note 1: The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) must be instructed or whether a review of the lessons is sufficient. This can be determined by administering an exam. If the developmental/CPC-IT passes the exam on one or more of the lessons with a score of 95 percent or higher, he or she may be excused from taking the other lessons.

Note 2: The following FAA nationally-developed lesson plans must be taught via instructor-led training, CBI, or self-study, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT. The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) will be instructed or a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure that training is provided to correct deficiencies identified on the end-of-lesson exam(s).

a. The Terminal Study Guide (TS-6-1 – TS-6-10) covering:

- (1) Lesson Plan 1 IFR Charts
- (2) Lesson Plan 2 IFR Publications
- (3) Lesson Plan 3 Stripmarking
- (4) Lesson Plan 4 IFR Holding
- (5) Lesson Plan 5 Vertical Separation
- (6) Lesson Plan 6 Lateral Separation
- (7) Lesson Plan 7 Longitudinal Separation
- (8) Lesson Plan 8 Initial Separation of Arriving and Departing Aircraft
- (9) Lesson Plan 9 Arrival and Departure Procedures
- (10) Lesson Plan 10 Emergencies and Communication Failures

b. Non-radar Instructor-Led Skills Development Exercises.

(1) Each facility, as determined by the TA, may develop (in accordance with the local training directive) non-radar instructor-led skills development exercises that allow Developmentals/CPC-ITs to apply specific skills and knowledge acquired during the academic instruction.

Example: Facilities that have sectors whose lack of radar coverage requires extensive use of non-radar control procedures, the TA may require the administration of a number of instructional scenarios. Developmentals /CPC-ITs must achieve a successful evaluation on these instructional scenarios at 70 percent and 100 percent of simulation. In those facilities that have sectors where

lack of radar coverage or existing procedures require only occasional use of non-radar procedures, the TA must ensure that the developmental/CPC-IT understands the capabilities of the back-up systems.

- (2) The exercises will provide the developmental/CPC-IT with the opportunity to:
 - (a) Record clearances and control information on strips.
 - (b) Use correct radio and interphone message format and communication procedures.
 - (c) Determine the need for separation (plotting and projecting).
 - (d) Issue clearances according to priority.
 - (e) Apply effective board management.

9. Instructor-Led Training Evaluation.

- a.** Locally prepared evaluations must be administered on the following items, as applicable:

- (1) Information contained in the FAA nationally-developed lesson plans.
- (2) Airspace layout.
- (3) Local equipment and procedures.

b. Additional evaluations may be developed to evaluate the developmental's/CPC-IT's progress, as deemed necessary to meet facility and/or individual training needs.

Note 1: If the individual does not pass the final graded instructor-led evaluation the provisions the most recent HRPm must be followed.

Note 2: A training review board is not required for instructor-led or simulation training failure.

10. Simulation Training.

Simulation training gives the developmental/CPC-IT an opportunity to learn and demonstrate, under simulated conditions, all the knowledge and skills required of a CPC.

Note: Each radar facility must develop and administer radar-to-non-radar transition scenarios consistent with operational needs, as contained within local emergency contingency directives. Emphasis will be placed on transition from the primary source of radar information to the backup radar and vice versa. Training must ensure that personnel are knowledgeable about the procedures used to transition to the backup radar and that personnel can apply separation standards applicable to that mode. Other items may be added as deemed appropriate by the TA, based on their applicability to the individual position.

a. General.

(1) At facilities where simulation equipment is available, the TA will determine the number of simulation training scenarios that the individual must complete. Periodic evaluation scenarios will be conducted to determine the individual's progress through the completion of the scenarios.

Example: The TA may require the administration of 18 simulation training scenarios, with numbers 6, 10, 14, and 18 as pass/fail evaluations.

(2) It is necessary to complete scenarios at the lowest complexity level first and to progressively work up to the highest level. Scenarios at a given complexity level may be administered in any order to provide variation. The developmental/CPC-IT will be required to complete training on a given set of instructional scenarios similar to those in the operational position. This requirement will ensure the developmental's/CPC-IT's exposure to the many prescribed special events and control situations that could occur.

(3) Simulation scenarios will be counted as simulation hours. A minimum and maximum number of simulation hours should be established in the local training directive.

(4) Up to 1 hour must be allotted for the instructional scenarios. This does not include the time spent for briefing and critique. The instructor is not precluded from terminating the simulated scenario prior to the time indicated if it has been determined that the maximum instructional benefit of the scenario has been derived.

(5) The results of the individual's performance during each scenario must be recorded on FAA Form 3120-25 and discussed with the individual (See appendix B.) Forms used during the evaluation scenario must be retained and filed in the individual's training folder.

b. Instructional Scenario Development.**(1) Definitions.**

(a) Volume level - A factor expressed as a percentage of the traffic worked during a typical busy period.

(b) Complexity - The number of situations that require thought to resolve an issue or conflict.

(2) General Objectives. To achieve standardization of volume level and scenario complexity for all field facilities, the following scenario development procedures have been established:

(a) Instructional scenarios must be developed for an operational position starting at the 50 percent volume level and progressively increasing to the 110 percent volume level. The additional 10 percent must be added to ensure that the developmental/CPC-IT encounters a greater volume of traffic than he/she will normally be expected to control.

(b) The formula is based on 110 percent traffic volume from an average period of a busy day (as defined and validated by the facility).

(c) To protect scenario integrity, some variations of the scenario should be made. Changes in aircraft identifications, equipment types, altitudes, and times are usually adequate for developing scenario variations. Selecting random aircraft for special situations will also add depth to scenario variations.

(d) The instructor must determine the weather, flight conditions, VFR traffic, and any abnormal conditions that may affect the overall scenario complexity and controller workload. The instructor must simulate these conditions as closely as possible to add realism to the scenario.

(e) The instructor must randomly incorporate pilot readback errors throughout the instructional scenarios. These are intentional readback errors made by ghost pilots to the developmental/CPC-IT in order to evaluate the developmental's/CPC-IT's listening skills.

(f) All instructional scenarios must have specific objectives and be directed toward developing the knowledge and ability of those receiving the training. The instructor must ensure that all scenario objectives are met.

(g) The instructor must introduce operations or situations that directly relate to scenario complexity. Normally it is more effective to introduce these complexity factors at a lower volume level to facilitate learning the associated procedure. If normal operational requirements dictate predetermined changes in runway or airspace configurations or changes in services provided at an operational position which affect complexity, separate scenarios should be administered for each change. Each scenario must state objectives, volume level, and complexity factors.

(h) Positive and methodical steps must be taken when developing simulated tower instructional scenario. Complexity, special control events, abnormal traffic situations, weather conditions, script development, and instructor guides need to be considered to achieve the desired scenario objectives.

Note: The guidelines listed above have proven to be most effective when developing instructional scenarios. There may be other methods, such as selecting an hour's worth of traffic from the actual position and administering it as an instructional scenario. There are pitfalls to this type of scenario development, however, because of the wide variation among traffic situations and because real traffic, as experienced from one position, does not always include typical air traffic occurrences.

c. Simulation Training Scenario Objectives. Each problem may contain one or more of the duties listed below. By the completion of this training, the developmental/CPC-IT must have independently performed all applicable duties.

(1) Applying separation rules.

(a) Crossing, converging, and opposite direction traffic.

- (b) Overtakes.
 - (c) Separation from, adjacent airspace, obstructions, and special use airspace.
 - (d) Successive arrivals and departures.
 - (e) Simultaneous arrivals and departures.
 - (f) Arrivals with altitudes inverted.
 - (g) Release aircraft into the airspace.
 - (h) VFR/IFR.
- (2) Communication and coordination.
- (a) Hearback/readback errors.
 - (b) Transfer of control and communications.
 - (c) Communication with aircraft through other than direct pilot-controller communication.
 - (d) Inter- and intra-facility coordination.
 - (e) Coordination restrictions.
 - (f) Verification information.
- (3) Clearances and control information.
- (a) IFR clearances.
 - (b) Clearance to alternate airport.
 - (c) VFR-on-top.
 - (d) VFR traffic encountering IFR.
 - (e) Route change in flight.
 - (f) Arrivals and departures.
 - (g) Approaches, including high-altitude IFR approaches, Contact Approaches.
 - (h) Holding.
 - (i) Airfiles and pop ups.
 - (j) Pilot deviations.

- (k) Requests for altitude change.
- (l) Radar Team concepts and communications.
- (4) Procedures.
 - (a) Interphone procedures.
 - (b) Traffic Management Initiatives (e.g., EDCT, TBFM, SWAP, metering, flow control).
 - (c) Fuel dumping.
 - (d) Special Flight Operations.
 - (e) Military procedures.
- (5) Emergencies and Equipment Outages.
 - (a) Loss of communication.
 - (b) In-flight emergencies.
 - (c) Aircraft with minimum fuel.
 - (d) National Airspace System control equipment failures.
 - (e) In-flight equipment malfunctions.
 - (f) Overdue aircraft.
 - (g) Hijack Procedures.
 - (h) Special Operations.
- (6) Weather
 - (a) Reporting and disseminating weather information.
 - (b) Changes to routes due to weather.
 - (c) Pilot Weather Reports (PIREPs).

Special situations should not be limited to those shown but should also include situations initiated by facility instructors except during an Evaluation Scenario.

d. Simulation Evaluation.

(1) Simulation evaluation scenarios must be administered at regular intervals during the simulation segment of training. The evaluations must be conducted on a pass/fail basis.

(2) Instructions on documenting and grading the evaluation are contained in appendix B. The following chart must be used to grade the scenarios:

Maximum Errors Allowed Per Scenario by Job Task	
Job Task	NR-HO-CI
Separation	0
Coordination	2
Control Judgment	5
Methods and Procedures	5
Equipment, Communication, and Other	5

(3) If the individual does not meet the requirements for successful completion of the scenario, the TA may determine that SET is warranted. The SET may include:

- (a) Instructor-led training.
- (b) CBI lessons.
- (c) Instructional scenarios.

(4) SET must be followed by a re-evaluation scenario at the same level of difficulty (complexity and volume) as that at which the failure occurred.

(5) If the individual does not pass the final graded evaluation scenario, the provisions of the most recent Human Resources Policy Manual must be followed.

Note: A training review board is not required for instructor-led or simulation training failure.

e. Scenario Development. The following situations and procedural items must be included in the familiarization and instructional scenarios if applicable to the facility/position. The scenarios must include traffic situations that involve:

- (1) Arrivals versus arrivals.
- (2) Departures versus departures.
- (3) Arrivals versus departures.
- (4) Arrivals versus adjacent airspace and over-flights.
- (5) Arcs versus holding pattern airspace.
- (6) Loss of communication.

- (7) Emergency procedures.
- (8) Special Visual Flight Rules (SVFR) procedures.

f. Scenario Application. During the simulation stage of training, the developmental/CPC-IT must perform the following in accordance with JO 7110.65:

- (1) Separate aircraft from other aircraft.
- (2) Issue clearances using correct phraseology.
- (3) Forward control information using correct phraseology.
- (4) Record clearances and control information on strips or pad, using approved symbols and abbreviations.
- (5) Communicate using radio and interphone procedures.
- (6) Use effective board/pad management techniques.
- (7) Demonstrate situational awareness.
- (8) Obtain information from an aircraft in an emergency and notify the proper facilities.
- (9) Obtain and disseminate weather information.
- (10) Demonstrate knowledge of all applicable Letters of Agreement.
- (11) Demonstrate knowledge of the Non-radar/RA position.
- (12) Receive and give position relief briefings on each instructional scenario.

g. Scenario Difficulty. This section covers the development of scenarios. A developmental/CPC-IT must control varying volumes of traffic and resolve situations of varying complexity. Volume level is the basic criteria for scenario development.

(1) Complexity factor. Scenario complexity is based on the number of situations that require the developmental/CPC-IT to apply the various procedures in JO 7110.65, such as ensuring separation, issuing taxi instructions, ensuring accurate readback of control instructions, and handling emergencies.

(2) Volume level criteria. This element refers to the hourly operations rate. The hourly operations rate is based on 100 percent traffic volume from an average period of a busy day (as defined and validated by the facility and included in the facility training directive).

The TA must determine the number of instructional scenarios the developmental/CPC-IT will complete. Evaluation scenarios must be administered at regular intervals during the simulation segment of training.

(a) Familiarization Scenarios. The developmental/CPC-IT must be given familiarization scenarios. These scenarios should emphasize the importance of effective interaction between the position and other Tower and/or TRACON team members.

Example: The first two Familiarization Scenarios should also place additional emphasis on equipment (e.g., buttonology, keyboarding).

(b) Instructional Scenarios. Instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing position duties in a simulated operational environment.

(c) Simulation Evaluation. Evaluation scenarios must be administered at regular intervals during the instructional scenario segment of training. The evaluations must be pass/fail.

i. A preparatory evaluation scenario must be administered prior to the first evaluation scenario.

ii. Developmentals/CPC-ITs must not be evaluated on any procedures or situations that they have not had experience with in previous scenarios.

iii. The instructor must assist, as necessary, to maintain scenario continuity, except during pass/fail evaluation scenarios.

(3) Position relief briefings must be received before and given after each instructional scenario.

(4) Scenario program example. The example in Figure F-4, Sample Simulation Scenarios, shows how a training program may be designed to fulfill the requirements of this stage.

Figure F-4: Sample Simulation Scenarios

Scenario	Volume (%)	Type
A	50	Familiarization
B	70	Familiarization
C	75	Familiarization
D	75	Familiarization
E	75	Familiarization
1	80	Instructional
2	80	Instructional

Scenario	Volume (%)	Type
3	80	Evaluation-Preparatory
4	80	Instructional
5	80	Evaluation (Pass/Fail)
6	85	Instructional
7	85	Instructional
8	90	Instructional
9	90	Instructional
10	90	Evaluation (Pass/Fail)
11	95	Instructional
12	95	Instructional
13	95	Instructional
14	100	Instructional
15	100	Evaluation (Pass/Fail)
16	110	Instructional

h. Additional Scenarios.

(1) Following successful completion of the evaluations and prior to the start of OJT, additional control scenarios may be administered on each sector in the developmental's/CPC-IT's area of specialization. These scenarios are intended to introduce the developmental/CPC-IT to sector-specific operations and traffic flows.

(2) The instructional scenarios will provide a highly interactive instructional environment in which the instructor and the developmental/CPC-IT will be able to discuss strategies and alternatives.

