U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

ORDER JO 3120.4M

Effective Date:
March 15, 2011

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 with and comply with this order. The order consists of six (6) chapters and ten (10) appendices. The chapters contain information generally applicable to all types of facilities. The appendices contain information unique to En Route, Terminal, flight service facilities, and the Air Traffic Control System Command Center. All facilities must be in compliance with this Order within ninety (90) days of the effective date.

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Distribution:

Initiated By: AJL-1
ATO Technical
Training and
Development

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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 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. This order is available on the FAA Web site at: http://faa.gov/air_traffic/publications and http://employees.faa.gov/tools_resources/orders_notices/.

4. What this Order Cancels. FAA Order 3120.4L, Air Traffic Technical Training, dated June 22, 2005, and all changes to it are canceled.

5. Explanation of Policy Changes. The significant changes to this order have been identified in the training documentation provided from the Air Traffic Technical Training Organization. Contact local training representatives or AJL-14 for further details.

6. Background. This version FAA Order 3120.4M has been created to reflect updates and changes in procedural and technical requirements for air traffic controller training.

7. Word Meanings. As used in the order:

- **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 and not a requirement.
- **e.** Singular words include the plural, plural words include the singular.

Chapter 2. Roles and Responsibilities

1. Air Traffic Technical Training Organization (AJL). AJL is responsible for developing individual and organizational competencies for the air traffic workforce.

a. Director of Technical Training. The Director of Technical Training is responsible for program guidance, operational effectiveness, technical accuracy, evaluation of air traffic technical training, coursework/curriculum review, including FAA Academy-delivered and developed courses as well as the oversight at institutions participating in the AT-CTI.

b. Manager of Technology. The Manager of Technology is responsible for web-based learning and computer based instruction (CBI).

c. Manager for Technical Training Facilities and Oversight. The Manager for Technical Training Facilities and Oversight is responsible for ensuring the delivery of consistent and appropriate training at the FAA Academy and at all air traffic field facilities.

2. Service Units (En Route, Terminal, Systems Operations). Service units are responsible for implementation, administration, and evaluation of the air traffic technical training program.

3. FAA Academy. The FAA Academy delivers technical training and supports the administration of the national Air Traffic Technical Training Program to include, but not limited to: preparing the Control Tower Operator (CTO) Tower Visibility Observation, Radar Qualification, Weather Surveillance Radar 88D (WSR-88D), Limited Aviation Weather Reporting Station (LAWRS) and En Route Flight Advisory Service (EFAS) Examination and Certification materials. They administer the Academy performance verification process.

4. Facility Personnel. Facility personnel involved in air traffic 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 the following:

Where authorized, a support manager is selected and assigned the responsibilities of the 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.

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

(2) The training program must be described in a facility training directive. The facility training directive is subject to quality assurance mechanisms described in applicable agency directives.

(3) A schedule of required refresher training is maintained and that the refresher training is accomplished.

(4) Individuals designated as the Facility Technical Liaison Officer (FTLO) or as the Facility Technical Officer Representative (TOR) for the air traffic field training contract must

complete the required training, as established by the contracting officer, within 90 days of occupying the position.

(5) Individuals assigned to staff positions that conduct instructor-led training or develop lesson plans must attend an FAA-approved instructor training course as soon as possible after occupying the position. Briefings conducted by staff personnel and administration of simulated control scenarios do not constitute instructor-led training.

Note: This training should occur within six months.

(6) FAA Form 3120-1 is initiated and maintained (see Appendix A).

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

(8) When the facility is identified as a LAWRS site, prior to the start of LAWRS training, the weather service regional office is notified of the pending change in status.

(9) For OJT and the Certification Process, the ATM must ensure that:

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

(c) Training reports are properly completed and maintained.

(d) Facility target hours, minimum certification hours, and 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 is conducted in accordance with this order.

(h) Ensure that an annual evaluation of the efficiency and effectiveness of the OJT program is conducted and a written report is prepared. The report shall be sufficiently detailed to provide a basis for improving the facility training program if needed.

(10) If training is unsuccessful, the ATM must initiate action in accordance with HRPM EMP-1.14, Collective Bargaining Agreement (CBA) and/or other appropriate directives.

(11) Ensure all information including national and local training orders and directives are made available to all facility personnel.

(12) Ensure that training teams receive support of the TA and support managers.

(13) Evaluate developmental's/CPC-IT's performance on a simulation scenario(s) when requested by the TA.

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

(7) Attend Air Traffic Facility Training Administration course as soon as possible.

c. Support Specialists. 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 (FLM)/Supervisory Traffic Management Coordinators (STMC) to ensure compliance with training directives and goals.

e. Front Line Manager (FLM)/Supervisory Traffic Management Coordinator (STMC). FLM/STMC administers on-the-job training. They identify, develop and assign Proficiency Training as needed. The FLM/STMC (or as identified in the local training order) 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 Skill checks.

(5) Ensure OJT is conducted and documented completely.

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

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

(8) Serves as the training team lead.

(9) Makes the final determination to amend that individual's training plan.

(10) Makes the final determination regarding certification for that individual.

(11) Makes the determination regarding suspension of OJT for that individual.

(12) Address any reported extenuating circumstances that may impede the developmental/CPC-IT/TMC-IT training progress.

f. On-the-Job Training Instructor (OJTI). The OJTI is responsible:

(1) To teach, coach and demonstrate techniques to apply air traffic procedures. OJTI 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.

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/ Certified Professional Controller in Training (CPC-IT) on the *same position* on the same day. The OJTI must:

(a) Be plugged in the same control position as the developmental/CPC-IT when OJT is conducted.

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

g. Developmental/CPC-IT/TMC-IT. The developmental/CPC-IT/TMC-IT is responsible to 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 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 3120-25/26/36, or its electronic equivalent.

(5) Immediately advise an FLM 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 (En Route, Terminal, System Operations, Flight Service Stations (FSS) and the David J. Hurley Air Traffic System Command Center (ATCSCC). Technical training requirements are developed and implemented in collaboration with the Air Traffic Technical Training Organization (AJL).

2. Changes, Modifications, Interpretations and Waivers. The Air Traffic Organization (ATO), Service Areas, and field facilities are responsible for identifying, reviewing job tasks and training requirements. Changes, modifications, interpretations and requests for waivers to training requirements must be submitted in writing to the Service Center Training Manager. The Service Center Training Manager, or their designee, will forward the request to the Manager, Air Traffic Technical Training Facilities and Oversight (AJL-14) within 30 days. The Manager of AJL-14, or their designee, will respond in writing to the requesting organization within 120 days.

3. Training Proposals. The development of new courses/curricula must be submitted to the Manager, Air Traffic Technical Training Facilities and Oversight (AJL-14).

4. Waivers.

a. Waivers to exempt individuals from specific training requirements should be submitted in writing to the Manager, Air Traffic Technical Training Facilities and Oversight, AJL-14. The Manager, or their designee, will coordinate with the line of business to determine if other training methods suffice or provide a waiver.

b. Waivers to FAA Academy course(s) must be submitted in writing to the Service Center Training Manager. The Service Center Training Manager, or their designee, will forward the request to the Manager, Air Traffic Technical Training Facilities and Oversight (AJL-14) within 30 days. The Manager of AJL-14, or their designee, will respond in writing to the requesting organization within 120 days.

c. Requests for waivers that affect multiple facilities or directed from a HQ's level must be submitted in writing through the Manager, Air Traffic Technical Training Facilities and Oversight, AJL-14 to the Director of Technical Training. The Director of Technical Training will act on these requests.

Note: Requests may be submitted electronically with electronic signatures.

5. Development of Training. The Director for Technical Training will take action to establish and maintain training programs for identified requirements. All training courses will be developed and administered in accordance with agency directives.

Note: Briefing items developed for controller information/awareness only are excluded from the Instructional Systems Development requirements.

6. Call for Training. Air Traffic Organization (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 memorandums of understanding.

> **Note:** The provisions of FAA Order 3120.4 may or may not apply to federal or non-federal contract towers and flight service stations. Training at FAA contract towers and flight service stations 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 a jointly staffed approach control facilities must be provided training on the 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 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, and are qualified for assignment to control positions under general supervision.

Chapter 4. Training Requirements for Air Traffic Control Specialists

1. Initial Qualification Training. Newly hired developmental must successfully complete initial qualification training for the selected option. Table 4-1 identifies initial qualification training requirements based on the hiring source.

Table 4-0-1. Initial Qualification for New Hires

Hiring Source	**Initial Training Requirement**
General Public	Air Traffic Basics and initial qualification course(s) conducted at the FAA Academy for the appropriate option.
Air Traffic-Collegiate Training Initiative (AT-CTI)	Initial qualification course conducted at the FAA Academy for the appropriate option. AT-CTI hires are not required to attend Air Traffic Basics.
Veterans Recruitment Appointment (VRA) military controllers	VRA hires are not required to attend Air Traffic Basics. Terminal option: Initial qualification training. En Route option: En Route initial qualification training.
Retired military controllers	Initial qualification training not required. Enter appropriate stage of field training determined by receiving facility. *Note***:** Individuals assigned to RAPCON facilities must attend Course 50034, Terminal Basic Radar Training at the FAA Academy's Radar Training Facility (RTF).
Department of Defense (DOD) civilian controllers	DOD hires are not required to attend Air Traffic Basics. Terminal option: May attend initial qualification training or enter appropriate stage of field training as determined by the receiving facility. En Route option: En Route initial qualification training.
Alaskan Flight Service Training Initiative	Initial qualification training not required. Enter appropriate stage of field training at an Alaskan Flight Service Station only.
Former Professional Air Traffic Control Organization controllers	Initial qualification course conducted at the FAA Academy for the appropriate option, and they may attend Air Traffic Basics.
Former Federal Employees (Reinstatements)	Initial qualification training not required. Enter appropriate stage of field training.

2. Field Qualification Training. Certified Professional Controller in Training (CPC-IT), Full Performance Level in Training (FPL-IT), Traffic Management Coordinator in Training (TMC-IT), and developmentals (Academy graduates, AG, VRA, RMC) 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 Instructional Program Guides (IPG) contained in Appendix D - En Route, Appendix E - Flight Service, Appendix F - Terminal, and Appendix G - Traffic Management.

a. CPC transferring from the En Route option to the Terminal option or CPC transferring 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. CPC transferring from tower only option to a combined Tower/Terminal Radar Approach Control (TRACON) or TRACON only option is required to complete Basic Radar Training (RTF).

c. CPC 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 and Terminal controllers entering the Traffic Management option must attend initial traffic management qualification training.

f. En Route, Terminal, and Traffic Management controllers changing to the Flight Service option who have not previously completed the Flight Service initial training must enter Flight Service training at the FAA Academy or the appropriate facility.

g. FSS specialists changing to the En Route or Terminal option must complete initial qualification training identified for the option at the FAA Academy. An FSS specialist who has previously 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 RTF (Course 50034). Enrollment in the RTF is limited to developmental/CPC-ITs assigned to or selected for TRACON facilities who have not previously been radar certified at the CPC level at an FAA facility. Developmental/CPC-ITs at visual flight rules (VFR) towers are not eligible to attend RTF. 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. Developmental/CPC-ITs at facilities that have weather observer responsibilities must:

a. Successfully complete Course 57511 (LAWRS) and successfully pass the NWS Weather Observer Certification Examination contained within course 57511.

b. Developmental/CPC-ITs must receive at least five (5) hours of OJT that includes

operation of the weather-observing equipment used at the facility and complete a minimum of five practice observations under realistic conditions.

c. Observations must be recorded on a Meteorological Form (MF) 1 M-10C, Surface Weather Observations (METAR/SPECI), and taken with the availability of a knowledgeable observer who can answer questions about the practice observations.

d. In order to retain certification, the developmental/CPC-IT must complete one official or practice observation recorded on an MF1M-10C within the past 60 days.