(3) The number of scenarios will be determined by the TA based on the needs of the facility.

(4) Instructional scenarios may use combined sector and position configurations.

Figure F-5. Non-Radar Simulation Checklist

Non-Radar (NR) Simulation Checklist			
Developmental / CPC-IT		Facility	
As each item on the checklist is completed, the instructor must record the date and the developmental/CPC-IT must initial using operating initials.			
Indicate with a N/A in the date column for items on the checklist that do not apply.			
I. Apply Separation		Initials	Date
a.	Departures (IFR successive)		
b.	Arrivals (IFR successive)		
c.	Tower en route aircraft (airways and radials)		
d.	Separation by pilots		
e.	Emergency or radio failure		
f.	Report leaving, report reaching		
g.	Required coordination.		
II. Situational Awareness			
a.	High-altitude instrument approach		
b.	Sector radio equipment failure		
c.	Visual separation		
d.	Special VFR		
e.	Composite flight plans		
f.	Airfiles		

g.	VFR OTP flights		
h.	Inter-facility coordination		
i.	Intra-facility coordination		
j.	Strip marking (SOP)		
k.	Pilot Requesting Altitude Change en route		
l.	Revisions: <ol style="list-style-type: none"> 1. From adjacent positions. 2. Pilot revises estimates. 3. Pilot requests route change. 		
m.	Direct Route Flights		
n.	Significant Meteorological Information (SIGMET).		
o.	Notice to Airmen (NOTAM).		
p.	Non-Receipt of position reports (not a radio failure).		
q.	Weather Below Minimums (requiring change in destination).		
r.	Weather Below Minimums (requiring missed approach and holding for change in weather).		
s.	Knowledge of backup radar systems		
t.	NAVAID Failure		
III. Position Information			
a.	Demonstrate Strip Board Management		
b.	Give and receive position relief briefing		

I certify that all items in this checklist have been completed and/or discussed. NOTE: Please return to TA when complete.			
Developmental/ CPC-IT			
Print Name	Signature	Date	
Instructor	Signature	Date	
FAA Manager	Signature	Date	

11. OJT. Through OJT, the developmental/CPC-IT must demonstrate the ability to satisfactorily perform the applicable job subtasks described in appendix B of this order.

12. OJT Checklist. OJT checklists should be used as a mutual training tool for the OJTI and the developmental/CPC-IT. When a checklist is used, the developmental/CPC-IT must be provided with the appropriate stage checklist during the initial training team meeting for that stage. Facilities may develop checklists locally. A sample OJT checklist of Radar Control is provided as an example. Completed OJT Checklist forms must be retained with other required training documentation.

**Section 8. Stage 7: Radar/Handoff/Coordinator Controller Training.
(Courses 55065 or current course)**

1. General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of the Radar/Handoff/Coordinator Controller (RC/HO/CI) within the TRACON and to attain certification on those positions.

This stage of training is administered in three parts: instructor-led training, simulation (if available), and OJT. When training CPCs who have lost operational currency or have transferred from another facility or area of specialization, the TA must decide which portions of the instructor-led and simulated training will be administered based on the needs of the specialist. Pass/fail criteria must apply in this stage of training.

2. Prerequisite: Successful completion of Terminal Basic Radar (course 50034 or current course), or individual meets direct entry qualifications established for specific hiring source.

3. Location: Field facility.

4. Training Length: Site specific.

5. Administration: Facilities with limited training resources must utilize FAA nationally-developed lesson plans and facility-developed self-study materials that will cover all of the required local knowledge and procedures. Contractor-supported training should be developed to facilitate support of training initiatives, as required. Instructor-led training is administered using nationally and/or facility-developed lesson plans and conducted under the direction of the TA. Facility lesson plans must be developed for Airspace layout.

a. Local procedures.

b. Equipment operations.

After successful completion of instructor-led/simulation training (as appropriate), OJT must be conducted in the operational environment in accordance with chapter 6 of this order.

Note 1: TAs may assign individuals to the RC/HO/CI training track simultaneously with the NR controller training track, based on the facility's needs.

Note 2: High-fidelity simulators (e.g., AT Coach, Enhanced Target Generator (ETG)) are the preferred method of conducting simulation training, utilizing locally developed scenarios as described in this section on a pass/fail basis. All facilities with access to high-fidelity simulators must conduct simulation training using the high-fidelity simulators prior to starting OJT. If facilities are unable to access high-fidelity simulators, they may use lower fidelity simulators such as SIMFAST.

6. Instructor-Led Training. The individual must successfully demonstrate the skills listed below in accordance with JO 7110.65, JO 7210.3, and local directives, and must pass all examinations in this phase of instructor-led training with an average score of 90 percent or higher (unless otherwise stipulated) on the material. Locally prepared evaluations must be

administered, as applicable.

Note 1: The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) must be instructed or whether a review of the lessons is sufficient. This can be determined by administering an exam. If the developmental/CPC-IT passes the exam on one or more of the lessons with a score of 95 percent or higher, he or she may be excused from taking the other lessons.

Note 2: The following FAA nationally-developed training must be taught via instructor-led, computer-based, or self-study, as determined by the TA, based on the needs of the facility and the developmental/CPC-IT. The TA must determine, based on the needs of the facility and the developmental/CPC-IT, whether the complete lesson(s) will be instructed or a review of the lesson(s) is required. Any review of lesson(s) must include administration of the associated end-of-lesson exam(s). The TA must ensure that training is provided to correct deficiencies identified on the end-of-lesson exam(s).

a. Part 1— FAA National Lesson Plans

- (1) Primary and Secondary Radar
- (2) Radar Operations and Identification Procedures
- (3) Handoffs, Point Outs, and Beacon Code Assignments
- (4) Radar Separation, Safety Alerts, and Traffic Alert and Collision Avoidance System (TCAS) Resolution Advisories
- (5) Departure Procedures
- (6) Arrival Procedures
- (7) Radar Additional Services
- (8) Radar Emergency Procedures
- (9) Types of Radar Services
- (10) ARTS

b. Part 2— Radar Terminal Control Position.

(1) Given job-like situations pertaining to the operation of the radar approach control position, the individual must successfully demonstrate the skills listed below in accordance with ETM-12-0-1, Fundamentals of Primary and Secondary Surveillance Radar; JO 7110.65, JO 7210.3, and local directives, and must pass an examination on the material:

- (a) Describe primary and secondary surveillance radar.
- (b) Describe radar phenomena.

- (c) Identify radar operations.
- (d) Describe radar identification, handoffs, and beacon code assignment procedures.
- (e) Explain radar separation.
- (f) Explain departure/arrival procedures.
- (g) Describe radar additional services.
- (h) Describe emergency procedures.
- (i) Describe the stages of radar service.
- (j) Describe procedures for the transition from radar to non-radar control.

(2) Given a simulated keyboard and quick-reference card pertaining to the operation of the automated system, the individual must successfully demonstrate the skills listed below in accordance with TM-11-4 (Students Reference Manual):

- (a) Define terms associated with ATC computer operation.
- (b) Interpret computer-generated data.
- (c) Identify associated and unassociated alphanumeric data.
- (d) Identify tabular data areas.
- (e) Recognize message error indications and system malfunction codes.

c. Part 3—Site-Specific Equipment and Procedures.

(1) Position-Associated Equipment. The individual must use and apply procedures for:

- (a) Radar indicators.
- (b) Automation equipment (STARS/ARTS, etc.), including local and regional adaptations.
- (c) Radio/telephone, main, and standby equipment.
- (d) Personnel safety equipment.
- (e) Radar system master control panel.
- (f) Other.

(2) Procedures. The individual must:

- (a) Explain the application of procedures contained in the following publications as

they pertain to the radar control positions:

1. FAA orders and/or handbooks.
2. Facility directives
3. LOAs.
4. Position binders.
5. AIM.

(b) Emergency Procedures and Unusual Situations. The individual must successfully demonstrate the skills listed below in accordance with FAR, Part 105; JO 7110.10, JO 7110.65, and JO 7210.3; local directives; and LOAs:

1. Identify personnel authorized to declare an emergency.
2. Identify notification procedures and the parties to be notified in an emergency situation.
3. Identify the procedures for handling information requests and alert notices.
4. Identify the actions required in the event of a hijack or aircraft bomb threat.
5. State minimum required information for in-flight emergencies.
6. State the methods of aircraft orientation.
7. State when to exercise priority or special handling.
8. Describe the actions required when a pilot declares minimum fuel.

(c) Describe procedures for conducting/receiving position relief briefings.

d. Part 4—Evaluation.

(1) The Terminal Radar Qualification examination, CBI 57503, is distributed on the CBI national distribution. Successful completion requires a minimum score of 70 percent.

(2) The individual must pass the facility-developed automation examination.

(3) Given an unlabeled video map/overlay, the individual must identify all items, plus:

- (a) Minimum vector altitudes.
- (b) Significant terrain areas and obstructions.
- (c) Primary radio frequencies for radar positions and adjacent control facilities.

- (d) Other items as determined by the facility.

If the individual does not meet the requirements for successful completion of the examinations, the TA may determine that additional training is warranted. This training may include:

- (a) Additional instructor-led training and/or
- (b) Computer-based training.

Note 1: If the individual does not pass the final graded instructor-led evaluation, the provisions of the most recent Human Resources Policy Manual must be followed.

Note 2: A training review board is not required for instructor-led or simulation training failure.

7. Simulation Training. Simulation training is being administered at terminal facilities using the capabilities of the simulation equipment. This gives the developmental/CPC-IT an opportunity to learn and demonstrate, under simulated conditions, all the knowledge and skills required of a CPC.

a. General.

(1) At facilities where simulation equipment is available, the TA will determine the number of simulation training scenarios that the individual must complete. Periodic evaluation scenarios will be conducted to determine the individual's progress through the completion of the scenarios.

Example: The TA may require the administration of eighteen simulation training scenarios, with numbers 6, 10, 14, and 18 as pass/fail evaluations.

(2) It is necessary to complete scenarios at the lowest complexity level first and to progressively work up to the highest level. Scenarios at a given complexity level may be administered in any order to provide variation. The developmental/CPC-IT will be required to complete training on a given set of instructional scenarios similar to those in the operational position. This requirement will ensure the developmental's/CPC-IT's exposure to the many prescribed special events and control situations that could occur.

(3) Simulation scenarios will be counted as simulation hours. A minimum and maximum number of simulation hours should be established in the local training directive.

(4) Up to 1 hour must be allotted for the instructional scenarios. This does not include the time spent for briefing and critique. The instructor is not precluded from terminating the simulated scenario prior to the time indicated if it has been determined that the maximum instructional benefit of the scenario has been derived.

(5) The results of the individual's performance during each scenario must be recorded on FAA Form 3120-25 and discussed with the individual (See appendix B.) Forms used during the evaluation scenario must be retained and filed in the individual's training folder.

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(a) Volume level - A factor expressed as a percentage of the traffic worked during a typical busy period.

(b) Complexity - The number of situations that require thought to resolve an issue or conflict.

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(a) Instructional scenarios must be developed for an operational position starting at the 50 percent volume level and progressively increasing to the 110 percent volume level. The additional 10 percent must be added to ensure that the developmental/CPC-IT encounters a greater volume of traffic than he/she will normally be expected to control.

(b) The formula is based on 110 percent traffic volume from an average period of a busy day (as defined and validated by the facility).

(c) To protect scenario integrity, some variations of the scenario should be made. Changes in aircraft identifications, equipment types, altitudes, and times are usually adequate for developing scenario variations. Selecting random aircraft for special situations will also add depth to scenario variations.

(d) The instructor must determine the weather, flight conditions, VFR traffic, and any abnormal conditions that may affect the overall scenario complexity and controller workload. The instructor must simulate these conditions as closely as possible to add realism to the scenario.

(e) The instructor must randomly incorporate pilot readback errors throughout the control scenarios. These are intentional readback errors made by ghost pilots to the developmental/CPC-IT in order to evaluate the developmental's/CPC-IT's listening skills.

(f) All instructional scenarios must have specific objectives and be directed toward developing the knowledge and ability of those receiving the training. The instructor must ensure that all scenario objectives are met.

(g) The instructor must introduce operations or situations that directly relate to scenario complexity. Normally it is more effective to introduce these complexity factors at a lower volume level to facilitate learning the associated procedure. If normal operational requirements dictate predetermined changes in runway or airspace configurations or changes in services provided at an operational position which affect complexity, separate problems should be administered for each change. Each problem must state objectives, volume level, and

complexity factors.

(h) Positive and methodical steps must be taken when developing simulated tower instructional scenario. Complexity, special control events, abnormal traffic situations, weather conditions, script development, and instructor guides need to be considered to achieve the desired scenario objectives.

Note: The guidelines listed above have proven to be most effective when developing instructional scenarios. There may be other methods, such as selecting 1 hour's traffic from the actual position and administering it as an instructional scenario. There are pitfalls to this type of scenario development, however, because of the wide variation among traffic situations and because real traffic, as experienced from one position, does not always include typical air traffic occurrences.

c. Simulation Training Scenario Objectives. Each problem may contain one or more of the duties listed below. By the completion of this training, the developmental/CPC-IT must have independently performed all applicable duties.

(1) Applying separation rules.

- (a) Crossing, converging, and opposite direction traffic.
- (b) Overtakes.
- (c) Separation from, adjacent airspace, obstructions, and SAA/SUA.
- (d) Successive arrivals and departures.
- (e) Simultaneous arrivals and departures.
- (f) Arrivals with altitudes inverted (e.g., stacks).
- (g) Release aircraft into the airspace.

(2) Communication and coordination.

- (a) Hearback/readback errors.
- (b) Transfer of control and communications.
- (c) Communication with aircraft through other than direct pilot-controller communication.
- (d) Inter- and intra-facility coordination.
- (e) Coordination restrictions.
- (f) Verification information.

- (3) Clearances and control information.
 - (a) IFR clearances.
 - (b) Clearance to alternate airport.
 - (c) VFR-on-top.
 - (d) VFR traffic encountering IFR.
 - (e) Route change in flight.
 - (f) Arrivals and departures.
 - (g) Approaches, including high-altitude IFR approaches, Contact Approaches.
 - (h) Holding.
 - (i) Airfiles and pop ups.
 - (j) Pilot deviations.
 - (k) Requests for altitude change.
 - (l) Radar Team concepts and communications.
- (4) Procedures.
 - (a) Interphone procedures.
 - (b) Traffic Management Initiatives (e.g., EDCT, TBFM, SWAP, metering, flow control).
 - (c) Fuel dumping.
 - (d) Special Flight Operations.
 - (e) Military procedures.
- (5) Emergencies and Equipment Outages.
 - (a) Loss of communication.
 - (b) In-flight emergencies.
 - (c) Aircraft with minimum fuel.
 - (d) National Airspace System control equipment failures.
 - (e) In-flight equipment malfunctions.

- (f) Overdue aircraft.
- (g) Hijack Procedures.
- (h) Special Operations.
- (6) Weather.
 - (a) Reporting and disseminating weather information.
 - (b) Changes to routes due to weather.
 - (c) Pilot Weather Reports (PIREPs).

Note: Special situations should not be limited to those shown but should also include situations initiated by facility instructors except during an Evaluation Scenario/problem.

d. Simulation Evaluation.

(1) Simulation evaluation scenarios must be administered at regular intervals during the simulation segment of training. The evaluations must be conducted on a pass/fail basis.

(2) Instructions on documenting and grading the evaluation are contained in appendix B. The following chart must be used to grade the scenarios:

Maximum Errors Allowed Per Scenario by Job Task

Job Task	Radar Controller
Separation	0
Coordination	2
Control Judgment	5
Methods and Procedures	5
Equipment, Communication, and Other	5

(3) If the individual does not meet the requirements for successful completion of the scenario, the TA may determine that SET is warranted. The SET may include:

- (a) Instructor-led training.
- (b) CBI lessons.
- (c) Instructional scenarios.

(4) SET must be followed by a re-evaluation scenario at the same level of difficulty (complexity and volume) as that at which the failure occurred.

(5) If the individual does not pass the final graded evaluation scenario, the provisions of the most recent HRPMP must be followed.

Note: A training review board is not required for instructor-led or simulation training failure.

e. Scenario Development. The following situations and procedural items must be included in the familiarization and instructional scenarios if applicable to the facility/position. Other items may be added as deemed appropriate by the TA, based on their applicability to the individual position. The instructional scenarios must include traffic situations that involve:

- (1) Apply appropriate separation standards.
- (2) Recognize compression on the final approach.
- (3) Provide VFR traffic advisories and VFR/IFR separation.
- (4) Provide no-gyro vectors.
- (5) Control missed approaches.
- (6) Recognize weather on a radar display and advise aircraft concerned.
- (7) Vector aircraft around weather (if applicable).
- (8) Handle airfiles.
- (9) Recognize an aircraft with an inoperative transponder.
- (10) Issue speed control instructions.
- (11) Issue visual approaches.
- (12) Apply appropriate radio failure procedures.
- (13) Recognize when an aircraft is being hijacked and apply correct procedures.
- (14) Transition from ARTS failure to primary and secondary radar.
- (15) Resolve one emergency situation.
- (16) Transition from radar to non-radar separation due to radar failure.
- (17) Provide separation and service to an aircraft dumping fuel.

(18) Apply additional facility-identified procedures.

(19) Recognize aircraft performance characteristics.

(20) Transition from STARS (if applicable) failure to emergency service-level special situations should not be limited to those shown but should also include situations initiated by facility instructors.

f. During the simulation stage of training, the developmental/CPC-IT will perform the following in accordance with JO 7110.65:

(1) Separate aircraft from other aircraft.

(2) Issue clearances using correct phraseology.

(3) Forward control information using correct phraseology.

(4) Record clearances and control information on strips or pad, using approved symbols and abbreviations.

(5) Communicate using radio and interphone procedures.

(6) Use effective board/pad management techniques.

(7) Demonstrate situational awareness.

(8) Obtain information from an aircraft in an emergency and notify the proper facilities.

(9) Obtain and disseminate weather information.

(10) Demonstrate knowledge of all applicable letters of agreement.

(11) Demonstrate knowledge of the radar control position.

(12) Position relief briefings must be received (before) and given (after) on all instructional scenarios.

g. Scenario Difficulty. This section covers the development of scenarios. A developmental/CPC-IT must control varying volumes of traffic and resolve situations of varying complexity. Volume level is the basic criterion for scenario development.

(1) Complexity factor. Scenario complexity is based on the number of situations that require the developmental/CPC-IT to apply the various procedures in JO 7110.65, such as ensuring separation, issuing taxi instructions, ensuring accurate readback of control instructions, and handling emergencies.

(2) Volume level criteria. This element refers to the hourly operations rate. The hourly operations rate is based on 100 percent traffic volume from an average period of a busy day (as defined and validated by the facility and included in the facility training directive).

The TA must determine the number of instructional scenarios the developmental/CPC-IT will complete. Evaluation scenarios must be administered at regular intervals during the simulation segment of training.

(a) Familiarization Scenarios. The developmental/CPC-IT must be given familiarization scenarios. These scenarios should emphasize the importance of effective interaction between the position and other Tower and/or TRACON team members.

Example: The first two Familiarization Scenarios should also place additional emphasis on equipment (e.g., buttonology, keyboarding).

(b) Instructional Scenarios. Instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing position duties in a simulated operational environment.

(c) Simulation Evaluation. Evaluation scenarios must be administered at regular intervals during the instructional scenario segment of training. The evaluations must be pass/fail.

i. A preparatory evaluation scenario must be administered prior to the first evaluation scenario.

ii. Developmentals/CPC-ITs cannot be evaluated on any procedures or situations that they have not had experience with in previous scenarios.

iii. The instructor must assist, as necessary, to maintain scenario continuity, except during pass/fail evaluation scenarios.

(3) Position relief briefings must be received before and given after each instructional scenario.

(4) Scenario program example. The example in Figure F-6, Sample Simulation Scenarios, shows how a training program may be designed to fulfill the requirements of this stage.

Figure F-6: Sample Simulation Scenarios

Scenario	Volume (%)	Type
A	50	Familiarization
B	70	Familiarization
C	75	Familiarization
D	75	Familiarization
E	75	Familiarization
1	80	Instructional
2	80	Instructional
3	80	Evaluation-Preparatory
4	80	Instructional
5	80	Evaluation (Pass/Fail)
6	85	Instructional
7	85	Instructional
8	90	Instructional
9	90	Instructional
10	90	Evaluation (Pass/Fail)
11	95	Instructional
12	95	Instructional
13	95	Instructional
14	100	Instructional
15	100	Evaluation (Pass/Fail)
16	110	Instructional

h. Additional Scenarios.

(1) Following successful completion of the evaluations and prior to the start of OJT, additional instructional scenarios may be administered on each sector in the developmental's/CPC-IT's area of specialization. These scenarios are intended to introduce the developmental/CPC-IT to sector-specific operations and traffic flows.

(2) The scenarios will provide a highly interactive instructional environment in which the instructor and the developmental/CPC-IT will be able to discuss strategies and alternatives.

(3) The number of scenarios will be determined by the TA based on the needs of the

facility.

(4) Instructional scenarios may use combined sector and position configurations.

i. Recovery in ATC Operations

(1) Training must be conducted in three parts: classroom discussion with examples, performance in laboratory and/or part task scenarios, and post-scenario discussions. If possible, the training team that will instruct the student during OJT should also participate in the student's recovery training.

(2) A minimum of four laboratory or part-task scenarios involving Recovery in ATC Operations must be administered prior to the start of OJT. These scenarios are intended to introduce the student to methods of re-establishing the correct margin of safety in response to an unsafe situation/outcome.

(3) The scenarios are non-pass/fail with no time limit established. The scenarios must provide an interactive instructional environment in which the instructor and student are able to discuss methods of recovery, strategies, and alternatives that assist in re-establishing minimum separation. Post-scenario discussions should include inadequate recovery actions to mitigate the event, other recovery actions that could be taken to mitigate the event, possible controller actions that could make the event worse, and situations where no recovery actions were necessary.

(4) At the TA's discretion, scenarios may include: converging aircraft, aircraft climbing through the altitude of a level aircraft, faster aircraft climbing through the altitude of a slower preceding aircraft, aircraft simultaneously climbing and descending, compression, aircraft missing the read-back of a climb or descent clearance, similar-sounding call sign aircraft, aircraft responding to a TCAS RA, loss of data blocks (target only), transposed call signs, lost communication, emergencies, etc.

Figure F-7: Radar/Handoff/Coordinator Control Simulation Checklist

Radar/Handoff TRACON/TRACON Control (RC/HO/CI) Simulation Checklist			
Developmental / CPC-IT		Facility	
As each item on the checklist is completed, the instructor must record the date, and the developmental/CPC-IT must initial the checklist, using operating initials.			
Indicate with a "N/A" in the date column for items on the checklist that do not apply.			
I. Apply LOA/SOP/7110.65		Initials	Date
A.	Radar procedures listed in LOA, SOP, and JO 7110.65		
II. Demonstrate Understanding of Identification Methods			
A.	Primary Radar Identification		
1.	Observing a departing aircraft target within 1 mile of the takeoff runway end at airports with an operating control tower, provided that one of the following methods of coordination is accomplished:		
	a. A verbal rolling/boundary notification is issued for each departure.		
	b. A non-verbal rolling/boundary notification is used for each departure aircraft.		
2.	Observing a target with respect to a fix.		
B.	Model 3/A (Beacon)		
1.	"Ident"		
2.	Change to specific discrete code.		
3.	Squawk "stand-by" and squawk "normal" modes.		
C.	Terminal Automation Systems Identification Methods: Standard Terminal Automation Replacement System (STARS), Common ARTS (CARTS), and En Route Automated Radar Tracking System (EARTS).		
1.	Auto-acquired aircraft.		
D.	Questionable Identification		
1.	Multiple targets.		
2.	Wrong transponder code.		
3.	Loss of transponder requiring initial transition to non-radar separation/routing.		
E.	Position Information		
1.	Notification requirements after initial identification.		
F.	Identification Status		
1.	Radar contact and radar contact lost.		
G.	Radar Data Blocks		
1.	Retain data blocks as appropriate.		
2.	Prearranged coordination impacts.		
H.	Radar Termination		
1.	Aircraft on approach to a non-Tower-controlled airport or after Tower closes.		
2.	Aircraft cancels Instrument Flight Rules (IFR).		
III. Transfer Radar Identification			

1.	Application.		
2.	Terms.		
3.	Methods (demonstrates appropriate phraseology).		
4.	Traffic.		
5.	Transferring Controller Handoff. a. Items to ensure prior to transferring communication. b. Verbal coordination. c. Necessary coordination.		
6.	Receiving Controller Handoff. a. Correlation of target with position. b. Restrictions. c. Control. d. Coordination. e. Initiation of an automated inter-facility handoff action and "NAT" or "IF" is displayed in the full data block.		
7.	Point-Out a. Automated point out function. b. Verbal (demonstrates appropriate phraseology).		
8.	Automated Information Transfer (AIT)		
IV. Ensure Radar Separation			
1.	Application.		
2.	Airspace within which radar separation. a. When less than 40 miles. b. When 40 miles or more. c. Narrowband radar operations. d. For single sensor ASR-9/11 with Mode S. e. STARS Multi-Sensor Mode. f. Micro-En Route Automated Radar Tracking System (MEARTS) Mosaic Mode. g. Wake turbulence.		
3.	Target separation.		
4.	Minima. a. Broadband Radar System or Digital Terminal Automation System (DTAS) (includes single sensor). b. Stage A/Enhanced Backup Surveillance (EBUS), MEARTS Mosaic Mode, Terminal Mosaic/Multi-Sensor Mode. c. Transitioning from Terminal to En Route control. d. STARS Single Sensor Mode/Multi-Sensor Mode. e. Wake Turbulence Application: (1) Aircraft operating directly behind and less than 1,000 feet below, or following an aircraft conducting an instrument approach.		
5.	Vertical Application a. Valid Mode C. b. Reports leaving or is observed (valid Mode C). c. Exceptions.		
6.	Passing or diverging.		
7.	Formation flights.		
8.	Separation from obstructions.		

9.	Adjacent Airspace/Edge of Scope/Beacon Target Displacement.		
V. Ensure Vector Requirements			
1.	Separation of Aircraft a. Departure/Arrival-non-Tower control airports. b. Aircraft crossing courses. c. Sequence of two or more arriving aircraft, or En Route aircraft, on the same route/direction. d. Aircraft descending/climbing through altitude of another on the same route/same direction. e. Aircraft descending/climbing through altitude of another aircraft on same route in opposite direction. f. Separation of at least two aircraft at same altitude on parallel courses. g. Radar-identified aircraft from known non-radar aircraft. h. Primary targets from primary targets. i. Beacon targets from beacon targets. j. Beacon targets from primary targets. k. Break up formation flights.		
2.	No-gyro vectors.		
3.	Movement of aircraft into Military Operations Area (MOA)/Air Traffic Control Assigned Airspace (ATCAA) and recovery from MOA/ATCAA.		
VI. Implement Special Handling			
A.	Priority Aircraft		
1.	MEDEVAC.		
2.	Presidential.		
3.	Semiautomatic Flight Inspection Aircraft (SAFI).		
4.	Air Evacuation.		
B.	Emergency		
1.	Icing.		
2.	Lost engine.		
3.	Lost aircraft.		
4.	Overdue aircraft.		
5.	In-flight equipment malfunction/emergency (loss of engine, fire, loss of oil pressure, windscreen broken, etc.)		
C.	Hijacking/Bomb Threats		
D.	Aircraft with Minimum Fuel		
E.	Loss of Navigational Equipment		
F.	Chaff Drop		
G.	Electronic Countermeasures (ECM) Activity		
VII. Handle Traffic Situations			
A.	Failure of aircraft to comply with route clearance.		
B.	Failure of aircraft to comply with altitude clearance.		
C.	Simultaneous arrivals where first aircraft is at highest altitude and last aircraft is at lowest altitude.		
D.	Multiple arrivals sequenced with slowest aircraft first and		

	succeeding aircraft faster. Unusual coordination altitudes/speed control/sequence required.		
E.	Fast departure following a slower aircraft on the same route.		
F.	Aircraft deviating around weather.		
G.	Tracking aircraft under law enforcement surveillance.		
H.	Fuel dumping.		
I.	Two or more aircraft in-trail; and use of speed adjustment to maintain separation.		
J.	Traffic Alert and Collision Avoidance System (TCAS) Resolution Advisories (TA and RA modes).		
K.	VFR-On-Top (OTP) handling and separation.		
VIII. Execute Appropriate Communication/Coordination			
A.	Aircraft unable to communicate on a TRACON frequency.		
B.	Marginal altitude/area for communications.		
C.	No Radio (NORDO) aircraft.		
D.	NAS system outage, e.g., Enhanced Backup Surveillance System (EBUS).		
E.	Aircraft loss of communication and attempt to reestablish communication, using alternate methods, e.g., other aircraft, previous frequency, transmitter change, Flight Service Station (FSS), use of 243.0, and Aeronautical Radio, Inc. (ARINC), etc.		
F.	Request from aircraft on frequency to change altitude or route prior to entering your sector.		
G.	Point-out.		
H.	Coordination with neighboring facility on non-LOA request.		
I.	Coordination with appropriate adjacent sector prior to authorizing aircraft to change altitude.		
J.	Manual hand-offs.		
K.	Automated hand-offs.		
L.	Transfer of control/communications requirements.		
M.	Loss of Mode C readout.		
N.	Request from aircraft on frequency to change altitude or route after entering your sector		
	I certify that all items in this checklist have been completed and/or discussed.		
	NOTE: Please return to TA when complete.		