Note: Availability of a knowledgeable observer can be coordinated with another certified weather observer or the FAA Academy.

e. Developmentals/CPC-ITs 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 as outlined in the previous paragraph.

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

(3) In order to retain this certification, the developmental/CPC-IT must be logged on the position responsible for ASOS/AWSS for at least one (1) hour or complete one (1) manual official or practice observation recorded on an MF1M-10C within the past 60 days.

Note: Completion of Course 57005 or 57089 must be recorded as supplemental training in FAA Form 3120-1. If only a portion of this course is required to meet the specific needs of the facility, only the portion(s) actually completed must be recorded in FAA Form 3120-1.

5. Proficiency Training. Proficiency training is required for all personnel who maintain operational currency. The purpose of this training is to maintain and upgrade the knowledge and skills necessary to apply air traffic procedures in a safe and efficient manner. This training includes but is not limited to Refresher, Supplemental, Skill Enhancement, and may include mandatory briefing items that are distributed by headquarters, service centers and/or the facilities. Proficiency training needs will differ from facility to facility and should be tailored to meet identified requirements. All proficiency training will be documented in the employee's FAA Form 3120-1.

Note: With the development of new technology, training accomplished via electronic means, such as eLMS, will be identified as part of the official training record.

6. Refresher Training. Each facility must establish in writing an annual refresher training program. Facilities are encouraged to review historical data in order to identify additional topics for the annual refresher training program in order to meet each facility's changing needs.

a. This program must include training on the following topics if applicable:

(1) Unusual situations, lost aircraft orientation, aviation security procedures, hijacking, and other topics identified by the TA. (Training on emergency situations should be based on real life incidents and aircraft accidents, stressing a lesson-learned approach.)

Note: Terminal and En Route personnel must receive lost aircraft orientation on an

annual basis, flight service 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) Weather and other conditions that affect flight e.g. icing, thunderstorms, wind shear, and VFR aircraft that encounter IFR conditions.

(4) Bird activity information and dissemination.

(5) Fatigue awareness.

(6) Other topics identified and transmitted by ATO.

(7) Safety alerts and traffic advisories.

(8) Wake turbulence information and application.

(9) Line up and wait.

(10) Local airport deicing plans (LADP).

(11) Minimum safe altitude warning procedures.

(12) Procedures and responsibilities for special use airspace (SUA). 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.

(13) Airspace classifications e.g. class A, B, C, D, etc.

(14) Land and Hold Short Operations (LAHSO).

b. Prevention of runway incursion. On a quarterly basis, tower facilities must review items directly related to the prevention of runway incursions. The intent of this requirement is for this training to occur every three (3) months.

c. All tower visibility observers must receive refresher training annually in tower visibility procedures and markers.

Note: LAWRS observers are not required to maintain a separate tower visibility certificate because it is incorporated in their LAWRS certification.

d. All certified weather observers who augment an ASOS or AWSS must receive at least semiannual LAWRS refresher training, and at least annual refresher training on the operator input device (OID). The LAWRS refresher 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 refresher training.

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

e. Radar facilities must conduct annual airspace intruder refresher training. This training must include but is not limited to:

(1) Tracked and untracked targets.

(2) Airspace violators who have established two-way radio communications and violators who have not established two-way radio communications.

(3) Mode C and non-Mode C equipped targets.

(4) Defense Event Network (DEN) notification requirements.

f. Facilities with simulation capabilities such as AT Coach, ETG, TTG, DYSIM, TSS, CBI, etc., must complete at least two (2) hours of simulation training on the items identified above in Section 6, Refresher Training. The use of TSS for annual refresher training is required for facilities where the TSS is located.

g. Primary Backup Mode. Terminal personnel required to maintain radar currency must receive refresher training annually on the use of the primary backup mode. All En Route personnel required to maintain currency must receive refresher training annually on the use of the primary backup mode at ARTCC's when and where applicable. This training must include:

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

(2) The unique radar/flight data processing used while operating in the back-up configuration(s).

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

h. Managerial Personnel/Controller-In-Charge (CIC). Managers and individuals certified as CIC must receive a minimum of one hour of refresher training annually. This training must include handling of accidents, incidents, unusual situations, upward reporting, DEN notification and emergency events.

i. User Request Evaluation Tool (URET). When an area of specialization exclusively utilizes URET, facilities must conduct annual refresher training on the transition to/from a URET environment to paper strips. Training with the paper strips must focus on the identification of possible aircraft conflictions, as well as proper strip marking procedures.

j. Air Traffic Organization Operational Contingency Plan, in accordance with JO 1900.47C, ensure familiarity with procedures and airspace based on the facility contingency plans (for example, loss of radar, communications failure, etc.).

k. Facilities that utilize Ocean 21 (O21) must conduct annual refresher 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 conflictions as well as proper strip marking procedures.

Note: O21 facilities should include O21 simulation as part of their annual refresher training.

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

8. Skill Enhancement Training (SET). The purpose of Skill Enhancement training 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.)

a. Skill Enhancement Training for CPC/FPL.

(1) The FLM will assign SET in writing to include the specific skills and requirements necessary to accomplish this training.

(2) The FLM is responsible for developing the training to be administered to the specialist. Training will be tailored to meet the individual's needs. Methods may include OJT, web-based instruction (CBI), instructor-led training, self directed study, simulation, and evaluation.

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

(4) SET will be documented in Section V of FAA Form 3120-1.

Note: 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.

b. Skill Enhancement Training for Developmentals, CPC-IT's, and TMC-IT's:

(1) The FLM will assign SET in writing to include the specific skills and requirements necessary to accomplish this training.

(2) The FLM is responsible for developing the training to be administered to the specialist. Training will be tailored to meet the individual's needs. Methods may include web-based instruction (CBI), instructor-led training, self directed study, simulation, and evaluation. (SET for developmentals may not include OJT.)

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

9. 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 will assign Remedial Training in writing to include the specific area(s) to be covered and the reasons.

b. The FLM is responsible for developing the training to be administered to the specialist. Training will be tailored to meet the individual's needs. Methods may include, but are not limited to, Web-based instruction (i.e., CBI), 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 an operational error/deviation in Section V.

Note: Remedial training is logged under Proficiency Training in TRAX.

10. 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 relevant 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. If recertification is not achieved the ATM 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 an FLM's designee. The appropriate NWS regional office must be notified of this proficiency check for notation on the individual's weather observer certificate. Personnel who have not taken an observation within 90 days must retake the NWS weather observer certification exam. Recertifications due to a performance deficiency must be entered in FAA Form 3120-1, Section VI, Technical Appraisal. All other recertifications must be recorded in 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 National Weather Service (NWS) and outlined in NWS Instruction 10-809.

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. Recertification(s) must be recorded in FAA Form 3120-1, Section III. Recertification due to a performance deficiency must be entered in FAA Form 3120-1, Section VI, Technical Appraisal.

11. 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 will 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 one (1) year must receive instructor-led, simulation training and OJT prior to recertification. OJT hours will 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 one (1) year or more must receive instructor-led, simulation and OJT prior to recertification. OJT hours will not exceed 100 percent of the target hours established for developmentals with no previous experience.

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 air traffic certificates and ratings must also be documented in the record. The guidance contained in Appendix A must be followed when making entries in 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" apply to anyone receiving training at the specialist, instructor, or supervisory level.

c. 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.

d. Documentation of training received should be the same at a temporary and at a permanent air traffic 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 (for example, 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 one (1) year. After 1 year, if appropriate, they must be handled in accordance with FAA Order 1350.15, Records Organization, Transfer, and Destruction Standards.

> **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 in 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 division.

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

Chapter 6. Air Traffic Control Specialist On-the-Job Training 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 OJF hours for each operational position within the facility. Cross-sectional work groups shall 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 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. An FLM may suspend training prior to completing all of the allotted target hours.

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

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

3. On-the-Job Training and Position Certification.

a. Selection of OJTIs. To be eligible to be selected as an OJTI, individuals must meet the following criteria:

(1) Certified at the CPC/FPL level.

(2) Certified Air Traffic Assistants, FV-2154, may provide OJT on positions on which they are certified.

(3) Certified a minimum of 6 months on positions involved.

> **Note**: Controllers with previous OJTI experience on the same type position(s) are exempt from this requirement or as identified in the local training order. Transferring CPC-IT's on the same-type position, shall be certified on the positions involved for a minimum of 60 hours prior to conducting OJTI. This requirement may be waived at the ATM's discretion for noncontrol positions.

(4) Recommended by the employee's FLM.

b. Selection Panel. The ATM will designate a panel to recommend OJTI candidates. The panel is composed of a minimum of two (2) 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 and 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 FAA Air Traffic OJTI course or OJTI Cadre course. Completion must be documented in FAA Form 3120-1, Section VII.

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

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

e. OJTI Evaluation. Once yearly, a FLM must conduct an evaluation of OJTIs while they are performing OJTI duties. If the last evaluation occurred more than twelve (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 in the employee's FAA Form 3120-1, Section VI.

f. 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 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 training progresses.

(1) The training team must consist of:

(a) The employee's FLM/STMC.

(b) At least two (2) no more than three (3) OJTIs.

Note: Only one (1) OJTI is required for a TMC-IT.

(c) The developmental/CPC-IT/TMC-IT.

(d) Other person(s), as assigned by the ATM.

(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 skill enhancement training as needed.

(f) Provide feedback to include but not limited to an identification 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 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/CPC-IT/TMC-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 (fifty-one 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. Retention of training plans, and all modifications, must be in accordance FAA Order 1350.15, Records Organization, Transfer and Destruction Standards.

5. Performance Skill Checks. Performance skill checks must be used to assess the developmental/CPC-IT/TMC-IT's training progress in the following manner: compare the current knowledge and skill level of the developmental/CPC-IT/TMC-IT against the level required for certification, and to also 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). Results of performance skill checks on position(s)/sector(s) which the developmental/CPC-IT/TMC-IT is not certified must not be documented in FAA Form 3120-1. 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 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 order. 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. 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 shall take one of the following actions Continuation of OJT, Skill Enhancement training, Suspension of OJT, or recommend a certification skill check. (A recommendation for certification skill check may only occur if the developmental/CPC-IT/TMC-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 (1) 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 skill checks. Position/Sector certification(s) must be documented in 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/ TMC-IT. The OJTI is responsible for the position/sector

b. Certification skill checks may:

(1) Be conducted prior to completing target hours if minimum certification hours have been met.

(2) Be conducted prior to exhausting the total additional hours if assigned.

(3) At facilities without Front Line Managers, 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 order, 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 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/CPC-IT/TMC-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, skill enhancement training or suspension of OJT.

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

8. Additional OJT Hours. Additional OJT hours are:

a. Not guaranteed.

b. Only an Operations Manager (OM)/Traffic Management Officer (TMO) or at a facility where no OM exists, any 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. Prior to assignment of additional hours, review of all training documents and consider input from the training team must occur.

e. There is no requirement to exhaust additional OJT hours. Upon the completion of additionally 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.

f. 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 the developmental's performance.

a. A training review must:

(1) Be conducted by a minimum of two (2) of the following individuals, as assigned by the ATM/District Manager or their designee.