	Name (Please Print)	Signature	Date
DEV/CPC-in-training			
Instructor			
Frontline Manager			

8. OJT. Through OJT, the developmental/CPC-IT must demonstrate the ability to satisfactorily perform the applicable job subtasks described in appendix B of this order.

9. OJT Checklist. OJT checklists should be used as a mutual training tool for the OJTI and the developmental/CPC-IT. When a checklist is used, the developmental/CPC-IT must be provided with the appropriate stage checklist during the initial training team meeting for that stage. Facilities may develop checklists locally. A sample OJT checklist of Radar Control is provided as an example. Completed OJT Checklist forms must be retained with other required training documentation.

Figure F-8: Course 55065 OJT CHECKLIST

Radar/Handoff/Coordinator Control (RC/HO/CI) OJT Checklist				
NOTE: The trainee must be able to demonstrate knowledge of the following. Indicate with an "N/A" in the date column items on the checklist that do not pertain				
Name:		OJTI	DEV	DATE
1.	Review and demonstrate backup Radar modes and methods.			
a.	STARS Full Service Level (FSL) to Emergency Service Level (ESL) selection.			
b.	Radar site selection including GATEWAY.			
c.	Center Radar Arts Presentation/Processing CENRAP (not available with En Route Automation Modernization (ERAM)).			
2.	Review and demonstrate the following methods/applications:			
a.	Traffic alerts and Minimum Safe Altitude Warning (MSAW) priorities.			
b.	Primary radar identification methods.			
c.	Target marker requirements and pre-arranged coordination agreements.			
d.	Reposition systems area/lists/preview area.			
e.	Reposition map locations (e.g., de-center).			
f.	Providing vertical separation during opposing base-leg turns to final.			
g.	Visual approach clearance following the preceding arriving aircraft.			
h.	Appropriate application of passing and diverging.			
i.	Use of visual separation between two or more departing and/or en route aircraft.			
j.	Pressurization issues on high-climbing departures (e.g., remain below 10K).			
k.	Termination of radar service.			
l.	Wake turbulence spacing and advisory requirements.			
m.	Merging target procedures.			
n.	Weather and chaff services and filters, e.g., Linear/Circular Polarization (LP/CP).			
o.	Dependent and independent parallel approach procedures.			
p.	Final approach course intercept requirements (e.g., 20-30 degrees).			
q.	Initiating and/or accepting an automated handoff.			
r.	Handling missed approach/go-around.			
s.	Initiating and/or accepting an automated Point Out.			
t.	Transfer of communications points, e.g., for Air Traffic Control Tower (ATCT), the Final Approach Fix (FAF).			
u.	Initiating and/or accepting a non-radar block.			
v.	Special military operations (site specific).			
w.	Aerial photography operations.			
x.	Compliance with Traffic Management Initiatives, e.g., Miles in Trail (MIT), Traffic Management Advisor (TMA).			

y.	VFR-On-Top separation and procedures.			
3.	Demonstrate understanding of EBUS operational impact on Terminal operations.			
I certify that all items in this checklist have been completed and/or discussed. NOTE: Please return to TA when complete.				
	Print Name	Signature	Date	
Developmental/ CPC-IT				
OJTI				
Frontline Manager				

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Appendix G. Traffic Management Instructional Program Guide

Section 1. Introduction.

This instructional program guide (IPG) includes information about the following two development stages:

1. FAA Academy Training (Course 50115)
2. Facility Traffic Management Coordinator Training (Course 55116 - Parts A and B)

Section 2. Stage 1: FAA Academy Training. Traffic Management Training (Course 50115 or current course)

1. General: The purpose of this stage is to train CPC's selected for TMC/NTMS positions, as well as supervisors and other personnel required to perform traffic management duties. This stage of training is administered in two parts: instructor-led training and instructor-led/simulated environment.

Course 50115 is not mandatory for anyone certified as a TMC. It is strongly recommended that any person training to become a TMC/NTMS receive this training within the first 18 months of accepting a Traffic Flow Management position. Certified TMC/NTMS who have not attended this course are also strongly recommended to attend. Certified Professional Air Traffic Control Specialist from the Terminal or En Route option, non-traffic management supervisors, managers, staff specialists, and other personnel who need to have a general knowledge of the Traffic Management system may attend Course 50115, but newly hired TMC/NTMS will have priority enrolling in the class.

2. Location: FAA Academy.

3. Training Length: 64 hours.

4. Administration: Training is administered in an instructor-led/simulated environment utilizing FAA nationally-developed instructional materials and computers for hands-on practice. Academic progress is assessed with an end-of-course exam on a pass/fail basis.

5. Training Contents:

- a. Traffic Management System history and future
- b. Systems Thinking
- c. Communication and Conflict Management
- d. Traffic Flow Management
- e. Severe Weather Management
- f. Airport/Airspace Capacity and Delay Reporting

- g.** Contingency Plans
- h.** Weather Coordinator
- i.** Mission Coordinator
- j.** Traffic Flow Management System (TFMS) Workstation
- k.** Mozilla
- l.** TFMS Reports
- m.** TFMS Menu Functions
- n.** Flight Schedule Monitor (FSM)
- o.** TFMS Email
- p.** TFMS Shell
- q.** National Traffic Management Log (NTML)
- r.** TFMS Manager

**Section 3. Stage 2: Facility Traffic Management Qualification and Certification
(Course 55116 or current course)**

General: The purpose of this stage is to provide the TMC-IT/NTMS-IT with local facility orientation and site specific training. Course 55116 is broken into two parts: Part A supplements and reinforces Course 50115 training and prepares the TMC-IT/NTMS-IT for OJT. Part B is to qualify the TMC-IT/NTMS-IT to perform the full range of duties and attain certification on all traffic management positions of operation within the facility.

Portions of this course may be used for TMCs/NTMSs who have lost their currency or for TMCs/NTMSs who have transferred from another facility. Facilities must decide which portions of Part A will be administered based on the needs of the specialist/facility.

55116 PART A

1. Prerequisite: Certification on at least two control positions at the facility. Qualifying control positions are as follows:

Tower- Local Control and/or Ground Control

TRACON- Satellite Radar, Departure Radar, Arrival Radar, and/or Final Radar

En Route- Radar Position, Radar Associate Position, and/or Non Radar Position

Note 1: The Air Traffic Manager must ensure the control positions are identified in the local facility training directive.

Note 2: Certification is required to ensure that candidates, who are completing traffic management training, have a sufficient level of local, specific area operational knowledge as well as a demonstrated understanding of local airspace and procedures in order to apply traffic management initiatives.

2. Location: Field Facility.

3. Training Length: Site specific.

4. Administration: Training is conducted in an instructor-led/simulated environment using FAA nationally-developed instructional materials, visual aids, and other media designed to support and pace all instruction. Facilities are encouraged to develop and conduct scenarios for use in the instructor-led/simulated environment. Scenarios should depict traffic management problems and resulting traffic management initiatives that have been experienced by the facility or are likely to occur (e.g. SWAP, TBFM, flow control, metering).

5. Training Content: Course 55116 Part A may contain any of the following topics or training. The facility is responsible for determining which topics are applicable. Facilities may add topics as necessary. All applicable procedures and directives in use at a facility must be covered in the course. Facilities are encouraged to develop and conduct scenarios for use in the instructor-led/simulated environment. Scenarios should depict traffic management problems that have been

experienced by the facility or are likely to occur.

- a. Introduction to facility and course
- b. Traffic management overview
- c. Airspace review and traffic flows
- d. TFMS workstation (TMW)
- e. Time Based Flow Management (TBFM) En Route ATCS (eLMS Course 60004744 or current course, applicable for Terminal, En Route and ATCSCC).
- f. Severe weather management
- g. Routes
- h. Traffic Management Initiatives (TMIs)
- i. Tower en route control
- j. Weather coordinator
- k. Mission coordinator
- l. Contingency plans
- m. Administrative and other duties

55116 PART B

- 1. Prerequisite:** Completion of Course 55116 Part A.
- 2. Location:** Field Facility.
- 3. Training Length:** Site specific.
- 4. Administration:** OJT is conducted in accordance with Chapter 6.

Part B of Course 55116 is administered on a pass/fail basis. The TMC-IT/NTMS-IT must pass a certification evaluation for each traffic management position of operation in the facility.

Part B. Lesson Objective: The TMC-IT/NTMS-IT will be able to perform all required traffic management duties and responsibilities under general supervision.

5. Job Functions: Through OJT, the TMC-IT/NTMS-IT will be able to: (Because of fundamental differences in operation among traffic management units, the following job functions may not apply to all facilities.)

- a. Use the TFMS workstation.
- b. Use the traffic management briefing terminal.
- c. Use the traffic management main display monitor.

- d.** Use communication equipment.
- e.** Use any other equipment normally employed by facility TMCs/NTMSs.
- f.** Monitor and analyze air traffic operations.
- g.** Develop and implement traffic management programs and procedures necessary to regulate and balance arrival, departure, and en route traffic flows.
- h.** Develop strategies to ensure maximum use of airspace.
- i.** Analyze and implement TMIs requested by facility personnel, adjacent facilities, and the ATCSCC.
- j.** Periodically review and, as necessary, modify or cancel TMIs.
- k.** Perform the duties of the Arrival and Departure Coordinator including, but not limited to, the use of TBFM, SWAP, etc.
- l.** Perform the duties of the Mission Coordinator including, but not limited to, processing altitude reservations and other missions, handling and disseminating requests for special use airspace, acting as a trusted agent, and serving as a liaison between the military and the facility.
- m.** Perform the duties of the Weather Coordinator including, but not limited to, collecting and/or disseminating pilot reports (PIREP), significant meteorological information (SIGMET), center weather advisories (CWA), meteorological impact statements (MIS), and other weather data.
- n.** Establish and maintain effective and cooperative communication with intra/interfacility personnel.
- o.** Document, maintain, and distribute accurate and timely records.
- p.** Conduct and receive proper position relief briefings.
- q.** Describe the duties of the TMC-IC/NTMS-IC.

Section 4. Instructions for Completing the TMC OJT Instruction/Evaluation Report FAA Form 3120-32. This appendix contains instructions for completing FAA Form 3120-32. This form must be used by instructors, OJTIs, and supervisory FLMs/STMCs to record their observations of the performance and progress of the TMC-IT/NTMS-IT during simulated control problems, OJT instruction, SET, and skill-check sessions. FAA Form 3120-32 may be used to document OJF. See Figure G-1 for a copy of this form.

Using the Worksheet: Complete the following items.

Block 1. NAME: Print TMC-IT'S/NTMS-IT's last name, first name.

Block 2. DATE: Enter month, day, year.

Block 3. POSITION(S): Enter position(s) of operation on which training or skill check is being performed.

Block 4. WEATHER: Record description of weather as visual flight rules (VFR), marginal VFR (MVFR), or IFR. Check the one box most representative of the session. Conditions that impact training should be noted in Block 12.

Block 5. WORKLOAD: Check description of workload. Check the one box most representative of the session.

Block 6. COMPLEXITY: Check description of complexity of operations. Check the one box most representative of the session. Note any unusual situations or occurrences that impact training in Block 12.

Block 7. HOURS THIS SESSION: Enter actual clock hours and minutes for this session.

Block 8. HOURS or PERCENT THIS POSITION: Enter total clock hours and minutes spent in training on this position. Include this session. As an option, enter percent of allotted hours expended so far for this position.

Block 9. PURPOSE OF REPORT: Check appropriate purpose of report on the form. Check "OJT" for any activity that is counted as part of the assigned training time. Check "Skill Enhancement" if used for SET. Indicate The FLM/STMC checks "Evaluation" if administering a performance skill check or "Certification" if administering a certification skill check. If "Other" is indicated, document the specific use in Block 12.

Block 10. ROUTING: According to facility requirements.

Block 11. PERFORMANCE: Block 11 consists of the performance section. This section contains critical job elements (CJE), job function categories, and job functions used as a basis for instructing and evaluating the TMC-IT/NTMS-IT. Users of this form should review the definitions of all job functions and their respective performance indicators in the attached checklist. These descriptions are guidelines to be used by all participants involved in OJT to ensure that what is expected is mutually understood. This checklist is not all-inclusive and is not meant to limit the duties to be reviewed. The job function category titled "Other" is intended for

local use and adaptation.

a. OJTIs place a mark (e.g., ✓, X) in the columns “OBSERVED” or “COMMENT” as follows:

(1) **OBSERVED:** A mark in this column indicates that the operation or procedure was observed during the period, but that no significant comments are made.

(2) **COMMENT:** A mark in this column indicates that the operation or procedure was observed during the period and is accompanied by a referenced comment in Block 12.

b. The FLM/STMC who conducts the skill check uses the columns “SATISFACTORY,” “NEEDS IMPROVEMENT,” and “UNSATISFACTORY.” OJTIs do not make marks in these columns since these terms are evaluative. The terms are defined as follows:

(1) **SATISFACTORY:** A mark in this column indicates that the TMC-IT’s/NTMS-IT’s observed performance this session meets expected performance requirements and indicates that the TMC-IT/NTMS-IT demonstrates the ability to work independently for this performance item. Examples of exemplary performance and specific comments, along with suggestions for improvement, must be stated in Block 12 of the form for each job function indicated.