(a) A FLM//STMC other than the employee's FLM. (If not available onsite, the district manager may assign this duty to any FLM/Traffic Management (TM) supervisor within the district.)

(b) A Support/Operations Manager at facilities where this position is staffed. (If not available onsite, the District Manager may assign this duty to any support/operations manager 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.

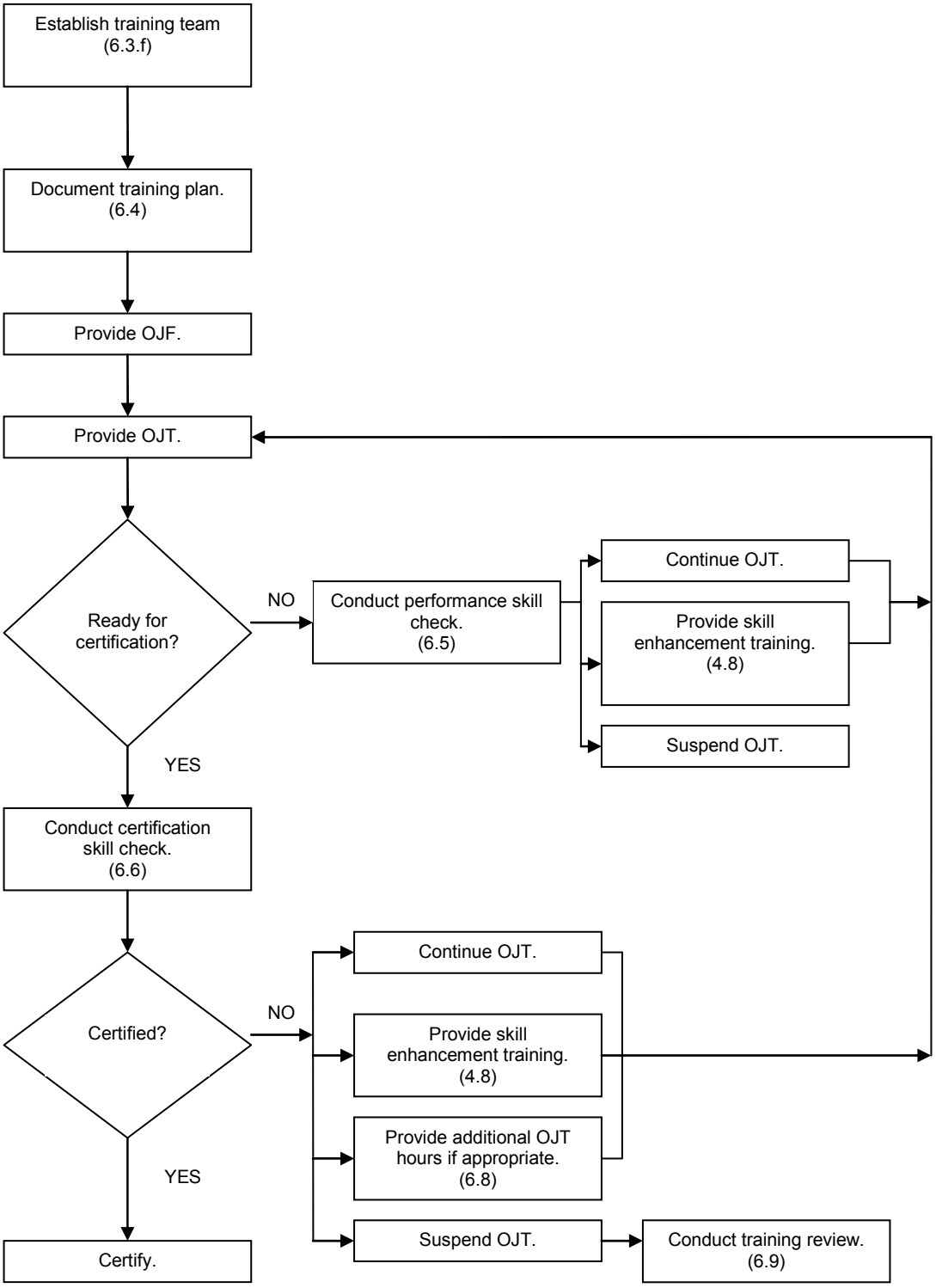
(2) Request information from the training team or other individuals.

c. ATM/District Manager must consider the training review's statement of facts and recommendation 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. Upon completion of these hours, a certification skill check must be conducted. The provisions of Chapter 6, Section 8, Additional OJT Hours, are

not applicable.

Figure 6-1 OJT and Certification Process



Appendix A. Instructions for Completing the Training and Proficiency Record FAA Form 3120-1

1. General. This appendix conveys instructions for recording employment data, training, and certification entries in FAA Form 3120-1. Examples of corresponding TRAX records are shown. TRAX maintains all data currently logged in FAA Form 3120-1. (See Figure B-2, FAA Form 3120-25.)

a. Air Traffic Managers (ATM) 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. AOV credentialing actions are not required to be recorded in 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 in FAA Form 3120-1 or TRAX computer program no later than 90 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 in 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 in 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 FLM 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 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. At Terminal facilities without published surveillance approach procedures, enter the notation "surveillance approaches not conducted in this facility" following the Stage 7 (Course 55065 OJT) entry in Section III of each individual training record.

k. Mandatory briefing items not pertaining to qualification, certification, proficiency, or management training (for example, standards of conduct, drug awareness, the Performance Management System, etc.), must not be recorded in FAA 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

EMPLOYEE'S NAME JD A EG			DATE EOD WITH FAA 1/2/00		
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 IIA, Air Traffic Certificates. This section relates to certificates that are required for the performance of air traffic 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 IIB.

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 IIA, 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
NOAA/FAA Agreement TWR Visibility Certificate	1234	10/19/02	LP
Air Traffic Control Specialist	N/A	11/16/03	LP
FAM Certification	FTN-123456	10/20/02	LP

4. Section IIB, 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 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 IIB, 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 thru F. Training relating to position qualification, including additional on-the-job (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, or 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			4/25/00			TWilliams
50034 RTF	AAC	11/30/00		JM	12/17/00		JM	TWilliams
55060 FD-TWR Instructor led	PHL	5/1/00	16	JM	5/4/00	16	JM	JJones
55060 FD-TWR OJT	PHL	5/8/00	20	JM	5/15/00	18	JM	TWilliams
55060 FD-Radar Instructor led	PHL	5/20/00	20	JM	5/27/00	20	JM	JJones
55060 Arrival Data OJT	PHL	6/1/00	30	JM	6/11/00	28	JM	TWilliams
55060 Dept. Data OJT	PHL	6/20/00	40	JM JM	7/8/00	36	JM JM	TWilliams
55061 CD Instructor led	PHL	7/20/00	5	JM	7/21/00	5	JM	JJones
55061 CD OJT	PHL	7/24/00	20	JM	7/30/00	18	JM	TWilliams
55062 GC Instructor led	PHL	8/15/00	40	JM	8/20/00	40	JM	JJones
55062 GC OJT	PHL	8/23/00	60	JM	9/20/00	54	JM	TWilliams
55063 LC Instructor led	PHL	9/25/00	40	JM	9/30/00	40	JM	JJones

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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	JM	11/19/00	70	JM	T Williams
55064 Nonradar Instructor led/Lab	PHL	12/22/00	40	JM	1/4/01	40	JM	T Williams
55065 Radar Instructor led	PHL	1/10/01	80	JM	1/24/01	80	JM	J Jones
55065 North Dept. OJT	PHL	1/27/01	90	JM	3/28/01	90	JM	
55065 North Dept Addl. OJT	PHL	4/1/01	18	JM	4/6/01	15	JM	T Williams
55065 South Dept. OJT	PHL	4/10/01	60	JM	5/18/01	55	JM	T Williams
55065 West Arrival OJT	PHL	5/20/01	80	JM	7/25/01	70	JM	T Williams
55065 East Arrival OJT	PHL	5/20/01	80	JM	8/1/01	65	JM	T Williams
55065 Final Approach. OJT	PHL	7/15/01	50	JM	8/27/01	45	JM	T Williams
Recertification – Tower Positions					9/10/01		JM	T Williams
OJT Instructor	PHL				4/20/02		JM	T Williams
55073 CIC	PHL	3/20/03	40	JM	3/29/03	40	JM	T 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	BJones
55053 Instructor led	ZDV	4/22/98	48	MR	5/1/98	48	MR	BJones
55053 OJT	ZDV	5/1/98	80	MR	6/25/98	18.7	MR	BJones
55054 Instructor led	ZDV	7/9/98	240	MR	8/25/98	240	MR	BJones
55054 LAB	ZDV	8/28/98	120	MR	11/30/98	120	MR	BJones
55054 OJT RAP HIGH	ZDV	12/9/98	120	MR	2/25/99	94	MR	BJones
55054 OJT BFF HIGH	ZDV	4/10/99	80	MR	5/25/99	65	MR	BJones
55054 OJT RAP LOW	ZDV	7/9/99	80	MR	8/15/99	56.5	MR	BJones

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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	BJones
55055 LAB	ZDV	1/8/00	160	MR	3/20/00	160	MR	
55055 OJT RAP LOW	ZDV	12/1/00	80	MR	2/12/01	80	MR	BJones
55055 Add. Hrs OJT RAP LOW	ZDV	2/15/01	16	MR	2/22/01	12	MR	BJones
OJT Inst. East Area	ZDV			MR	6/6/02		MR MR	BJones
55055 LAB	ZDV	11/1/03	8	MR	11/5/03	8	MR	
55055 OJT	ZDV	11/11/03	80		12/11/03	80	MR	BJones
Recertification - East Area					2/15/03			BJones

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Figure A-6. Section III (Flight Service 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	COU	7/9/99	80	JM	7/21/99	52	JM	BJones
55242	COU	9/12/99	160	JM	9/24/99	70	JM	BJones
55241	COU	10/14/99	100	JM	1/5/00	100	JM	
55241 Addl. Hrs. OJT	COU	1/8/00	20	JM	1/15/00	15	JM	BJones
OJT Inst. Flight Data	COU			JM	9/12/00		JM	BJones
55247	COU	3/10/01	60		4/10/02	60	JM	BJones

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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 air traffic control (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	D CERTIFICATION	E EMPL
9/15/98	Radar Qualification Exam	DFW	V Conrad	PC

7. Section V, Proficiency Training (Refresher, Supplemental, Skill Enhancement, Remedial). Entries in this section must specifically describe the training provided. Refer to Chapter 4, Section 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. ATMs are 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 in 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 skill enhancement training entries must specifically describe the training conducted. Coded entries must not be used for remedial or Skill Enhancement training. If the facility is maintaining a master code/decode sheet, a single entry (for example, 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 computer-based instruction (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:** Skill enhancement training 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 Training (Refresher, Supplemental, Remedial, Skill Enhancement)

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	J Parks	CU
2/1/00	57002, NOTAMs CBI	1	1/22/00	4.0	J Parks	CU
3/10/00	Aircraft Characteristics Climb Rates,					
	Vertical Separation Standards	3	3/3/00	2	J Parks	CU
5/1/00	Speed Control & Sequencing	4	4/10/00	1.2	J Parks	CU
6/22/00	Review: Radar Vector Procedures, Effect of					
	Temperature on Climb Rates, Coordination Procedures					
	(Facility SOP on Position Relief Briefings)	3	6/15/00	8	J Parks	CU
6/22/01	ETG Lab Problems 2, 8, 11, 21, 22, 23, 24, 25	3	6/21/01	16	J Parks	CU
6/30/01	Lost Aircraft Orientation	1	6/30/01	2	J Parks	CU
7/1/01	Pilot Weather Briefing	1	7/1/01	2	J Parks	CU
8/3/01	Annual Tower Visibility Review	1	7/3/01	.5	J Parks	CU
8/3/01	VSCS ATCS Operations Course	2	7/27/01	16	J Parks	CU

1/ TRAINING TYPE CODE 1 - Refresher 2 - Supplemental 3 - Remedial 4 - Skill Enhancement

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8. Section VI, Technical Appraisal. The technical appraisal section for all options must include the on-the-job training instructor (OJTI) skill check described in Chapter 6, Sections 4 and 5 and technical training discussions described in FAAO 7210.56, Air Traffic Quality Assurance.