(2) **NEEDS IMPROVEMENT:** A mark in this column indicates that the TMC-IT’s/NTMS-IT’s observed performance is acceptable at this stage of training, but must improve in order to meet expected performance. Specific comments, along with suggestions or requirements for improvement, must be stated in Block 12 of the form for each job function indicated.

(3) **UNSATISFACTORY:** A mark in the column indicates that the TMC-IT’s/NTMS-IT’s observed performance is unsatisfactory at this stage of training. Suggestions and recommendations for correcting each unsatisfactory job function must be stated in Block 12, except at the 100 percent level.

c. To certify on a skill check, all applicable items must be marked satisfactory or “N/O” (not observed). If an item is marked “N/O”, Block 12 must indicate that the TMC-IT/NTMS-IT has demonstrated satisfactory performance/knowledge for that job function. If necessary, verbal questioning, simulation, or other methods may be used to demonstrate knowledge of a job function when not observed. (Any mark in the “UNSATISFACTORY” column constitutes a failure of the skill check or certification and must be documented in Block 12.)

d. If a job function is not applicable to a position being observed, it must be recorded as “N/A” (not applicable).

Block 12. COMMENTS: Used by the OJTI or by the FLM/STMC who conducted the skill check, the comment block provides space for the documentation of the TMC-IT's/NTMS-IT's performance during OJT instruction or skill check sessions.

a. OJTI's Use of the Comment Block: This block is used by the OJTI to document an observation when a mark is made in the "Comment" column on the front of the form. The OJTI must sign and date this block. The comments:

- (1) May be specific or general.
- (2) May include exemplary, noteworthy, or unusual events.
- (3) Must describe any observed performance deficiencies. In the case of performance deficiencies, or when improvement is needed in a specific area, references must be made to applicable procedures, letters of agreement (LOA), orders/directives, etc.

b. Supervisor's Use of the Comment Block: This block must be used by the FLM/STMC who conducted the skill check to:

- (1) Document performance/progress.
- (2) Describe performance rated as "Needs Improvement" or "Unsatisfactory" and list references to specific procedures, LOAs, or directives that should be reviewed by the TMC-IT/NTMS-IT so that the performance problem may be corrected.
- (3) Recommend one of the following:
 - (a) Continuation of OJT
 - (b) SET
 - (c) Suspension of training
 - (d) Certification

The FLM/STMC must sign and date this block.

Block 13. EMPLOYEE'S COMMENTS: This block may be used by the TMC-IT/NTMS-IT for making comments pertaining to the training period or skill check, or for making general comments regarding training. Sign and date. A signature does not necessarily indicate concurrence with the report, only that the report has been discussed with the TMC-IT/NTMS-IT.

Block 14. CERTIFICATION: This block is used by the FLM/STMC to document position certification/recertification. Record position of operation, sign, and date.

Figure G-1. TMC OJT Instruction/Evaluation Report FAA Form 3120-32

TRAFFIC MANAGEMENT COORDINATOR OJT INSTRUCTION/EVALUATION REPORT										
1. Name			2. Date		3. Position(s)					
4. Weather <input type="checkbox"/> VFR <input type="checkbox"/> MVFR <input type="checkbox"/> IFR		5. Workload <input type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy		6. Complexity <input type="checkbox"/> Routine Not Difficult <input type="checkbox"/> Occasionally Difficult <input type="checkbox"/> Mostly Difficult <input type="checkbox"/> Very Difficult		7. Hours This Session				
						8. Hours (%) This Position				
9. Purpose <input type="checkbox"/> OJT <input type="checkbox"/> Certification <input type="checkbox"/> Other <input type="checkbox"/> Evaluation <input type="checkbox"/> Recertification <input type="checkbox"/> Skill Enhancement						10. Routing				
Performance	11.	CJE	Job Function Category	Job Function		Observed	Comment	Satisfactory	Needs Improvement	Unsatisfactory
		Operating Methods and Procedures	A. Effective Judgment	1. Awareness is maintained.						
	2. Good judgment is applied.									
	3. Aware of controller and system user requirements.									
	4. Handles unusual situations.									
	B. Methods and Procedures		5. Monitors system.							
			6. Programs/initiatives are implemented correctly.							
			7. Efficient traffic flow is maintained.							
			8. Takes prompt action to correct deficiencies.							
			9. Data is handled correctly.							
	C. Equipment		10. Equipment capabilities are fully used.							
			11. Equipment malfunctions recognized.							
			12. Computer entries are complete/correct.							
	Communication	D. Communication/Coordination	13. Required coordination is performed.							
			14. Coordination is thorough, clear, and concise.							
			15. Cooperative, professional manner is maintained.							
			16. Relief briefings are complete and accurate.							
	E. Other									

FAA Form 3120-32 (5-98)

NSN: 0052-00-921-7000

Figure G-1 TMC OJT Instruction/Evaluation Report FAA Form 3120-32 (continued)

12. Comments	
13. Employee's Comments:	
<div style="display: flex; justify-content: space-between;"><div>This report has been discussed with me (Signature): _____</div><div>Date: _____</div></div>	
14. Certification: I certify that this employee meets qualification requirements for position and is capable of working under general supervision.	
<div style="display: flex; justify-content: space-between;"><div>Signature of Certifier: _____</div><div>Date: _____</div></div>	

FAA Form 3120-32 (5-98)

NSN: 0052-00-921-7000

Traffic Management Job Functions and Indicators for the OJT Instruction/Evaluation Report

Job Function Category: Effective Judgment

Job Function	Indicator
<i>1. Awareness is maintained.</i>	<p>a. Maintains awareness, and keeps appropriate personnel aware of: total traffic situation, current and forecasted weather conditions, traffic management programs/initiatives and equipment status.</p> <p>b. Remains alert for possible situations which may affect traffic flows.</p> <p>c. Manages saturation or traffic flow problems.</p>
<i>2. Good judgment is applied.</i>	<p>a. Adheres to priority of duties.</p> <p>b. Actions are planned in a complete, correct, and timely manner to provide a safe, orderly, and expeditious flow of traffic.</p> <p>c. Ensures traffic management programs/initiatives are necessary prior to implementation.</p> <p>d. Manages traffic in a manner which avoids inefficiencies and unnecessary delays.</p>
<i>3. Aware of controller and system user requirements.</i>	<p>a. Uses TMIs which consider field facilities/controllers, users, and other TMCs/NTMSs.</p> <p>b. To the extent that safety is not compromised, ensures the user is accommodated while maintaining equity of access among all users.</p> <p>c. Listens and responds to controller/supervisor requests.</p> <p>d. Listens and responds to user requests and offers advice or recommends options.</p>
<i>4. Handles unusual situations.</i>	<p>a. Reacts appropriately to adverse situations.</p> <p>b. Ensures decisions are based on known facts and data.</p>

	<p>c. Investigates and analyzes situations to determine an effective course of action.</p> <p>d. Requests assistance when workload dictates.</p>
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Job Function Category: Methods and Procedures

Job Function	Indicator
5. <i>Monitors system.</i>	<p>a. Understands job functions and analyzes conditions which may impact the system.</p> <p>b. Proactively manages system constraints.</p>
6. <i>Programs/initiatives are implemented correctly.</i>	<p>a. Makes a proper assessment of the situation and provides a valid justification for the program or initiative.</p> <p>b. Properly plans using reliable and accurate data.</p> <p>c. Considers other options.</p> <p>d. Actions are timely and correct.</p> <p>e. Organizes processes of implementation into logical sequences.</p> <p>f. Administers and cancels TMIs and programs.</p>
7. <i>Efficient traffic flow is maintained.</i>	<p>a. Considers present and forecasted traffic to determine if an overload may occur and takes appropriate action to prevent or reduce the impact.</p> <p>b. Considers traffic mix and aircraft characteristics to ensure an orderly traffic flow is maintained.</p> <p>c. Manages departing, arriving, and en route traffic flows effectively and efficiently to ensure traffic volume is manageable.</p>
8. <i>Takes prompt action to correct deficiencies.</i>	<p>a. Recognizes when an error has been made and takes prompt action to correct the error.</p> <p>b. Uses alternate strategies, as necessary, in a timely and efficient manner.</p>

9. Data is handled correctly.	<p>a. SIGMETs, CWAs, and MISs are disseminated correctly.</p> <p>b. PIREPs are properly written, recorded, and disseminated.</p> <p>c. Handling, use, and disposition of sensitive/classified documents are correct.</p> <p>d. Collects and disseminates traffic management information, equipment outages, and other data as necessary.</p> <p>e. Posts all required information appropriately.</p> <p>f. Ensures documentation reflects actual system performance.</p> <p>g. Operational information is documented in a correct and timely manner.</p>
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Job Function Category: Equipment

Job Function	Indicator
10. Equipment capabilities are fully used.	<p>a. Uses equipment to fullest extent possible.</p> <p>b. Demonstrates knowledge of capabilities and limitations of equipment.</p> <p>c. Enters all required data into computer for area display.</p> <p>d. Displays appropriate area of responsibility on plan view display and traffic situation display.</p> <p>e. Adjusts displays appropriately.</p> <p>f. Demonstrates ability to retrieve information from all available equipment sources. This may include, but is not limited to, the TFMS workstation, TBFM, weather and radar processor, AT Workstation, integrated terminal weather system, and telecommunications equipment.</p>
11. Equipment malfunctions recognized.	<p>a. Recognizes equipment malfunctions and uses appropriate methods to restore equipment to operational status if possible.</p>

	<ul style="list-style-type: none"> b. Reports equipment outages to appropriate personnel if restoration to operational status is not possible. c. Equipment status information is understood and posted correctly.
12. Computer entries are complete/correct.	<ul style="list-style-type: none"> a. Uses correct computer entries. b. Is aware of equipment peculiarities.

Job Function Category: Communication/Coordination

Job Function	Indicator
13. Required coordination is performed.	<ul style="list-style-type: none"> a. Informs appropriate facilities, users, and other traffic management personnel of significant events and information in a timely manner. b. Coordinates TMIs and/or special instructions in a proper and timely manner. c. Provides justification for actions when necessary. d. Coordinates with available weather sources as appropriate. e. Directs messages to appropriate personnel.
14. Coordination is thorough, clear, and concise.	<ul style="list-style-type: none"> a. Relays only pertinent, necessary, and accurate information. b. Ensures coordination is complete and clarifies any misunderstood information. c. Pronunciation is clear. Speech rate is moderate. d. Does not coordinate separate messages when it would be more effective to combine information. e. Appropriate communications method is used.
15. Cooperative professional manner is maintained.	<ul style="list-style-type: none"> a. Conveys the image of a skilled, capable professional to others. b. Is courteous, tactful, and displays a spirit of cooperation.

	<ul style="list-style-type: none">c. Remains calm and displays a positive attitude under adverse conditions.d. Negotiates in a professional manner.e. Is receptive to suggestions for improvement from instructor/supervisor.f. Does not use abusive or profane language.
<i>16. Relief briefings are complete and accurate.</i>	<ul style="list-style-type: none">a. Follows approved checklist when exchanging information and both individuals acknowledge the positive transfer of responsibility.b. Ensures that questions about the operation of the position are resolved before transfer of responsibility is completed.c. Communicates pertinent status information including TMIs, weather information, and system situation.d. Signs on/signs off the position as appropriate.

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Appendix H. Terminal and En Route Facility Controller-in-Charge Instructional Program Guide (IPG)

Section 1. Introduction. This IPG includes information about the following two development stages:

1. CBI En Route Course 57057, Terminal Course 57060
2. CIC En Route Course 55072, Terminal Course 55073

Section 2. Stage 1: FAA Academy Training. Controller-in-Charge CBI. (Course 57057 or current course, En Route) (Course 57060 or current course, Terminal)

1. **General:** The purpose of this training is to provide the CPC/TMC selected to be CICs in either the En Route or Terminal environment with a mandatory national CBI course.
2. **Prerequisite:** CPC/TMCs from the En Route or Terminal options that have been selected by the CIC selection official.
3. **Location:** Field facility.
4. **Training Length:** This training is self-paced; therefore, the time to complete is based on an average. The lessons should be able to be completed within 3 to 5 hours.
5. **Administration:** This training is conducted using nationally-developed training.
6. **Training Contents:** Course 57057 contains these areas of instruction.
 - a. Introduction to course layout and course content.
 - b. Position Overview: Overview of the general responsibilities of the CIC.
 - c. Supervising Personnel: Responsibilities for position assignments, position relief briefings, approving leave, training, safety, and drug exams.
 - d. Operations Management: Procedures and responsibilities associated with data logs, Notices to Airmen, equipment outages, and flight inspection of navigational aids.
 - e. Incidents: Responsibilities associated with near-midair collisions (NMAC), pilot deviations, and reported occurrences.
 - f. Critical Air Situations: Procedures and responsibilities associated with aircraft accidents, hijacked aircraft, bomb threats, flight assists, emergency locator transmitter signals and unusual aircraft activities.
 - g. Special Operations: Responsibilities for handling presidential aircraft and other special

air operations.

Course 57060 contains the same areas of instruction as Course 57057 plus the following:

- h.** (Terminal Only) Reporting Exercises: Practice completing reports associated with flight assists, pilot deviations, aircraft accidents, reported occurrences and NMACs.
- i.** (Terminal Only) Public Relations: Procedures for handling public inquiries.
- j.** (Terminal Only) Facility Emergencies and Security: Procedures and responsibilities associated with emergencies and security of the facility.

Section 3. Stage 2: Facility Controller-in-Charge Qualification and Certification.
(Course 55072 or current course, En Route Part A)
(Course 55073 or current course, Terminal Part A)

1. General: Course 55072, Facility CIC (En Route Part A), is designed for CPC/TMC's selected to be CICs in an En Route environment. It provides job related knowledge, skill-oriented training, and site-specific instructor-led training. Instruction provided will prepare the developmental CIC to enter OJT for part B.

Course 55073, Facility CIC (Terminal Part A), is designed for CPCs/TMCs selected to be CICs in a terminal environment. It provides job related knowledge, skill-oriented training, and site-specific instructor-led training. Instruction provided will prepare the developmental CIC to enter OJT for part B.

2. Prerequisite: Successful completion of Course 57057, En Route CBI
or
Course 57060, Terminal CBI

3. Location: Field facility determined.

4. Training Length: Up to 12 hours for Course 55072 or up to 12 hours for Course 55073.

5. Administration: Training is administered in an instructor-led/operational environment utilizing FAA nationally-developed instructional materials tailored to facility requirements and enhanced with site-specific items. Facilities may add additional lessons and/or items. Facilities are encouraged to develop and conduct scenarios depicting situational awareness problems based on actual situations experienced by the facility or those that are likely to occur.

6. Training Contents: Courses 55072 and 55073 contain these areas of instruction.

- a. Watch supervision requirements.
- b. Operations management.
- c. Resource management.
- d. Unusual situations.
- e. Accidents/Incidents.
- f. Human relations and communications.
- g. Leave administration.
- h. Medical/drug/alcohol regulations.
- i. Reported occurrences.

- j.** Training procedures.
- k.** Work environment and human relations.

Section 4. Stage 3: Facility Controller-In-Charge (CIC) Qualification and Certification
(Course 55072 or current course, En Route Part B)
(Course 55073 or current course, Terminal Part B)

1. General: Course 55072, Facility CIC (En Route Part B), is designed for CPCs/ TMCs selected to be CICs in an En Route environment. Site specific OJT is provided enabling the developmental to perform all required watch supervision duties and responsibilities.

Course 55073, Facility CIC (Terminal Part B), is designed for CPC/TMCs selected to be CICs in a terminal environment. Site specific OJT is provided enabling the developmental to perform all required watch supervision duties and responsibilities.

2. Prerequisite: Successful completion of Course 55072, En Route, Part A
or
Course 55073, Terminal, Part A

3. Location: Field facility.

4. Training Length: Facility determines OJT hours.

5. Administration: Training is administered through OJT instruction, SET, and skill check sessions.

6. Exception: Due to the duties associated with watch supervision, the assignment of a training team is not required. OJT must be conducted by an FLM/STMC. Performance and progress are assessed through observations by FLMs/STMCs.

7. Training Contents: Course 55072, En Route Part B, contains these areas of instruction. Because of differences in operations among TRACONs, towers, and ARTCCs, the following job functions may not apply to all facilities:

- a. Make position assignments.
- b. Provide breaks.
- c. Combine/de-combine positions.
- d. Monitor/configure equipment.
- e. Monitor weather for impacts on air traffic.
- f. Assign OJT.
- g. Ensure available resources are deployed for optimal efficiency.
- h. Identify need for overtime.
- i. Process leave requests.

- j.** Document time and attendance.
- k.** Process and document FAA/facility forms.
- l.** Implement contingency plans.
- m.** Respond to unusual situations/emergencies/accidents and incidents.
- n.** Coordinate special operations.
- o.** Respond to information requests.
- p.** Handle public complaints.
- q.** Make on-the-spot corrections.
- r.** Eliminate distractions.
- s.** Demonstrate runway selection responsibilities.
- t.** Through simulation, respond to bomb threats, hijacking, and UFO reports.
- u.** Adhere to guidance and goals for the shift.
- v.** Maintains situational awareness.
- w.** Conduct and receive position relief briefings.
- x.** When necessary, implement flow control.
- y.** Identify and report harassment incidents.
- z.** Report equipment malfunctions.
- aa.** Prevent air traffic occurrences.
- bb.** Provide assistance to specialists.
- cc.** Report and process mandatory and/or electronic occurrence reports.
- dd.** Comply with labor contract requirements.

Course 55073 contains the same areas of instruction as Course 55072, except in a terminal environment.

**Section 5: Instructions for Completing the CIC OJT Instruction/Evaluation Report
FAA Form 3120-36**

1. Introduction. This appendix contains instructions for completing FAA Form 3120-36. This form must be used by FLM/STMCs to record their observations of the performance and progress of CPCs/TMCs selected as CIC during OJT instruction, SET, and skill check sessions. FAA Form 3120-36 may be used to document on-the-job familiarization. A copy of the form can be seen in Figure H-1.

2. Using the Worksheet. Complete the following items. Block numbers correspond to the numbered blocks on the worksheet.

Block 1. NAME: Print CPC's/TMC's name.

Block 2. DATE: Enter month, day, year.

Block 3. POSITION (S): Enter CIC and area of operation on which training or skill check is being performed.

Block 4. WEATHER: Record description of weather as VFR, MVFR, or IFR. Check the one box most representative of the session. Conditions that impact training should be noted in block 12.

Block 5. WORKLOAD: Check description of workload. Check the one box most representative of the session.

Block 6. COMPLEXITY: Check description of complexity of operations. Check the one box most representative of the session. Note any unusual situations or occurrences that impact training in block 12.

Block 7. HOURS THIS SESSION: Enter actual clock hours and minutes for this session.

Block 8. HOURS (%) THIS POSITION: Enter total clock hours and minutes spent in training on this position. Include this session. As an option, enter percent of allotted hours expended so far for this position.

Block 9. PURPOSE OF REPORT: Check appropriate purpose of report on the form. Check "OJT" for any activity that is counted as part of the assigned training time. Check "Skill Enhancement" if used for SET. The FLM/STMC checks "Evaluation" if administering a performance skill check or "Certification" if administering a certification skill check. If "Other" is indicated, document the specific use in Block 12.

Block 10. ROUTING: According to facility requirements.

Block 11. PERFORMANCE: Block 11 consists of the performance section. This section contains critical job elements, job function categories, and job functions used as a basis for instructing and evaluating the CPC-IT/TMC-IT. Users of this form should review the definitions of all job functions and their respective performance indicators in the attached checklist. These

descriptions are guidelines to be used by all participants involved in OJT, and to ensure that what is expected is mutually understood. This checklist is not all-inclusive and is not meant to limit the duties to be reviewed. The job function category entitled “Other” is intended for local use and adaptation.

a. OJT. Place a mark (e.g., X, ✓, etc.) in the columns “OBSERVED” and “COMMENT” as follows:

(1) **OBSERVED:** A mark in this column indicates that the operation or procedure was observed during the period, but that no significant comments are made.

(2) **COMMENT:** A mark in this column indicates that the operation or procedure was observed during the period and is accompanied by a referenced comment in block 12.

b. Skill Check. The FLM/STMC who conducts the skill check uses the columns “SATISFACTORY,” “NEEDS IMPROVEMENT,” and “UNSATISFACTORY.” The terms are defined as follows:

(1) **SATISFACTORY:** A mark in this column indicates that the CPC/TMC’s observed performance this session meets expected performance requirements and indicates that he/she demonstrates the ability to work independently for this performance item. Examples of exemplary performance and specific comments, along with suggestions for improvement, must be stated in block 12 of the form for each job function indicated.

(2) **NEEDS IMPROVEMENT:** A mark in this column indicates that the CPC/TMC’s observed performance is acceptable at this stage of training, but must improve in order to meet expected performance. Specific comments, along with suggestions or requirements for improvement, must be stated in Block 12 of the form for each job function indicated.

(3) **UNSATISFACTORY:** A mark in this column indicates that the CPC/TMC’s observed performance is unsatisfactory at this stage of training. Suggestions and recommendations for correcting each unsatisfactory job function must be stated in block 12, except at the 100 percent level.

c. To certify on a skill check, all applicable items must be marked satisfactory or “N/O” (not observed). If an item is marked “N/O,” block 12 must indicate that the CPC/TMC has demonstrated satisfactory performance/knowledge for that job function. If necessary, verbal questioning, simulation, or other methods may be used to demonstrate knowledge of a job function when not observed. Any checkmark in the “UNSATISFACTORY” column constitutes a failure of the skill check or certification and must be documented in block 12.

d. If a job function is not applicable to a position being observed, it must be recorded as “N/A” (not applicable).

Block 12. COMMENTS: This block is used for documentation of the CPC/TMC’s performance during OJT instruction or skill check sessions.

a. OJT: Used to document an observation when a mark is made in the “Comment” column

on the front of the form. The OJTI must sign and date this block. The comments:

- (1) May be specific or general.
- (2) May include exemplary, noteworthy, or unusual events.
- (3) Must describe any observed performance deficiencies. In the case of performance deficiencies, or when improvement is needed in a specific area, references must be made to applicable procedures, letters of agreement (LOA), orders/directives, etc.

b. Skill Check: This block must be used by the FLM/STMC who conducted the skill check to:

- (1) Document performance/progress.
- (2) Describe performance rated as “Needs Improvement” or “Unsatisfactory” and list references to specific procedures, LOAs, or directives that should be reviewed by the CPC/TMC so that the performance problem may be corrected.
- (3) Recommend one of the following:
 - (a) Continuation of OJT
 - (b) SET
 - (c) Suspension of training
 - (d) Certification

Block 12A. Use of this block is not required. When a directive is applicable to the comment, it is recommended that the applicable directive and paragraph be noted.

Block 13. RECOMMENDATION: This block must be used by the FLM/STMC who conducted the skill check. The FLM/STMC must recommend one of the following:

- a. Certification skill check
- b. Certification (when appropriate)
- c. Continuation of OJT
- d. SET
- e. Suspension of OJT

Note: This block is not used for CPC/TMC performance skill checks.

Block 14. EMPLOYEE’S COMMENTS: This block may be used by the CPC/TMC for making comments pertaining to the training period or skill check, or for making general

comments regarding training. Employee must sign and date the form. A signature does not necessarily indicate concurrence with the report, only that the report has been discussed with the CPC/TMC.

Block 15. CERTIFICATION: This block is used by the employee's FLM/STMC to document position certification/recertification. Record position of operation, sign, and date.

Figure H-1: FAA Form 3120-36

CONTROLLER-IN-CHARGE OJT INSTRUCTION/EVALUATION REPORT									
1. Name:			2. Date:			3. Position(s):			
4. Weather: <input type="checkbox"/> VFR <input type="checkbox"/> MVFR <input type="checkbox"/> IFR		5. Workload: <input type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy		6. Complexity: <input type="checkbox"/> Routine, not difficult <input type="checkbox"/> Occasionally difficult <input type="checkbox"/> Mostly difficult <input type="checkbox"/> Very difficult		7. Hours this session:			
						8. Hours (%) this position:			
9. Purpose: <input type="checkbox"/> OJT <input type="checkbox"/> Certification <input type="checkbox"/> Other <input type="checkbox"/> Evaluation <input type="checkbox"/> Recertification <input type="checkbox"/> Skill Enhancement						10. Routing:			
11.	CJE	Job Function Category	Job Function	Observed	Comment	Satisfactory	Needs Improvement	Unsatisfactory	
Performance	Operations Management	A. Monitors the Operation	1. Maintains awareness.						
			2. Applies good judgment.						
			3. Is aware of controller and system user requirements.						
			4. Handles unusual situations.						
		B. Methods and Procedures	5. Monitors system.						
			6. Implements programs/initiatives correctly.						
			7. Maintains efficient traffic flow.						
			8. Takes prompt action to correct errors.						
		C. Equipment	9. Handles data correctly.						
			10. Uses equipment capabilities fully.						
			11. Recognizes equipment malfunctions.						
			12. Computer entries are complete/correct.						
	D. Resource Management	13. Staffs appropriately.							
		14. Provides relief periods.							
	Communications	E. Training	15. Accomplishes training.						
			16. Documents training.						
		F. Human Relations and Communications	17. Communicates shift requirements effectively.						
			18. Communicates effectively to the public.						
			19. Maintains an effective work environment.						
	Special Operations	G. Quality Assurance	20. Communicates effectively with management.						
			21. Provides complete and accurate relief briefings.						
		22. Prepares accident and incident reports that are complete and accurate.							
	H. Other	23. Reports miscellaneous events accurately.							

FAA FORM 3120-36(8-00)

NSN:0052-00-923-6000

Figure H-1: FAA Form 3120-36 (continued)

12. Comments	12A. References
	Signature: _____ Date: _____
13. Recommendation: <input type="checkbox"/> Certification Skill Check <input type="checkbox"/> Certification <input type="checkbox"/> Continuation of OJT <input type="checkbox"/> Skill Enhancement Training <input type="checkbox"/> Suspension of OJT	
14. Employee's Comments:	
This report has been discussed with me (Signature) _____ Date: _____	
15. Certification/Recertification: I certify that this employee meets qualification requirements and is capable of working under general supervision. Signature of Certifier: _____ Date: _____	

Controller-in-Charge Job Functions and Indicators for the OJT Instruction/Evaluation Report

Job Function Category: Monitors the Operation

Job Function	Indicator
<i>1. Maintains awareness.</i>	<ul style="list-style-type: none"> a. Maintains situational awareness and keeps appropriate personnel aware of the total traffic situation, current and forecasted weather conditions, traffic management programs/initiatives, and equipment status. b. Remains alert for possible situations that may affect traffic, personnel, or equipment. c. Manages saturation or traffic flow problems. d. Is aware of the status of all equipment and personnel.
<i>2. Applies good judgment.</i>	<ul style="list-style-type: none"> a. Adheres to priority of duties. b. Actions are planned in a complete, correct, and timely manner to provide the environment for a safe, orderly, and efficient flow of traffic. c. Performs on-the-spot corrections for operational integrity. d. Assigns duties in an effective and proactive manner. e. Manages resources in a manner that avoids inefficiencies.
<i>3. Is aware of controller and system user requirements.</i>	<ul style="list-style-type: none"> a. Deploys resources in a manner that considers field facilities, controllers, and users. b. Ensures compliance with traffic management initiatives. c. To the extent that safety is not compromised, ensures the user is accommodated while maintaining equity of access among all users. d. Listens and responds to controller requests. e. Listens and responds to user requests.
<i>4. Handles unusual situations.</i>	<ul style="list-style-type: none"> a. Reacts appropriately to adverse situations. b. Ensures decisions are based on known facts and data. c. Investigates and analyzes situations to determine an effective course of action.

	d. Requests assistance when workload/situation dictates.
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Job Function Category: Methods and Procedures

Job Function	Indicator
5. <i>Monitors system.</i>	a. Understands job functions and analyzes conditions which may impact the work environment. b. Manages system constraints proactively.
6. <i>Implements programs/initiatives correctly.</i>	a. Makes a proper assessment of the situation and provides a valid justification for actions. b. Plans properly using reliable and accurate data. c. Considers available options. d. Takes timely and correct actions. e. Organizes processes of implementation into logical sequences. f. Administers and coordinates for cancellation of traffic management initiatives and programs.
7. <i>Maintains efficient traffic flow.</i>	a. Considers present and forecasted traffic to determine if an overload may occur and takes appropriate action to prevent or reduce the impact. b. Considers traffic mix and aircraft characteristics to ensure an orderly traffic flow is maintained. c. Deploys personnel so departing, arriving, and en route traffic flows effectively and efficiently.
8. <i>Takes prompt action to correct errors.</i>	a. Recognizes when an error has been made and takes prompt action to correct the error. b. Uses alternate strategies, as necessary, in a timely and efficient manner.
9. <i>Handles data correctly.</i>	a. Disseminates SIGMETs, CWAs, and MISs correctly. b. Obtains PIREPs, when required, and they are properly written, recorded, and disseminated. c. Handles, uses, and disposes sensitive/classified documents correctly. d. Collects and disseminates traffic management

	<p>information, equipment outages, and other data as necessary.</p> <ul style="list-style-type: none"> e. Ensures required information is appropriately posted. f. Ensures documentation reflects actual system performance. g. Documents operational information in a correct and timely manner.
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Job Function Category: Equipment

Job Function	Indicator
<i>10. Uses equipment capabilities fully.</i>	<ul style="list-style-type: none"> a. Uses equipment to fullest extent possible. b. Demonstrates knowledge of capabilities and limitations of equipment. c. Enters all required data into appropriate computer systems. d. Adjusts displays appropriately. e. Demonstrates ability to retrieve information from all available equipment sources.
<i>11. Recognizes equipment malfunctions.</i>	<ul style="list-style-type: none"> a. Recognizes equipment malfunctions and uses appropriate methods to restore equipment to operational status if possible. b. Reports equipment outages to appropriate personnel if restoration to operational status is not possible. c. Understands and posts equipment status information correctly. d. Accomplishes required reports on equipment outages.
<i>12. Makes complete/correct computer entries.</i>	<ul style="list-style-type: none"> a. Uses correct computer entries. b. Is aware of equipment peculiarities.