Block A. DATE COMPLETED: Enter the date shown on the appraisal form or the date the technical training discussion 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.

Note: For technical training discussion, enter "Technical Training Discussion."

Block C. DATE DISCUSSED: Enter the date the appraisal was discussed with the employee. Enter a diagonal line for technical training discussions.

Block D. FRONTLINE MANAGER SIGNATURE: For technical appraisals and OJTI skill checks, the employee's Front Line Manager, 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	DATE C DIS-	D CERTIFICATION	E EMPL
9/25/00	East Arrival-OJTI Evaluation Satisfactory	9/25/00	VConrad	PC
10/1/02	RAP LOW- Performance Skill Check Unsatisfactory	10/1/02	VConrad	PC
2/1/04	Technical Training Discussion		VConrad	PC
8/2/04	Technical Training Discussion		VConrad	PC

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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.

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 (for example, 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-11. Section VII, Management and Other Training

DATE A COMPLETED	B TECHNICAL APPRAISAL	DATE C DIS-CUSSED	D CERTIFI	E EMPL
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
6/12/98	Weather Satellite Data Interpretation 50206	FAA Academy	32	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
3/20/01	Air Traffic Controllers Teamwork Enhancement Workshop 55051	Dallas TX	28	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
5/25/02	EFAS 50201	FAA Academy	144	CT

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10. 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-12). 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.

c. The entry for "Technical Training Discussion" may be abbreviated as "TTD."

Figure A-12. Anywhere ATCT Employee Training Record

Controller, Joe C (JC)

Section I - Employment Data

Fac EOD	Facility	FAA EOD
01/05/1997	ANY ATCT ATC-12	02/02/80

Section IIA - Air Traffic Certificates

Issued	Certificate Title	Number
01/05/1997	CONTROL TOWER OPERATOR	123456789
01/05/1997	FAMILIARIZATION TRAINING	123456

Section IIB - Air Traffic Ratings

Issued	Rating	Facility
01/05/1997	Facility	ANY ATCT

Section III - Qualification Training

Issued	STAGE/Course	Fac ID	Auth Hours	Completed	Hours
01/13/1997	55060 FD Instructor led	ANY	56:00	01/21/03	56:00
02/05/1997	55060 FD OJT	ANY	40:00	2/10/03	13:18
04/05/1997	OJTI-ALL - OJTI	ANY	0:00	04/05/03	0:00

Section V - Proficiency Training

Complete	Major Subject Area	Type	Hours	Item Date
05/04/1997	57008, METAR/TAF (BASIC) - CBI	Refresher	4:00	05/01/1997
05/08/1997	CENRAP ORDER/TRANSITION	Refresher	0:30	05/01/03
05/08/1997	R4102 LETTER OF PROCEDURE	Supplemental	0:18	05/01/1997
05/08/1997	LAHSO PROCEDURES	Refresher	0:12	05/01/1997

I certify that the above training items are correct for 03/02/03 to 05/10/03

Joe C Controller _____ Kim Tyme _____

(Specialist's Signature) **(FLM/Facility Staff Specialist)**

Figure A-12, Anywhere ATCT Employee Training Record (Continued)

Controller, Joe C (JC)

Section V - Proficiency Training

Complete	Major Subject Area	Type	Hours	Item Date
06/04/1997	AT BULLETIN 97-2 June 97-06-08	Refresher	0:30	06/01/1997
06/04/1997	GENOT N7000.16 97-01-05	Supplemental	0:15	06/01/1997

Section VI - Technical Appraisal

Complete	Over-The Shoulder	Discussed
05/05/1997	OJTI Performance Skill Check	05/05/1997
06/02/1997	TTD	
11/05/1997	OJTI Performance Skill Check	11/05/1997
02/10/1999	TTD	

Section VII – Management and Other Training

Date	Course	Location	Hours		
09/24/1997	55051 AIR TRAFFIC TEAMWORK ENHANCEMENT	ASW	24:00		
10/03/1997	50113 NATIONAL TRAFFIC MANAGEMENT	WASHINGTON D.C.	28:00		
03/05/1997	55049 Fundamentals of ATC OJT Instruction	ANY	24:00		

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

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

Section 2. Using the Form. Entries on training reports must be sufficiently detailed to support appropriate administrative actions (for example, 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's 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, MVFR, IFR, or Other (specify type; for example, 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 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. 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 11. PERFORMANCE: This section contains job tasks and job subtasks used as a basis for instructing and evaluating the developmental/CPC-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 (for example, ✓, 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 (for example, ✓, 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 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 CPC-in-training's/developmental'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. 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 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.

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

(b) Certification skill check. A mark in this column indicates that the developmental's/CPC-IT's observed performance in the session(s) needs improvement to meet 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. A mark in this column indicates that the observed performance in the session(s) needs improvement to meet the expected CPC performance requirements to work independently.

(3) **UNSATISFACTORY:** A mark in this column indicates that the developmental's/CPC-IT's observed performance is unsatisfactory at this stage of training. Specific comments relating to each unsatisfactory job subtask shall 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 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 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. 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 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/nonradar, 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/ Nonradar Lab	Radar-Associate Lab	Radar Sim Lab	Tower Simulation
Separation	0	0	0	
Coordination	2	2	2	
Control Judgment	4	4	5	
Methods and Procedures	4	4	5	
Equipment, Communication, and Other	4	4	5	

d. Performance Verification (PV): PV is conducted on students completing initial qualification training conducted at the FAA Academy. A Performance Verification evaluator must place a mark (for example, ✓, X) in the columns "SATISFACTORY," "NEEDS IMPROVEMENT," and "UNSATISFACTORY" as defined above.

Block 12. COMMENTS: Used by the OJTI, FLM, lab instructor, or PV evaluator to document the developmental's/CPC-IT's performance during OJT, skill-check sessions, and simulation training. The OJTI, FLM, lab instructor, PV evaluator 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/PV 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/TM supervisor who conducted the skill check. The FLM/TM supervisor must recommend one of the following:

a. Certification skill check.

b. Certification (when appropriate)

c. Continuation of OJT.

d. Skill enhancement training.

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. 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/traffic management supervisors 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	5. Workload	6. Complexity	7. Hours
☐ VFR ☐ MVFR ☐ IFR ☐ Other_____	☐ Light ☐ Moderate ☐ Heavy	☐ Not Difficult ☐ Occasionally Difficult ☐ Mostly Difficult ☐ Very Difficult	8. Total Hours This Position

9. Purpose ☐ OJT ☐ OJF ☐ Familiarization Scenario ☐ Instructional Scenario ☐ Evaluation Scenario ☐ Skill Check ☐ Certification ☐ Recertification ☐ Skill Enhancement ☐ 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.						
		16. Effective working speed is maintained.						
	E. Equipment	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.						
		24. Relief briefings are complete and accurate.						
	G. Other							

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Figure B-2. FAA FORM 3120-25 (Continued)

12. Comments	12A. References

Signature: _____ Date: _____

13. Recommendation ☐ Certification Skill Check ☐ Certification
☐ Continuation of OJT ☐ Skill Enhancement Training ☐ 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: _____

FAA Form 3120-25 (5-98) Supersedes Previous Edition

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

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JOB TASK: **PAGE:**

Job Task: Separation

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

Job Task: Coordination

Job Subtask	Indicator
3. ***Performs handoffs/pointouts.***	Performs handoffs/pointouts correctly, and at the appropriate time/position.
4. ***Required coordinations are performed.*** 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.	a. Coordinates restrictions or special instructions. b. Verifies aircraft/vehicle position and/or altitude at the time of coordination. c. Verifies and acknowledges all information exchanges.

Job Task: Control Judgment

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

Job Task: Methods and Procedures

Job Subtask	Indicator
9. ***Aircraft identity is maintained.*** Maintains positive identification during the entire time the aircraft are within the area of responsibility.	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 nonradar, untracked, unassociated, or primary targets within delegated airspace. f. Remains aware of previously coordinated traffic.
10. ***Strip posting is complete/correct.*** Posts all required information on strips, and updates as required.	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 URET aircraft list errors, ensuring that printed/ displayed information agrees with the assigned altitude and route. f. Selects appropriate URET sorting and posting options so that the aircraft list is easily referenced for necessary flight information. g. Enters all required information into the URET system and updates as required.
11. ***Clearance delivery is complete/correct and timely.*** Transmits/issues clearances in correct format, is specific, and uses correct phraseology.	a. Uses specific terms to describe a fix. b. Adheres to readback procedures. c. Adheres to predeparture clearance (PDC) procedures.
12. ***LOAs/directives are adhered to.*** Ensures performance of control instructions/duties is in compliance with handbooks, facility procedures, and directives.	a. Adheres to LOA requirements. b. Adheres to facility directives and local routing instructions.

13. ***Additional services are provided.*** Follows the required format for providing navigational assistance, weather information, and traffic advisories.	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 nonradar-identified aircraft as required. f. Provides chaff services and bird activity information when necessary.
14. ***Rapidly recovers from equipment failures and emergencies.*** Handles equipment failures, unusual or nonstandard situations, and emergencies correctly.	a. Handles aircraft emergencies effectively, including radio failures, hijacks, and bomb threats. b. Appropriately handles special flight operations, and unusual or nonstandard situations. c. Is knowledgeable of available backup equipment and properly transitions to its use.
15. ***Scans entire control environment.*** Checks assigned control environment and equipment for changes in data or presentation.	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.
16. ***Effective working speed is maintained.*** Paces control actions and associated tasks at an acceptable rate.	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.

Job Task: Equipment

Job Subtask	Indicator
17. ***Equipment status information is maintained***. Maintains knowledge of equipment operating status.	a. Determines status of equipment performance. b. Reports malfunctions.
18. ***Equipment capabilities are utilized/ understood***. Uses available equipment to the fullest extent possible. Displays knowledge of capabilities and limitations of equipment and its associated backup.	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.	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. ***Ensures that all data passed or received are understood***. Does not have to repeat information using different words to convey the intended meaning.	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.	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.	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.	a. Formulates message before transmitter is keyed. b. Uses radio/interphone when required.
24. ***Relief briefings are complete and accurate.*** 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.	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.

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

Section 1. Introduction. This appendix contains instructions for completing FAA Form 3120-26. The form must be used by on-the-job instructors (OJTI) and supervisors to record their observations of the performance and progress of the developmental/CPC-IT during simulated scenarios, on-the-job (OJT) instruction, skill enhancement training, and skill-check sessions. FAA Form 3120-26 may be used to document on-the-job familiarization (OJF). (See Figure C-1, FAA Form 3120-26.)

Section 2. Using the Form. Entries on training reports must be sufficiently detailed to support appropriate administrative actions (for example, 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 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. Indicate "Simulation" if simulation simulated is used. 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.

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 (for example, 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 (for example, 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/CPC-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/supervisor to document the developmental's performance during OJT instruction and skill-check sessions. The OJTI/supervisor 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/CPC-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. Skill enhancement training

e. Suspension of OJT

Block 14. EMPLOYEE'S COMMENTS: This block may be used by the developmental/CPC-IT for making comments pertaining to the training session or the skill check. 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. 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

FSS/AFSS OJT
INSTRUCTION/EVALUATION REPORT

1. Name	2. Date	3. Scenario/Position(s)

4. Weather	5. Workload	6. Complexity	7. Hours
☐ VFR ☐ MVFR ☐ IFR ☐ LIFR	☐ Light ☐ Moderate ☐ Heavy	☐ Not Difficult ☐ Occasionally Difficult ☐ Mostly Difficult ☐ Very Difficult	8. Total Hours This Position

9. Purpose ☐ Certification ☐ Recertification ☐ OJF ☐ OJT ☐ Simulation ☐ Skill Check ☐ Skill Enhancement ☐ Other

0. Routing

11. Performance	Job Task	Job Subtask	Observed	Comment	Satisfactory	Needs Improvement	Unsatisfactory
	A. Methods and Procedures	1. Adheres to priority of duties.					
		2. Demonstrates ability to handle unusual situations.					
		3. Initiates required search and rescue situations.					
		4. Maintains basic weather watch.					
		5. Compiles, evaluates, records, and disseminates data.					
	B. Equipment	6. Equipment status is maintained.					
		7. Computer entries are correct.					
		8. Equipment capabilities are utilized/maintained.					
		9. Equipment malfunctions are recognized/restored.					
	C. Maintenance	10. Performs routine maintenance of NWS instruments.					
		11. Replaces expendable materials as necessary.					
	D. Communication/ Coordination	12. Preduty/relief briefings are complete and accurate.					
		13. Functions effectively as a team member.					
		14. Is sensitive to needs of system users.					
		15. Communication is clear/concise.					
		16. Uses prescribed phraseology.					
		17. Coordination is thorough.					
		18. Makes only necessary transmissions.					
	E. Pilot Weather Briefing	19. Obtains sufficient background data.					
		20. Presents briefing in prescribed format.					
		21. Briefs in a tailored/organized/clear/concise manner.					
		22. Maintains awareness of current weather and forecasts.					
	EFAS	23. Maintains required displays.					
		24. Applies VNR procedures as prescribed.					
		25. Maintains complete, accurate real-time weather.					
		26. Develops flight advisories for routes/altitudes.					
		27. Coordinates with NWS and CWSU.					
	F. Other						

F/ **FAA Form 3120-26** (5-98) Supersedes Previous Edition NSN: 0052-00-000-3002

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

12. Comments	12A. References

Signature: _____ Date: _____

13. Recommendation ☐ Certification Skill Check ☐ Certification
☐ Continuation of OJT ☐ Skill Enhancement Training ☐ 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: _____

FAA Form 3120-26 (5-98) Supersedes Previous Edition NSN: 0052-00-900-3002

Job Subtasks and Indicators Checklist for the FSS OJT Instruction/Evaluation Report

The list of job subtasks/indicators specified for each position is stated in general terms to account for differences in equipment and to accommodate both flight service stations (FSS). 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 orders to specify facility-level job subtasks/indicators.

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TITLE **PAGE**

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

Job Subtask	Weather Observer	Broadcast	Flight Data/NOTAM/ Coordinator	Preflight	Inflight	EFAS
1. Adheres to priority of duties.	X	X	X	X	X	X
2. Demonstrates ability to handle unusual situations.			X	X	X	
3. Initiates required search and rescue situations.			X		X	
4. Maintains basic weather watch.	X					
5. Compiles, evaluates, records, and disseminates data.	X	X	X	X	X	
6. Equipment status is maintained.			X			X
7. Computer entries are correct.			X	X	X	X
8. Equipment capabilities are utilized/maintained.	X	X	X	X	X	X
9. Equipment malfunctions are recognized/restored.		X	X	X	X	X
10. Performs routine maintenance of NWS instruments.	X					
11. Replaces expendable materials as necessary.			X			
12. Preduty/relief briefings are complete and accurate.	X	X	X	X	X	X
13. Functions effectively as a team member.	X	X	X	X	X	X
14. Is sensitive to needs of system users.			X	X	X	
15. Communication is clear/concise.	X	X	X	X	X	X
16. Uses prescribed phraseology.	X	X	X	X	X	X
17. Coordination is thorough.			X		X	

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

X = Unique to Position

WEATHER OBSERVER

Job Task: Methods and Procedures

Job Subtask	Indicator
1. ***Adheres to priority of duties.***	a. Performs all position functions in accordance with locally published priority of duties. b. Evaluates observation elements in prescribed order.
4. ***Maintains basic weather watch.***	a. Records meteorological and non-meteorological data accurately and promptly. b. Makes scheduled and unscheduled observations.
5. ***Compiles, evaluates, records, and disseminates data.***	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.

Job Task: Equipment

Job Subtask	Indicator
8. ***Equipment capabilities are utilized/maintained.***	Operates position equipment/backup equipment using prescribed procedures.

Job Task: Maintenance

Job Subtask	Indicator
10. ***Performs routine maintenance on NWS instruments.***	a. Adjusts, cleans, resets, stores, makes minor routine repairs to, and replaces expendable materials in equipment. b. Performs adjustments to delicate precision instruments. c. Keeps instruments clean and protected from damage.

Job Task: Communication/Coordination

Job Subtask	Indicator
12. ***Preduty/relief briefings are complete and accurate***.	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.
13. ***Functions effectively as a team member.***	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. Convey pertinent information to other team

	members in a timely manner.
15. ***Communication is clear/concise.***	Demonstrates clear and understandable speech rate.
16. ***Uses prescribed phraseology.***	Uses approved procedural words, phrases, and formats.

BROADCAST

Job Task: Methods and Procedures

Job Subtask	Indicator
1. ***Adheres to priority of duties.***	Performs all position functions in accordance with locally published priority of duties.
5. ***Compiles, evaluates, records, and disseminates data.***	a. Discards nonpertinent 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. ***Equipment capabilities are utilized/maintained.***	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. i. Reads and resets counters.
9. ***Equipment malfunctions are recognize d/restored.***	Notifies maintenance of malfunctions in accordance with prescribed local procedures.

Job Task: Communication/Coordination

Job Subtask	Indicator
12. ***Preduty/relief briefings are complete and accurate.***	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.
13. ***Functions effectively as a team member.***	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.
15. ***Communication is clear/concise.***	a. Has pleasant and positive voice. b. Formulates message before transmitter is keyed. c. Selects appropriate channels. d. Has clear and understandable speech rate.
16. ***Uses prescribed phraseology.***	Uses approved procedural words, phrases, and formats.
18. ***Makes only necessary transmissions.***	a. Radio/interphone are used only when necessary. b. Transmits only required information/instructions.

Job Task: Pilot Weather Briefing

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

FLIGHT DATA/NOTAM/COORDINATOR

Job Task: Methods and Procedures

Job Subtask	Indicator
1. ***Adheres to priority of duties.***	Performs all position functions in accordance with locally published priority of duties.
2. ***Demonstrates ability to handle unusual situations.***	Demonstrates ability to handle unusual situations.
3. ***Initiates required search and rescue situations.***	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. ***Compiles, evaluates, records, and disseminates data.***	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 symbols and abbreviations. e. Revises flight data promptly as necessary. f. Correctly formats/edits all messages. g. Classifies, formats, and distributes NOTAMs, as prescribed. h. Leased Service A/B system—Adheres to transmission schedule.

Job Task: Equipment

Job Subtask	Indicator
6. ***Equipment status is maintained.***	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.***	a. Activates spare/backup equipment when required. b. Notifies maintenance of equipment malfunctions in accordance with prescribed local procedures.

Job Task: Maintenance

Job Subtask	Indicator
11. ***Replaces expendable materials as necessary.***	Correctly replaces ribbons and paper.

Job Task: Communication/Coordination

Job Subtask	Indicator
12. ***Preduty/relief briefings are complete and accurate.***	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.
13. ***Functions effectively as a team member.***	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.
14. ***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.
15. ***Communication is clear/concise.***	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.
16. ***Uses prescribed phraseology.***	a. Uses approved procedural words, phrases, and formats. b. Listens for acknowledgment. c. Issues instructions that are specific. d. Ensures readbacks are correct.
17. ***Coordination is thorough.***	a. Conducts intrafacility/interfacility coordination in a timely manner. b. Forwards IFR departures, progress reports, and arrival reports to air traffic control (ATC), upon request.

PREFLIGHT

Job Task: Methods and Procedures

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

Job Task: Equipment

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

Job Task: Communication/Coordination

Job Subtask	Indicator
12. ***Preduty/relief briefings are complete and accurate.***	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.
13. ***Functions effectively as a team member.***	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.

Job Subtask	Indicator
14. ***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.
15. ***Communication is clear/concise.***	a. Has pleasant and positive voice. b. Has clear and understandable speech rate.
16. ***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. ***Maintains required displays.***	a. Plots/posts weather charts correctly. b. Maintains PIREP display.
24. ***Applies VNR procedures as prescribed.***	Applies VNR procedures as prescribed.

INFLIGHT

Job Task: Methods and Procedures

Job Subtask	Indicator
1. ***Adheres to priority of duties.***	Performs all position functions in accordance with locally prescribed priority of duties.
2. ***Demonstrates ability to handle unusual situations.***	Demonstrates ability to handle unusual situations.
3. ***Initiates required search and rescue situations.***	a. Indicates recognition of overdue aircraft. b. Attempts radio contact of overdue aircraft.
5. ***Compiles, evaluates, records, and disseminates data.***	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. ***Computer entries are correct.***	Uses prescribed procedures for computer entries.
8. ***Equipment capabilities are utilized/maintained.***	a. Operates position equipment/backup equipment using prescribed procedures. b. Uses primary/secondary radios selectively. c. Compares console instruments. d. Correctly uses circular slide rule to solve problems.
9. ***Equipment malfunctions are recognized/restored.***	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.

Job Task: Communication/Coordination

Job Subtask	Indicator
12. ***Preduty/relief briefings are complete and accurate.***	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.
13. ***Functions effectively as a team member.***	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.
14. ***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.
15. ***Communication is clear/concise.***	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.
16. ***Uses prescribed phraseology.***	a. Uses approved procedural words, phrases, and formats. b. Listens for acknowledgment. c. Issues instructions that are specific. d. Ensures readbacks are correct.

Job Subtask	Indicator
17. ***Coordination is thorough.***	a. Conducts intrafacility/interfacility coordination in a timely manner. b. Forwards IFR departures, progress reports, and arrival reports to ATC upon request.
18. ***Makes only necessary transmissions.***	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.