Job Function Category: Resource Management

Job Function	Indicator
<i>13. Staffs appropriately.</i>	<ul style="list-style-type: none"> a. Ensures appropriate positions are opened for current and anticipated traffic volume. b. Ensures sufficient personnel are available to meet anticipated traffic demands. c. Ensures sufficient personnel are available to accommodate planned events. d. Ensures appropriate process and priority for leave.
<i>14. Provides relief periods.</i>	<ul style="list-style-type: none"> a. Accomplishes position rotation in an efficient manner. b. Gives meal breaks appropriate priority.

Job Function Category: Training

Job Function	Indicator
<i>15. Accomplishes training.</i>	<ul style="list-style-type: none"> a. Ensures training activities are accomplished in a proper and timely manner. b. Ensures training documentation is accomplished in a proper and timely manner. c. Ensures OJT assignments are appropriate for level of proficiency. d. Ensures OJT instruction reports are prepared.
<i>16. Documents training.</i>	<ul style="list-style-type: none"> a. Ensures OJT assignments are appropriate for level of proficiency. b. Ensures OJT instruction reports are prepared.

Job Function Category: Human Relations and Communication

Job Function	Indicator
<i>17. Communicates shift requirements effectively.</i>	<ul style="list-style-type: none"> a. Provides on-the-spot corrections diplomatically. b. Manages workplace distractions utilizing courtesy and tact. c. Utilizes human relations skills when making

	operational assignments.
<i>18. Communicates effectively with the public.</i>	<ul style="list-style-type: none"> a. Coordinates facility visits. b. Responds to media inquiries appropriately. c. Communicates effectively with system users.
<i>19. Maintains an effective work environment.</i>	<ul style="list-style-type: none"> a. Communicates effectively to minimize workplace distractions. b. Is courteous, tactful, and displays a spirit of cooperation. c. Remains calm and displays a positive attitude under adverse conditions.
<i>20. Communicates effectively with management.</i>	<ul style="list-style-type: none"> a. Provides accurate and objective documentation of operational events to supervisory personnel. b. Communicates information about unusual situations in a timely and effective manner. c. Informs management of potential problems/situations when appropriate.
<i>21. Provides complete and accurate relief briefings.</i>	<ul style="list-style-type: none"> a. Follows approved checklist when exchanging information and both individuals acknowledge the positive transfer of responsibility. b. Ensures that questions about the operation of the position are resolved before transfer of responsibility is completed. c. Communicates pertinent status information including traffic management initiatives, weather information, and system situation. d. Signs on/signs off the position as appropriate.

Job Function Category: Quality Assurance

Job Function	Indicator
<i>22. Prepares accident and incident reports that are complete and accurate.</i>	<ul style="list-style-type: none"> a. Notifies management in a timely manner. b. Applies and follows directives. c. Prepares and forwards documentation.
<i>23. Reports miscellaneous events accurately.</i>	<ul style="list-style-type: none"> a. Completes daily reports. b. Requests a System Service Review (SSR).

c. Records flight assists, noise damage issues and complaints, reckless flying reports, UFO reports, and actions taken.

Appendix I: Reserved for Ocean21**Ocean21 (O21)**

1. General: Developmentals and CPC-ITs assigned to Areas of Operation using Ocean21 will receive the generic version course 59028, updated to the most current software build practicable, as a required element of Stage 3 and/or Stage 4 training, as provided for in the local facility training directives.

2. Administration:

a. Developmentals/CPC-ITs will receive training using O21 upon completion of the applicable stage simulation training. Each developmental/CPC-IT must complete Course 59028, Ocean21 Air Traffic Operator Training.

b. Upon completion of Course 59028, site-specific instructional scenarios using O21 must be administered. These instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing ATC duties using O21 in a simulated operational environment.

c. CPC transfers without previous O21 certification must complete Course 59028 prior to starting OJT on any O21 control position.

d. No examination, test, or scenario may be evaluated on a pass/fail basis.

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**Appendix J. Instructions for Completing the
OJTI Candidate Abilities and Attributes Report
FAA Form 3120-148**

Section 1. Introduction. The Independent Review Panel convened by the FAA Administrator to review the selection, assignment and training of ATCS, made a number of recommendations related to OJT and OJTIs in its final report dated September 22, 2011. The panel noted that there is a wide and varied list of what qualities and attributes contribute to an ATCS being a good OJTI. This appendix contains instructions for completing FAA Form 3120-148, OJTI Candidate Abilities and Attributes Report. The intent of this checklist is to aid FLMs/Supervisors in focusing objectively on the abilities and attributes seen in ATCS that contribute to making them effective OJTIs.

Section 2. Using the Form. The OJTI Candidate Abilities and Attributes Report must be completed by the candidate's FLM/Supervisor. The candidate is not required to demonstrate all the abilities and attributes listed on the form to be recommended to the selection panel. The FLM/Supervisor and OJTI candidate must discuss the completed form, including, if applicable, recommendations from the FLM/Supervisor for any training to develop those abilities and attributes that might require further attention before the candidate can be successfully recommended. When a recommendation for selection is made, the completed checklist is submitted to the selection panel.

OJTI CANDIDATE ABILITIES AND ATTRIBUTES REPORT**OJTI CANDIDATE'S NAME:** _____

	Demonstrates	
Ability to Maintain Operational Integrity		
Self-awareness/operates within personal limits (i.e., asks for help or mitigates services as appropriate)		
Situational awareness		
Effective Communication Skills		
Interpersonal – communication with peers/management		
Technical – communicates effectively when on position		
Effective listener		
Flexibility		
Problem solving skills include utilizing multiple techniques		
Open-minded/receptive to different solutions for situations		
Knowledge and Application of Available Resources		
Correctly applies all applicable Orders and other guidance (i.e. 3120.4, 7110.65, LOAs, SOP, MOUs, LTA)		
Organizational skills		
Attention to detail		
Consistent work habits		
Patience		
Demonstrates respect for colleagues		
Demonstrates patience with internal and external users		
Professionalism		
Effective team member		
Pride of work/sense of ownership		
Responds to the needs of users		
Displays positive work habits (i.e. on time, willingness to provide assistance without solicitation)		
Receives constructive feedback well and seeks to improve when recommendations are received		
Demonstrates accountability in own work		

Comments:

		Signature	Date
FLM/Supervisor	I Do <input type="checkbox"/> / Do Not <input type="checkbox"/> Recommend Candidate to be an OJT		
OJT Candidate			
OJT Panel	Concur <input type="checkbox"/> Do Not <input type="checkbox"/> Concur <input type="checkbox"/>		

FAA Form 3120-148 7/13

**Abilities, Attributes and Indicators for the
OJTI Candidate Abilities and Attributes Report**

<u>ABILITY:</u>	<u>PAGE:</u>
ABILITY TO MAINTAIN OPERATIONAL INTEGRITY.....	J-5
EFFECTIVE COMMUNICATION SKILLS.....	J-5
FLEXIBILITY.....	J-6
KNOWLEDGE AND APPLICATION OF AVAILABLE RESOURCES.....	J-6
ORGANIZATIONAL SKILLS.....	J-6
PATIENCE.....	J-7
PROFESSIONALISM.....	J-7

Ability to Maintain Operational Integrity

Attribute	Indicator
<i>1. Self-awareness/operates within personal limits.</i>	a. Asks for help in a timely manner. b. Takes initiative to control number of aircraft as he/she approaches their capacity e.g. stops departures, initiates flow, etc.
<i>2. Situational awareness.</i>	a. Anticipates and plans for the impact of events e.g. change in runway configuration, changing weather conditions. b. Draws attention to potential conflicts on neighboring positions. c. Recognizes and acts upon changes in A/C performance e.g. change in A/C ground speed with altitude in certain weather conditions.

Effective Communication Skills

Attribute	Indicator
<i>1. Interpersonal – communication with peers/management.</i>	a. Communicates effectively with peers and management alike. b. Is receptive to feedback from peers and management.
<i>2. Technical – communicates effectively when on position.</i>	a. Landline coordination is correct and complete. b. Coordination is restricted to that which is required or will maximize operational efficiency. c. Uses prescribed phraseology.
<i>3. Effective listener.</i>	a. Acts upon communicated operational information without prompting. b. Demonstrates the ability to listen to, and comprehend, verbal information while performing other duties while on position. c. Asks questions to clarify understanding.

Flexibility

Attribute	Indicator
<i>1. Problem solving skills include utilizing multiple techniques.</i>	a. Demonstrates an ability to adapt to different techniques. b. Identifies and applies alternate techniques for different conditions/circumstances.
<i>2. Open-minded/receptive to different solutions to situations.</i>	a. Receptive to differing opinions about the “best” way to resolve problems. b. Able to communicate different solutions including the advantages/disadvantages of each solution.

Knowledge and Application of Available Resources

Attribute	Indicator
<i>1. Correctly applies all applicable Orders and Directives.</i>	a. Demonstrates a thorough knowledge of all applicable Orders and Directives. b. Demonstrates the ability and willingness to research those subjects and details which might not have previously been encountered.

Organizational Skills

Attribute	Indicator
<i>1. Attention to detail.</i>	a. Closes the loop – does not leave tasks incomplete. b. Determines priority of duties to ensure operational efficiency. c. Considers impact on others’ workload before making nonstandard operational requests.
<i>2. Consistent work habits.</i>	a. Operates on position in a consistent manner. b. Uses memory aids and techniques that ensure completion of operational tasks.

Patience

Attribute	Indicator
<i>1. Demonstrates respect for colleagues.</i>	a. Accepting and respectful of people's differing professional and personal opinions. b. Maintains effective working relationships with all team members.
<i>2. Demonstrates patience with internal and external users.</i>	a. Displays respect for alternate points of view. b. Maintains professionalism both on and off the frequency. c. Effectively responds to user's requests.

Professionalism

Attribute	Indicator
<i>1. Effective team member.</i>	a. Offers assistance to team members when necessary. b. Welcomes offers of assistance from other team members.
<i>2. Pride of work/sense of ownership.</i>	a. Looks for ways to improve own performance. b. Presents effective solutions to problems.
<i>3. Responds to the needs of the users.</i>	a. Strives to provide good service even when it results in an increased workload. b. Exhibits positive responses to user requests.
<i>4. Displays positive work habits.</i>	a. Follows procedures – avoids taking short cuts. b. Continues to expand knowledge base after becoming CPC/TMC/FPL.
<i>5. Receives constructive feedback well and seeks to improve when recommendations are received.</i>	a. Acts upon feedback.
<i>6. Demonstrates accountability in own work.</i>	a. Shows a willingness to admit mistakes and acknowledge when there is a "better way."

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Appendix K. Definitions

- 1. Air Traffic Manager (ATM)** – Individual responsible for the overall efficiency and effectiveness of the facility training program.
- 2. Comprehensive Electronic Data Analysis and Reporting (CEDAR)** – A software program that provides an electronic means of managing resources, and capturing safety-related information and metrics. CEDAR provides a temporary storage of employee training history; permanent storage of employee training history resides in FAA Form 3120-1 or eLMS, as applicable.
- 3. Centralized Training** – Agency training conducted at a location other than the participant's regularly assigned facility (e.g., FAA Academy, Service Center). This may include resident courses conducted locally and funded centrally.
- 4. Certification Skill Check (CSC)** – An assessment used to determine if an individual demonstrates the knowledge and skill level necessary to certify on an operational position.
- 5. Certified Professional Controller (CPC)** – A civilian air traffic control specialist (ATCS) who is or has been facility/area certified in the Terminal/En Route air traffic control option in the air traffic service whose primary duty is the separation and control of live air traffic.
- 6. Certified Professional Controller-In-Training (CPC-IT)** – A CPC in the process of obtaining certification for the facility/area to which assigned.
- 7. Computer Based Instruction (CBI)** – Instructional delivery method using interactive computer technology.
- 8. Consolidated Positions** – Operational positions with the same function which are routinely combined (e.g., 6D/13D, 8R/10R, etc.).
- 9. Continuation of OJT** – It is anticipated that certification will be attained within the target OJT hours or that additional OJT hours may be assigned.
- 10. Controller in Charge (CIC)** – An air traffic control specialist performing duties of a shift supervisor in accordance with JO 7110.65.
- 11. Currency** – Prescribed minimum time requirement necessary to work an operational position independently under general supervision.
- 12. Developmental** – Anyone in any option who has not achieved full performance level, CPC, or TMC in any facility/area.
- 13. Direct Monitoring** – Observing and listening to all activity at the operational position.
- 14. Discontinuation of training** – An action taken by the ATM/District Manager determining that no further training must be conducted and/or a recommendation from a training review board that no further training be conducted.