Job Task: Pilot Weather Briefing

Job Subtask	Indicator
19. ***Obtains sufficient background data.***	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.***	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 incoming weather 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. ***Maintains required displays.***	a. Plots/posts weather charts correctly. b. Maintains PIREP displays.
24. ***Applies VNR procedures as prescribed.***	Applies VNR procedures as prescribed.

EFAS

Job Task: Methods and Procedures

Job Subtask	Indicator
1. ***Adheres to priority of duties.***	Performs all position functions in accordance with locally published priority of duties.
2. ***Demonstrates ability to handle unusual situations.***	Demonstrates ability to handle unusual situations.

Job Task: Equipment

Job Subtask	Indicator
6. ***Equipment status is maintained.***	a. Checks transmitters and receivers. b. Verifies status of weather radar. c. Verifies status of weather chart reproduction and display equipment. d. Verifies status of GOES satellite. e. Verifies operation of Service A request/reply.
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.***	Notifies maintenance of malfunctions in accordance with prescribed local procedures.

Job Task: Communication/Coordination

Job Subtask	Indicator
12. ***Preduty/relief briefings are complete/accurate.***	a. Obtains preduty weather briefing from appropriate source. b. Follows position relief checklist when exchanging information. c. Ensures that both individuals acknowledge the positive transfer of responsibility. d. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.
13. ***Functions effectively as a team member.***	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.
15. ***Communication is clear/concise.***	a. Has pleasant and positive voice. b. Has clear and understandable speech rate. c. Formulates message before keying transmitter.
16. ***Uses prescribed phraseology.***	a. Uses approved procedural words, phrases, and formats. b. Listens for acknowledgment. c. Issues instructions that are specific. d. Ensures readbacks are correct.
18. ***Makes only necessary transmissions.***	a. Uses radio/interphone only when necessary. b. Transmits only required information/ instructions.

Job Task: Pilot Weather Briefing

Job Subtask	Indicator
19. ***Obtains sufficient background data.***	Receives requests and determines actions required.
21. ***Briefs in a tailored/organized/ clear/concise manner.***	Provides information tailored to a specific flight.
24. ***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 the position. c. Selects all new relevant charts and updated displays. d. Selects all new relevant Service A data and updates flight advisory materials and displays. e. Modifies posted charts to reflect real-time weather.
26. ***Develops flight advisories for routes/altitudes.***	Advises aircraft of alternate routes/altitudes to avoid areas of hazardous weather.
27. ***Coordinates with the National Weather Service (NWS) and the Center Weather Services Unit (CWSU).***	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.

Appendix D. En Route Instructional Program Guide

Section 1. Introduction. This instructional program guide (IPG) includes information about the following four development stages:

a. FAA Academy Training (Courses 50143, 50145 and 50146)

b. Assistant Controller Training (Course 55053)

c. Nonradar/Radar Associate Controller Training (Courses 55054 and 55056)

d. Radar Controller Training (Courses 55055 and 55057)

When training certified professional controllers (CPC) who have lost operational currency or have transferred from another facility or area of specialization, the training administrator (TA) must decide which portions of the instructor-led and simulation training will be administered based on the needs of the specialist.

On-the-job training (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)

General: This course is designed for individuals with no air traffic experience. It provides the fundamental aviation/air traffic knowledge needed to prepare developmentals to begin training in their specific air traffic option.

Prerequisite: Entry qualifications established for specific hiring source.

Location: FAA Academy.

Training Length: 200 hours.

Administration: Training is administered in an instructor-led environment utilizing FAA Academy-prepared instructional materials and includes the following topics: introduction to the air traffic 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. The student is evaluated using block exams and a final comprehensive exam.

Training Contents: The course covers 12 areas of instruction contained in 32 lessons.

1. Instruction.

Block 1: Introduction to the ATC System (32 hours):

a. The purpose of this block is to provide an orientation to the FAA organization, Air Traffic Service, and the FAA Academy.

b. Covers the functions, elements, types of services, facilities, and key concepts that comprise the ATC system.

Block 2: Publications (29 hours):

a. Covers the purpose of basic FAA orders and manuals.

b. Covers the purpose and contents of visual flight rules (VFR)/instrument flight rules (IFR) charts and publications and teaches students how to read them for navigational purposes.

Block 3: Federal Aviation Regulations (7 hours): Covers the primary federal rules and regulations that apply to ATC.

Block 4: Principles of Aerodynamics (4 hours): Covers the fundamental principles of flight, including airfoils, relative wind, the four forces acting on an aircraft in flight, the interrelationships of those forces, and lift factors.

Block 5: Aircraft Types and Characteristics (7 hours): Covers the basics of aircraft identification for ATC.

Block 6: Fundamentals of Navigation (16 hours): Covers the principles and methods of navigation as well as the equipment used.

Block 7: Pilot's Environment (5 hours): Covers the instrumentation and systems used by a pilot to navigate and control the aircraft.

Block 8: Flight Assistance and Emergencies (9 hours):

a. Covers situations requiring special handling or services.

b. The difference between flight assistance and emergencies is discussed along with the different levels and types of emergencies.

c. The purpose and function of the National Search and Rescue Plan are also presented.

Block 9: Special Operations (2 hours): Covers the most common types of flights that require unusual or special handling such as Presidential aircraft, military operations, and medical flights.

Block 10: Wake Turbulence (3 hours): Covers the causes and effects of wake turbulence.

Block 11: Weather (39 hours):

a. Covers the fundamentals of weather.

b. Includes weather basics, hazardous effects of selected weather phenomena on flight, and the purpose of weather products that are significant to aviation.

c. Includes how to read and understand these weather products.

Block 12: Communications (18 hours): Covers the air traffic communication process including formatting of authorized communications, phraseology, and control symbology.

2. Evaluation.

a. Student proficiency is measured through a variety of methods. Academic progress is assessed through the use of end-of-lesson exam(s) and four academic block exam(s) covering the following blocks:

(1) Block Exam I - Lessons 1, 3 thru 8.

(2) Block Exam II - Lessons 9 thru 15.

(3) Block Exam III - Lessons 16 thru 22.

(4) Block Exam IV - Lessons 23 thru 29.

b. A final comprehensive exam is given at the end of all blocks of instruction. The score from this exam determines the course score.

Section 2B. Initial En Route Training
(Courses 50145 and 50146)

General: Course 50145, Initial En Route Training, is designed for developmental/CPC-IT. It provides job-related knowledge and skill-oriented training. This training consists of instructor-led training, medium-fidelity skills practice utilizing an interactive computer-based instructional system, and full-fidelity simulation in an En Route simulated environment.

Course 50146, Initial En Route and User Request Evaluation Tool (URET) Training, is designed for En Route developmental/CPC-ITs. It differs from Course 50145 in that it contains training on URET. This course consists of lecture, computer-based instruction, and full-fidelity lab simulation in an En Route simulated environment. Instruction will enable the developmental/CPC-IT to progress into field-delivered stages of air traffic controller training.

Prerequisite: Successful completion of Course 50143, Air Traffic Basics (En Route), or the individual meets direct entry qualifications established for specific hiring source.

Location: FAA Academy

Training Length: 424 hours for Course 50145 or 488 hours for Course 50146

Administration: Training is administered in an instructor-led/simulation environment utilizing FAA Academy-prepared instructional materials and a simulated control area (Aero Center). Training is primarily oriented to procedural studies and demonstration/evaluation of control scenarios. Students are assessed during performance verification (PV) on a pass/fail basis.

Training Contents:

Course 50145 contains four blocks of instruction.

Course 50146 contains the same areas of instruction as Course 50145 plus the following:

- Working with URET windows
- Areas and columns

- Point out column
- Interacting with entries
- Entry coding
- Heading and Speed
- Altitude amendments
- Templates
- Route amendments
- APD and plan processing
- URET alerts
- Rules of conflict notification
- Graphic Plans Display (GPD)
- Trial planning
- Host hold/stop probe processing
- Coordination and hold menus
- Keyboard messages
- Tools menu
- Wind grid display
- Outages
- Interfacility Automation (IFA) and advanced concepts
- Effective use of URET
- URET procedures

1. Instruction.

Block 1: Academics (80 hours):

a. The purpose of this block is to present students with air traffic concepts and allow them to practice basic skills.

b. Topics presented include Aero Center nonradar airspace, radio and interphone procedures, flight progress strips, recording clearances and control information, forwarding flight plan and control information, general control and board management, IFR clearances and route assignments, departure procedures, altimeter setting and altitude assignment requirements, holding procedures, arrival and approach procedures, and letters of agreement (LOA).

Block 2: Nonradar Academics/Lab (152 hours):

a. This block of instruction emphasizes procedures for coordination and separation,

stripmarking, phraseology, and board management.

b. Academic topics presented include vertical, lateral, and longitudinal nonradar separation as well as initial separation of arrivals and departures.

c. Part-task exercises and nonradar scenarios reinforce nonradar separation skills.

Block 3: Radar Academics/Medium-Fidelity Lab (96 hours):

a. This block allows students to use radar to improve Radar Associate (RA) skills, understand radar controller responsibilities, and learn to work with the radar team.

b. Academic topics presented include Aero Center radar airspace, radar data display, radar data processing and flight data processing message composition and entry, beacon code assignments, radar handoff and point outs, radar separation and safety alerts, radar vectoring, radar departures and arrivals, speed adjustments, emergencies, additional services, and military operations.

c. Part-task exercises are included to reinforce academics.

Block 4: Radar Associate Academics/Lab (128 hours):

a. This block focuses on learning and applying skills to perform radar associate duties.

b. Academic topics presented include radar console equipment, position relief briefing, and situation awareness.

c. Part-task and full-task scenarios are included to allow students to practice RA skills.

2. Evaluation.

Student proficiency is measured through a variety of methods described as follows.

a. Academic progress is assessed through the use of non graded end-of-lesson exam, a map exam, and three academic block exams covering the following areas:

(1) Block Exam I - Academics.

(2) Block Exam II - Nonradar.

(3) Block Exam III - Radar.

b. The application portion of the course consists of skill-based scenarios that provide feedback on how well the student applies proper air traffic procedures in a simulated environment. These scenarios are included in Blocks II, III, and IV as follows.

(1) Block II contains part-task exercises and nonradar scenarios. The final nonradar scenario is an evaluation of students' cumulative knowledge and skills at that point in the course.

(2) Block III contains part-task radar scenarios in a medium-fidelity simulation environment.

(3) Block IV contains part-task and increasingly complex full-task scenarios presented in a full-fidelity simulation environment. One student is on the RA position, one instructor is on the R position, and one instructor provides OJT to the student.

3. Performance Verification (PV).

a. PV must consist of an academic examination and an assessment of a skill-based

scenario. A score of 70 % is required for successful completion of the academic assessment.

b. PV specialists and/or operationally current supervisory personnel must conduct the skill-based assessments.

c. Students must be assessed within the requirements outlined in Chapter 3 and FAA Order (JO) 7110.65, Air Traffic Control.

d. Following the skill-based assessment, the student must be "debriefed" by the PV specialist. During this debrief, the PV specialist must ask for explanations regarding questionable control actions and weigh responses in order to evaluate the student's cognitive skills. This investigation provides PV personnel the opportunity to identify areas that need improvement.

e. Students must be assessed within the PV standards process. The process consists of four critical elements:

(1) Rater Reliability. Evaluation consistency is maximized by thorough training of temporary duty PV personnel and instruction on the student briefing process. This provides a reliable method for insuring that assessments take place in a similar manner from student to student.