15. District Manager – The Manager responsible for the oversight of terminal facilities within their assigned district.

16. eLMS – The FAA's electronic learning management system for employees to take online training, register for course offerings, and view their learning histories.

17. Evidence-based Training: Training based on an analysis of safety data.

18. Facility Training – Training conducted at the employee's assigned duty location.

19. Failed – Grade assigned to a student who does not satisfactorily complete a course.

20. Familiarity – Knowledge of delegated airspace, adjacent facilities, frequencies, traffic flows and types, and procedures (e.g., letters of agreement) associated with a sector/operational position.

21. Front Line Manager (FLM) – Managerial personnel responsible for the direct supervision of operational personnel.

22. Full Performance Level (FPL) – An air traffic control specialist (ATCS) who is or has been facility/area certified in the FS option.

23. Incomplete – Grade assigned to a student who does not complete a course because of mitigating circumstances which are not related to performance (e.g., prolonged illness, death in family, etc.).

24. Instructional Program Guide (IPG) – Guide that outlines required course content for certain national air traffic qualification training programs.

25. Instructional System Design (ISD) – Instructional Systems Design (ISD) is the science and psychology of sound instruction that uses the A-D-D-I-E model: Analyzing the problem, Designing a training solution, Developing the courseware, Implementing the solution, and performing Evaluations throughout the process. The ADDIE model is a basic production model, not limited to instruction.

26. Instructor-Led Training (ILT) – Training accomplished by the individual with an instructor/facilitator.

27. Minimum Certification Hours – The number of training hours required before becoming eligible for certification on a given operational position.

28. National Operations Manager (NOM) – The NOM provides oversight and direction to National Traffic Management Officers (NTMOs) to ensure compliance with training directives and goals at the ATCSCC.

29. National TMS-in-Training (NTMS-IT) – A traffic management specialist who is in the process of obtaining certification at the ATCSCC.

30. National Traffic Management Officer (NTMO) – Managerial personnel responsible for the direct supervision of operational personnel at the ATCSCC.

31. National Traffic Management Specialist (NTMS) – A traffic management specialist at the Air Traffic Control System Command Center (ATCSCC).

32. Non-Operational Personnel – Personnel who are not required to maintain operational currency.

33. National Traffic Management Specialist (NTMS) – A traffic management specialist at the Air Traffic Control System Command Center (ATCSCC).

34. On-The-Job Familiarization (OJF) – An assignment of direct monitoring of an operational position.

35. On-The-Job Training (OJT) – Training conducted by a qualified individual that provides direct experience in the work environment.

36. On-The-Job Training Instructor (OJTI) – Non-supervisory personnel who conducts OJT.

37. Operational Personnel – Personnel assigned to the operations quarters or in direct supervision of the operations quarters or individuals who maintain currency.

38. Out-Of-Agency Training – Training conducted by or obtained from sources other than the FAA.

39. Performance Skill Check (PSC) – An assessment used to evaluate a developmental's training progress or an assessment of a specialist's performance on an operational position on which the specialist is certified.

40. Proficiency - Knowing, understanding, and applying air traffic procedures in a safe and efficient manner.

41. Proficiency Training – Training conducted to maintain and update the knowledge and skills necessary to apply air traffic procedures in a safe and efficient manner.

42. Qualification Training – Training conducted to develop the knowledge and skills required to qualify specialists for certification on positions of operation within an air traffic facility.

43. Recovery in ATC Operations – Corrective actions taken or not taken by air traffic control in response to an unsafe situation/outcome in order to return to the correct margin of safety.

44. Recurrent Training – Recurrent Training is collaboratively-developed national safety training delivered via electronic means, instructor-led presentations, or any combination thereof. Recurrent Training is intended to increase air traffic controller proficiency, enhance awareness of human factors affecting aviation, and promote behaviors essential for the identification, mitigation and/or management of risk.

- 45. Refresher Training** – Training conducted to maintain and update previously learned knowledge and skills.
- 46. Remedial Training** – Training provided to correct specific identified operational deficiencies.
- 47. Self -Directed Study** – Training accomplished by the individual without an instructor.
- 48. Simulation Fidelity** – Low-fidelity simulation approximates some of the sensory experiences associated with air traffic operations and includes SIMFAST, TTG, table-top, CAB LAB, etc. High-fidelity simulation approximates most of the sensory experiences with the actual operation and includes TTL, AT Coach, ETG, TSS, O21 lab, etc.
- 49. Simulation Training** – Training conducted in a simulated operational environment that allows personnel to apply and demonstrate skills and knowledge.
- 50. Skill Enhancement Training** – Training designed to improve an individual’s knowledge, skills, and abilities.
- 51. Supervisory Traffic Management Coordinator (STMC)** – Managerial personnel responsible for the direct supervision of traffic management personnel.
- 52. Supplemental Training** – Training provided prior to the use of new/revised procedures, regulations, or equipment.
- 53. Suspension of OJT** – An action taken by the developmental’s FLM to temporarily stop OJT.
- 54. Target Hours** – Number of hours established to achieve qualification training on an operational position.
- 55. TMC-in-Training (TMC-IT)** – A CPC who is in the process of obtaining certification in the TMU to which assigned.
- 56. Tower Radar Display** – General term used for equipment that provides radar data in a control tower (e.g., DBRITE, Remote ARTS Color Display (R-ACD), TDW, STARS LITE, etc.).
- 57. Traffic Management Coordinator (TMC)** – A CPC who is or has been certified on the required positions in a TMU.
- 58. Traffic Management Officer (TMO)** – Manager responsible for the oversight of one or more Traffic Management Units.
- 59. Trainee** – Developmental, CPC-IT, FPL-IT or TMC-IT.
- 60. Training Administrator (TA)** – Individual designated to administer the facility training program.

61. Training Plan – A document used to outline the training objectives for a developmental/CPC-IT.

62. Training Proposal – A written document that identifies a training need and specifies tasks, target audience, schedule, and priority for the proposed training.

63. Training Team – Designated individuals who facilitate the training of a developmental/CPC-IT.

64. TRAX – A software program that allows automated preparation and maintenance of employee training records. TRAX is not a system of records. TRAX is a mechanism for entering and printing training reports that are placed in FAA Form 3120-1.

65. Web-Based Training – (also known as eLearning, computer-based instruction, etc.) Comprises all forms of electronically-supported learning and teaching. The technology communication system, whether networked or not, serves as a specific media device to implement the learning.

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Appendix L: Acronym List

AC	Advisory Circular
ADF	Automatic Direction Finder
AFIS	Automated Flight Information Service
AG	Academy Graduate
AIM	Aeronautical Information Manual
AISR	Aeronautical Information System Replacement
AIT	Automated Information Transfer
AJI	Office of Safety and Technical Training
AJI-2	Director of Technical Training
ALTRV	Altitude Reservation
AMA-500	FAA Academy, Air Traffic Division
AMASS	Airport Movement Area Safety System
AOR	Area of Responsibility
AOV	Air Traffic Safety Oversight Service
ARINC	Aeronautical Radio Incorporated
ARTCC	Air Route Traffic Control Center
ARTS	Automated Radar Terminal System
ASDE	Airport Surface Detection Equipment
ASOS	Automated Surface Observing System
AT	Air Traffic
ATC	Air Traffic Control
ATCAA	Air Traffic Control Assigned Airspace
ATCS	Air Traffic Control Specialist
ATCSCC	Air Traffic Control System Command Center
ATCT	Air Traffic Control Tower
ATM	Air Traffic Manager
ATO	Air Traffic Organization
ATSAP	Air Traffic Safety Action Program
AWSS	Automated Weather Sensor System
CAP	Civil Air Patrol

CAR	Corrective Action Request
CARTS	Common Automated Radar Terminal System
CBA	Collective Bargaining Agreement
CBI	[Computer] Web-based Instruction
CD	Clearance Delivery
CENRAP	Center Radar ARTS Presentation/Processing
CERAP	Combined En Route Radar Approach
CI	Coordinator TRACON
CIC	Controller-In-Charge
CJE	Critical Job Element
CO	Contracting Officer
COR	Contracting Officer's Representative
CPC-IT	Certified Professional Controller-in-Training
CTO	Control Tower Operator
CWA	Center Weather Advisory
CWSU	Center Weather Services Unit
D-ATIS	Digital Automatic Terminal Information Service
DBRITE	Digital Bright Radar Indicator Tower Equipment
DEN	Domestic Events Network
DH	Decision Height
DOD	Department of Defense
EARTS	En Route Automated Radar Tracking System
EBUS	Enhanced Backup Surveillance
ECM	Electronic Countermeasures
EDCT	Estimated Departure Control Time
EDST	En Route Decision Support Tool
eLMS	Electronic Learning Management System
EMS	Emergency Medical Services
EOD	Entered On Duty
EOR	Electronic Occurrence Report
ERAM	En Route Automation Modernization
ERC	Event Review Committee

ERIDS	En Route Information Display System
ESL	Emergency Service Level
ETG	Enhanced Target Generator
FAA	Federal Aviation Administration
FACIDENT	Facility Identification
FAF	Final Approach Fix
FAR	Federal Aviation Regulations
FBI	Federal Bureau of Investigation
FBO	Fixed-Base Operator
FCC	Federal Communications Commission
FD	Flight Data
FDIO	Flight Data Input/Output
FDT	Flight Deck Training
FLM	Front Line Manager
FPA	Flight Plan Area
FPL-IT	Full Performance Level in Training
FS	Flight Service
FSS	Flight Service Station
GC	Ground Control
GOES	Geostationary Operational Environmental Satellite
GPS	Global Positioning System
HAA	Height Above Airport
HIWAS	Hazardous Inflight Weather Advisory Service
HO	Handoff
HQ	Headquarters
HRPM	Human Resources Policy Manual
H-VOR	High VOR
IAFDOF	Inappropriate Altitude for Direction of Flight
IDS	Information Display System
IFR	Instrument Flight Rules
ILS	Instrument Landing System
ILT	Instructor-Led Training

IPG	Instructional Program Guide
ISD	Instructional Systems Design
LADP	Local Airport De-icing Plan
LAHSO	Land and Hold Short Operations
LAWRS	Limited Aviation Weather Reporting Station
LC/CC	Local Control/ Coordinator Cab
LOA	Letter of Agreement
LUAW	Line Up And Wait
L-VOR	Low VOR
MANPADS	Man Portable Air Defense Systems
MARSA	Military Authority Assumes Responsibility for Separation of Aircraft
MDA	Minimum Descent Altitude
MF	Meteorological Form
MEARTS	Micro-En Route Automated Radar Tracking System
MEDEVAC	Medical Evacuation (used for priority service of medical emergencies)
METAR	Manual Aviation Routine Weather Report
MIS	Meteorological Impact Statement
MIT	Miles In Trail
MOA	Military Operations Area
MOR	Mandatory Occurrence Report
MSAW	Minimum Safe Altitude Warning
MTR	Military Training Route
MVFR	Marginal Visual Flight Rules
M-VOR	Medium VOR
NAS	National Airspace System
NAVAID	Navigational Aid
NDB	Non-directional Beacon
NMAC	Near Midair Collision
NOM	National Operations Manager
NOTAM	Notice to Airmen
NR	Non-Radar
NTD	National Training Database

NTMO	National Traffic Management Officer
NTMS	National Traffic Management Specialist
NWS	National Weather Service
O21	Ocean 21
OASIS	Operational and Supportability Implementation System
OID	Operator Input Device
OJF	On-the-Job Familiarization
OJT	On-the-Job Training
OJTI	On-the-Job Training Instructor
OM	Operations Manager
OPM	Office of Personnel Management
PAPI	Precision Approach Path Indicator
PDC	Pre-Departure Clearance
PIREP	Pilot Report
QA	Quality Assurance
QAK	Quick Action Keyboard
R-ACD	Remote ARTS Color Display
RA	Resolution Advisory
RAP	Risk Analysis Process
RAPCON	Radar Approach Control
RATCF	Radar Air Traffic Control Facility
RC	Radar Control
RCC	Rescue Coordination Center
RCO	Remote Communications Outlet
RMC	Retired Military Controller
RVR	Runway Visual Range
RVV	Runway Visibility Value
SAA	Special Activity Airspace
SAFI	Semiautomatic Flight Inspection
SAR	Search and Rescue
SET	Skill Enhancement Training
SFRA	Special Flight Rules Area

SIA	Status Information Area
SID	Standard Instrument Departure
SIGMET	Significant Meteorological Information
SOP	Standard Operating Procedure
SPECI	Aviation Selected Special Weather Report
SSR	System Service Review
STAR	Standard Terminal Arrival Route
STARS	Standard Terminal Automation Replacement System
STMC	Supervisory Traffic Management Coordinator
SUA	Special-Use Airspace
SVFR	Special Visual Flight Rules
SWAP	Severe Weather Avoidance Plan
TA	Training Administrator
TACAN	Tactical Air Navigation
TBFM	Time Based Flow Management
TCAS	Traffic Alert and Collision Avoidance System
TDLS	Tower Data Link Services
TDW	Tower Display Workstation
TDWR	Terminal Doppler Weather Radar
TEC	Tower En Route Control
TFMS	Traffic Flow Management System
TIBS	Telephone Information Briefing System
TMA	Traffic Management Advisor
TMC-IT	Traffic Management Coordinator in Training
TMI	Traffic Management Initiative
TMO	Traffic Management Officer
TMW	TFMS Workstation
TRACON	Terminal Radar Approach Control
TRSA	Terminal Radar Service Area
TSEW	TRACON Skill Enhancement Workshop
TSS	Tower Simulator System
TTG	Test Target Generator

TTL	Test and Training Laboratory
TWEB	Transcribed Weather Enroute Broadcasts
UAS	Unmanned Aircraft Systems
UFO	Unidentified Flying Object
UHF	Ultra High Frequency
UNICOM	Universal Communications
UTM	Unsuccessful Transmission Message
VASI	Visual Approach Slope Indicator
VFR	Visual Flight Rules
VFR OTP	VFR-On-Top
VHF	Very High Frequency
VNR	VFR Not Recommended
VOR	Very High Frequency Omnidirectional Radio Range
VOR/DME	VOR/Distance Measuring Equipment
VORTAC	Co-located VOR and TACAN Beacon
VOT	Very High Frequency Omnirange Test
VRA	Veterans Recruitment Appointment
VSCS	Voice Switching and Control System
VTABS	VSCS Training and Backup Switch