(2) PV Scenarios. The scenarios incorporate field requirements, so when a student can perform the tasks necessary to run a scenario, he/she will have demonstrated the skills necessary to begin field training.

(3) PV Assessment. The PV process is based on expert assessment. PV is not assessing at the full performance skill level. Rather, PV determines if students have the fundamental knowledge necessary to begin field OJT. Initial assessments must be conducted using one PV specialist observing one student.

(4) PV Reassessment. In the event of an unsuccessful PV scenario, the student must receive additional training from the FAA Academy targeted toward identified weaknesses. After completion of this training, another PV scenario must be conducted using two PV specialists not involved in the first assessment. The two PV specialists must then reach consensus before a decision can be made regarding the student's success or failure.

f. In the event that a student is unsuccessful during the second assessment, PV must notify the appropriate service area office. Disposition of the unsuccessful student must be determined by the service area office in accordance with the proper directives.

Section 3. Stage 2: Assistant Controller Training (Flight Data).

(Course 55053)

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 the FAA Academy-prepared materials.

Prerequisite: Successful completion of Stage 1 PV

Location: Field facility

Training Length: Site specific

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

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

After successful completion of instructor-led training, OJT must be conducted in the operational environment in accordance with Chapter 3 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.

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

a. 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:

(1) Label each NAVAID/fix with its correct identifier (including the first NAVAID outside the area).

(2) Label sector boundaries within the student's area of specialization.

(3) Label special use airspace.

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

(5) Other items as identified by the TA and as documented in the local training order.

b. Operating Communication System. Given an operational position containing a communication system (for example, Voice Switching Control System (VSCS), etc.), the developmental/CPC-IT must:

(1) Place outgoing calls:

(a) Locate the interphone jack/dual jack module at the assistant position.

(b) Locate the interphone and radio jacks/dual jack module at the controller position.

(c) Identify and state the function of the five components of a pushbutton dial.

(d) Identify and state the function of the VSCS display module (VDM).

(e) Identify and state the function of the key panel module, short ring, ring and flash, and release keys.

(f) Place direct access calls.

(g) Place override calls.

(2) Receive incoming calls:

(a) Identify the basic components of the system/VDM on which incoming calls are received.

(b) Identify the audio/visual signals for an incoming call.

(c) Operate the radio transfer key when the:

(i) Controller uses the I/R jack.

(ii) Controller uses the interphone jack.

(iii) Controller answers an interphone line.

(iv) Developmental/CPC-IT answers an interphone line.

c. Flight Data Position (Nonautomated). 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 nonautomated mode, including:

(1) Compute sector fix postings.

(2) Apply flight data procedures applicable to the assigned center.

(3) Pick up and sequence the strips for delivery.

(4) Place the strips in the appropriate bay at receiving sectors.

(5) Post and forward flight plan information.

d. Flight Data Position (Automated). Given an operational 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) Function keys.

(b) Display system replacement keyboard.

(c) Computer readout device.

(d) Flight strip printer.

(f) URET display, if applicable.

(g) En Route information display system (ERIDS) 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 in the appropriate bay at receiving sectors.

2. The following FAA Academy-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.

Lesson plan E-5-1 Federal Airway & Jet Route System
Lesson plan E-5-2 Voice Switching and Control System (VSCS) Equipment.
Lesson plan E-5-3 Flight Progress Strip Distribution
Lesson plan E-5-4 Computer Operational Equipment.
Lesson plan E-5-5 Computer Field Format
Lesson plan E-5-6 Computer Message Composition and Entry

3. Instructor Led Training Evaluation.

a. Locally prepared evaluations must be administered on the following items, as applicable:

(1) The center chart.

(2) Processing flight data in the nonautomated and automated modes.

(3) Computer message entry.

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

4. 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: Nonradar and Radar Associate Controller Training.

(Courses 55054 and 55056)

General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of a nonradar 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 CPC's 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 nonradar/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.

Prerequisite: Successful completion of Stage 1 (Stage 1 PV).

Instructor led/Situational Training: This training is conducted under the direction of the facility TA using self-study guides and lesson plans developed at the FAA Academy 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.

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.

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.

1. Nonradar Instructor led Training. Instructor led training must include the following:

a. The En Route Study Guide (ES-7-1).

b. 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:

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

(2) Label adjacent sector and facility boundaries.

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

(4) Label all intersections.

(5) 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 order.

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

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

(8) Label all approach control airspace, VFR towers, and flight service stations (FSS).

(9) 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:

(a) Initial penetration/approach altitude.

(b) Initial penetration/approach fix.

(c) Inbound heading/bearing/radial.

(d) Missed approach procedures and altitudes.

c. Special Military Operations self-study guide and assessments (ES-7-2 and ES-7-2.1 thru ES-7-2.8).

d. LOAs and facility orders pertinent to the assigned area of specialization.

e. 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.

f. Additional requirements as identified by the facility (for example, depict standard instrument departures/standard terminal arrivals, depict Class B, C, D, and E airspace, Phraseology/Strip Marking self-study guide and assessment) and as documented in the local training order.

2. Nonradar Instructor led/Situational Training.

a. The facility training department must instruct the following FAA Academy developed training:

E-8-26 Recording Clearances and Control Information

E-8-27 Radio and Interphone Communication

E-8-29 Vertical Separation

E-8-30 Longitudinal Separation

E-8-31 Lateral Separation

E-8-33 General Control and Board Management

E-8-34 IFR Clearances and Route Assignments

E-8-35 IFR Flight Direction, Altitude Assignment, and Altimeter Setting

E-8-38 Approaches

E-8-39 Initial Separation of Departures/Arrivals and Visual Separation

E-8-40 Holding Aircraft

E-8-42 Forwarding Control Information

E-8-44 Air Traffic Services

E-8-45 Lost Communication Procedures

E-8-46 Initiating Emergency Procedures

E-8-47 VFR and VFR/OTP Procedures

E-8-48 Special VFR

b. Each facility, as determined by the TA, may develop (in accordance with the local training order) nonradar 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 nonradar control procedures, the TA must develop (in accordance with the local training order) nonradar instructor-led skills development exercises. For areas of specialization that have lack of radar coverage or existing procedures that require only occasional use of nonradar control procedures, the TA may determine that no nonradar instructor-led skills development exercises need be administered.

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

(1) Record clearances and control information on strips.

(2) Use correct radio and interphone message format and communication procedures.

(3) Determine the need for separation (plotting and projecting).

(4) Issue clearances according to priority.

(5) Apply effective board management.

3. Nonradar Simulation Training.

a. During the nonradar simulation stage of training, the developmental/CPC-IT will apply nonradar ATC procedures in accordance with JO 7110.65 and other pertinent directives. Guidelines for development and administration of simulation scenarios are listed in Appendix D, Section 4, Paragraph 6.

b. Nonradar simulation scenarios will be conducted in a one-position sector configuration.

c. Nonradar Familiarization Scenarios. The developmental/CPC-IT must be given nonradar 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.

d. Nonradar Instructional/Evaluation Scenarios.

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

(2) The TA must determine (and as documented in the local training order) the number of nonradar 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 nonradar 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 nonradar control procedures, the TA may determine that no instructional scenarios need be administered.

(3) If the developmental's training program calls for the administration of facility developed evaluation scenarios, they must be administered at regular intervals during the nonradar 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 skill enhancement training is warranted. The skill enhancement training may include:

(a) Instructor led training.

(b) Computer-based instruction (CBI) courseware.

(c) Instructional scenarios.

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

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

e. Nonradar 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 order, based on their applicability in the developmental's sectors.

(1) Applying separation rules:

(a) Crossing, converging, and opposite direction traffic.

(b) Overtakes.

(c) Separation from: adjacent airspace, obstructions, and special use airspace (SUA).

(d) Successive arrivals and departures.

(e) Simultaneous arrivals and departures.

(f) Arrivals with altitudes inverted.

(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/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) Transfer of control and communications.

(j) Airfiles and VFR popups.

(k) Pilot deviations.

(l) Request for altitude change at assigned altitude.

(4) Procedures:

(a) Interphone procedures.

(b) Metering/Flow control.

(c) Fuel dumping.

(d) Approach control saturation.

(e) Special flight operations.

(f) Military procedures (for example, SUA, altitude reservations (ALTRVs), aerial refueling).

(5) Emergencies and Equipment Outages:

(a) Loss of communication.

(b) Inflight emergencies.

(c) Aircraft with minimum fuel.

(d) National Airspace System (NAS) control equipment failures (for example, communications, NAVAIDs).

(e) Inflight equipment malfunctions.

(f) Overdue aircraft.

(g) Hijacking.

(6) Weather:

(a) Reporting and disseminating weather information.

(b) Changes to routes due to weather (for example, departures, arrivals, en route).

f. Nonradar Scenario Complexity Workload. The worksheet on the following pages (Figure D-2) is used in determining the complexity workload for each nonradar 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-2. 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 coordination)		1	
	Totals			

Figure D-2. 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.	

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

(a) Departure	5
(b) Arrival	4
(c) En Route (requiring control function)	4
(d) En Route (no control function)	2
(e) Emergency or aircraft radio failure	4
(f) Special flight	3
(g) Required coordination	1

(Additional point for each required coordination function associated with the above functions.)

(2) Complexity Definitions.

(a) 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.

(b) 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.

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

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

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

(f) 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.

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

(3) 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 Nonradar 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)

4. Radar Associate Instructor led/Situational Training.

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

(1) FAA Academy-developed training:

E-8-50 Fundamentals of Radar for Radar Associates.

E-8-51 Radar Data Display for Radar Associates.

E-8-52 Beacon Code Assignment for Radar Associates.

E-8-53 Radar Handoff & Point Out for Radar Associates.

E-8-54 Radar Vectoring, Speed Adjustment and Scanning for Radar Associates.

E-8-55 Position relief Briefing for Radar Associates.

(2) Direct access radar channel (DARC) 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 messages from the radar associate position.

(2) Identify radar map symbols, function keys, aircraft, weather, etc., on radar displays.

(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 nonradar procedures into a radar environment to ensure positive separation.

(8) Perform a position relief briefing.

5. Radar Associate Simulation Training.

a. During the radar associate simulation stage of training, the developmental/CPC-IT will apply ATC procedures in accordance with FAAO 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 order) 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 skill enhancement training is warranted. The skill enhancement training may include:

(a) Instructor led training, and/or

(b) Instructional scenarios.

Skill enhancement training must be followed by a re-evaluation scenario at the same level as that at which the failure occurred.

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

e. Radar Associate/URET 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, URET, or a combination.

(1) Applying separation rules (radar and nonradar):

(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 through 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) Transfer of control and communications.

(j) Airfiles and VFR popups.

(k) Pilot deviations.

(l) Request for altitude change at assigned altitude.

(4) Procedures:

(a) Interphone procedures.

(b) Metering/Flow control.

(c) Fuel dumping.

(d) Approach control saturation.

(e) Special flight operations.

(f) Military procedures (for example, 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 nonradar procedures.

(i) Traffic alert and collision avoidance system (TCAS) resolution advisory.

(j) Presidential handling.

(k) Unmanned aircraft vehicles (UAV).

(5) Emergencies and equipment outages:

(a) Loss of communication.

(b) Inflight emergencies.

(c) Aircraft with minimum fuel.

(d) NAS control equipment failures (for example, communications, NAVAIDs).

(e) Inflight 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 (for example, departures, arrivals, en route).

f. During the radar associate simulation stage of training, the developmental/CPC-IT will perform the following in accordance with FAAO 7110.65:

(1) Issue clearances using correct phraseology.

(2) Forward control information using correct phraseology.

(3) Record clearances and control information on strips/URET, using approved symbols and abbreviations.

(4) Communicate using radio and interphone procedures.

(5) Use effective board management techniques.

(6) Demonstrate situational awareness.

(7) Obtain information from an aircraft in an emergency and notify the proper facilities.

(8) Obtain and disseminate weather information.

(9) Demonstrate knowledge of all applicable letters of agreement.

(10) Demonstrate knowledge of the assigned area of specialization.

(11) Give and receive a position relief briefing.

g. 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 which require a radar associate controller to apply the various procedures in FAAO 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.

(a) The hourly operations rate is based on 100 % traffic volume from an average period of a busy day (as defined and validated by the facility and included in the facility training order).

(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-4 shows how a training program may be designed to fulfill the requirements of this stage.

Figure D-4. 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)

h. User Request Evaluation Tool (URET).

(1) In facilities equipped with URET, each developmental/CPC-IT must complete Course 55087, URET Training, unless URET training was administered during the developmental's initial qualification training at the FAA Academy.

(2) Upon completion of the URET training course, site specific radar associate instructional scenarios using URET must be administered. These instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing radar associate ATC duties utilizing URET in a simulated operational environment.

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

Example: The TA may require the administration of 15 radar associate URET instructional scenarios with instructional scenario numbers 12 and 15 as evaluations.

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

(a) Instructor led training, and/or

(b) Instructional scenarios.

Skill enhancement training 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.

(6) During URET radar associate simulation training, the developmental/CPC-IT will perform the following:

(a) Respond to color coding in aircraft list (alerts, IAFDOF, UTM, HERT, etc.).

(b) Utilize and maintain URET flight data management tools (free text area, speed/heading, bookkeeping box, highlighting, holding etc.).

(c) Amend flight plan data.

(d) Investigate and prioritize alerts.

(e) Effectively use trial planning to exam and resolve conflicts.

(f) Identify and resolve conflicts when conflict probe is deactivated.

(g) Ensure preferential routings have been issued and entered.

(h) Apply stop probe.

(i) Identify status of URET software (flight planning, probe, trial planning, and weather).

i. 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.

6. Nonradar/Radar Associate/Radar Associate URET 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 % 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 keep 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 HRPM EMP-1.14 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 (for example, scenario objectives, and starting conditions).

d. Remote Guide. A remote guide must be developed for each control scenario. This guide provides the remote controller with instructions essential to the scenario (for example, 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.

7. OJT. Nonradar/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.

8. 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 D-5. EXAMPLE 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 DARC.			
a. DARC and FDEP.			
b. DARC only.			
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 a control zone.			
c. Longitudinal separation.			
d. Lateral separation.			
e. Vertical separation.			

Figure D-5. Course 55054/55056 OJT Checklist (Continued)

COURSE 55054/55056 OJT CHECKLIST		**Page 2**		
		OJTI	**DEV**	**DATE**
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, ARINC, Company.			
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.			

COURSE 55054/55056 OJT CHECKLIST

		OJTI	DEV	DATE
11.	URET			
a.	Manage URET Windows			
b.	Investigate and Prioritize alerts			
c.	Respond to color coding in aircraft list (Alerts, IAFDOF, UTM, etc.)			
d.	Utilize URET 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.			
c.	Knows the proper procedure for handling a hijacked aircraft.			
17.	Position relief briefings are conducted in accordance with FAAO 7210.3.			
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.

Frontline 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)

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.)

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.

Location: Field facility

Training Length: Site-specific

Administration: Instructor led training is administered using FAA Academy-developed 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 dynamic simulation (DYSIM) exercises.

Simulation training consists of DYSIM simulation 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 3.

1. Instructor Led/Situational Training.

a. The facility training department may instruct the following FAA Academy-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.

E-11-1 Fundamentals of Radar

E-11-2 Radar Data Display

E-11-3 Radar Equipment

E-11-4 RDP Message Entry

E-11-5 Beacon Code Assignment

E-11-6 Radar Identification

E-11-7 Radar Handoff and Pointout

E-11-8 Radar Separation and Safety Alerts

E-11-9 Radar Vectoring

E-11-10 Radar Departures and Arrivals

E-11-11 Speed Adjustment

E-11-12 Radar Emergencies

E-11-13 Additional Services

E-11-15 Position Relief Briefing

E-11-17 Radar Controller Scan

b. Radar Qualification Examination.

(1) Prior to entering a simulated radar environment, the developmental/CPC-IT must pass the radar qualification examination obtained from the FAA Academy on a CBI disk. If the developmental/CPC-IT does not meet the requirements for successful completion of the examination, the TA may determine that skill enhancement training is warranted.

(2) Skill enhancement training may include:

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

(b) CBI training.

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

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

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

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

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

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

2. 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% 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 is 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 skill enhancement training is warranted. This training may include:

(a) Instructor led training,

(b) CBI training, and/or

(c) Scenarios.

Note: Skill enhancement training 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 skill enhancement training, the provisions of HRPM ERM-1.14 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 FAAO 7110.65 and other applicable directives. (See examples in Appendix D, Section 5, Paragraph 2e.) 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, paragraph 5g(2) for detailed instructions.

(3) Instructor Guide and Remote Guide. See Appendix D, Section 4, paragraphs 6c and 6d 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 order) 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 (for example, to geographical point, to final approach course, for separation, departures, off route, around weather, no-gyro, flight breakup, sequencing).

(3) Departures and arrivals simultaneously in sector.

(4) Separation (for example, overtaking situations; crossing, converging, and opposite direction traffic, visual; from adjacent airspace, obstructions, and special use airspace; primary to primary, beacon to beacon, and beacon to primary; radar and nonradar).

(5) Request to VFR/OTP.

(6) Request control from adjacent controller.

(7) Release control to adjacent controller.

(8) Service to VFR aircraft (for example, encountering IFR, providing advisories).

(9) Cancellation of IFR.

(10) Inflight emergency.

(11) Special flight operations.

(12) Aircraft with minimum fuel and fuel dumping.

(13) Aircraft equipment failures (for example, 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) Military procedures (for example, change in destination, aerial refueling, ALTRVs, formation flights, MARSA, high-altitude penetration, IFR military training routes and VFR military training routes etc.).

(19) Weather (for example, route change in flight, change in departure/arrival route, deviations, below minimums requiring missed approach and holding, etc.).

(20) Communicating with aircraft through other than direct pilot-controller communication.

(21) Marginal radar coverage.

(22) Loss of radar requiring the use of nonradar procedures.

(23) Control equipment failures (for example, NAVAIDs, radar, communications).

(24) Handoffs and pointouts (for example, sector to sector, facility to facility, in relation to preceding flights, etc.).

(25) Refusal, noncompliance, and/or nonreceipt of clearance, unexpected aircraft performances, erroneous readbacks, etc.

(26) Holding (for example, implementing and recovering from holding procedures; loss of communications; alternate airport; minimum fuel; reidentifying aircraft).

(27) Clearances (for example, IFR, approaches, to alternate airport, etc.).

(28) Obtaining and disseminating weather information.

(29) Application of approach control procedures and/or services (for example, arrival and departure, simultaneous and successive).

(30) Hijack.

(31) Airfiles and popups.

(32) Air evac or air ambulance (Lifeguard).

(33) Overdue aircraft.

(34) TCAS resolution advisory.

(35) NOTAMs.

(36) Suspicious aircraft.

(37) Other (specify).

f. Scenario Program Example. Figure D-6 shows an example of how a training program may be designed to fulfill the requirements listed above.

Figure D-6. 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

Scenario	Volume (%)	Type
12	95	Instructional
13	95	Instructional
14	100	Instructional
15	100	Evaluation (Pass/Fail)

g. 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 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 area of specialization.

(4) Control scenarios may use combined sector and position configurations.

3. 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 must receive a minimum of one hour of instruction on the primary backup system prior to certification on the first radar sector. This requirement is not required for facilities operating with ERAM.

c. Developmentals must receive a minimum of one 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.

d. OJT Checklists. 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.

Appendix E. Flight Service Instructional Program Guide

Section 1. Introduction. This instructional program guide (IPG) includes information about the following three components of flight service station (FSS) qualification and certification training:

1. FAA Academy Training
2. FSS Training

Target hours for the completion of each operational position must be assigned according to the facility training directive. On-the-job familiarization (OJF) must be assigned as specified in Chapter 6. Additional on-the-job training (OJT), skill enhancement training, 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: FAA Academy Training.

Section 2A. Air Traffic Basics (Flight Service)

(Course 50243)

General: This course is designed for newly hired individuals with no air traffic experience or for non-air traffic FAA employees selected for the air traffic option. It provides the necessary aviation/air traffic fundamental knowledge needed to prepare the students to begin training in their specific air traffic option.

Prerequisite: Entry qualifications as established by the Office of Personnel Management.

Location: FAA Academy.

Training Length: 200 hours.

Administration: Training is administered in a instructor-led/simulation environment utilizing FAA Academy-prepared instructional materials and includes Introduction to the air traffic 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 carried out through instructor-led lecture accompanied by graphics and video. Group discussions and exercises with limited hands-on practice and demonstrations are provided. The student is evaluated using block exams, final comprehensive exam.

Training Contents: Course 50143 contains these areas of instruction:

- Air Traffic Control system and the National Airspace System (NAS)
- Teamwork in the air traffic control environment
- Airports
- Separation
- Notices to airmen (NOTAM)

- Fundamentals of radar
- Introduction to FAA orders and manuals
- Introduction to letters of agreement (LOA) and standard operating practices
- Airspace
- Introduction to Federal Aviation Regulations
- Federal Aviation Regulations, Part 91
- Principles of flight
- Wake turbulence
- Aircraft characteristics and recognition
- Basic navigation
- Radio and satellite navigation
- Visual flight rules (VFR) charts and publications
- En Route instrument flight rules (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
- Stripmarking
- Air traffic control clearances

Section 2B. Flight Service Initial Training

(Course 50244)

General: This course is initial training for individuals selected for the flight service options. It 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 flight service and weather knowledge to prepare the student to begin on-the-job training at a field flight service station.

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 Controller-Training Division.
or
Approval by Air Traffic Controller Training and Development Group;
and
Course 57511, LAWRS;

Location: FAA Academy.

Training Length: 52 days/416 hours.

Administration: Training is administered in a instructor-led/simulated environment utilizing FAA Academy-prepared instructional materials. Training is specific and fast-paced, and includes integrated communications switching, M1FC, 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 simulated sessions. After successful completion of FAA Academy training, the developmental/CPC-IT is qualified to begin OJT. This course is pass/fail. An overall score of 70% is required to pass this course. Although not required to pass this course, there are three National Weather Service (NWS) certification exam and the M1FC keyword examination that must be passed prior to beginning OJT. If these examinations are not passed while at the Academy, they must be retaken in the field until they are passed.

Training Contents: This course contains 13 blocks of instruction.

1. Instruction.

Block 1: Indoctrination (12 hours)

a. The purpose of this block is to provide air traffic control specialists with an orientation to the FAA organization, Air Traffic Service, and the FAA Academy.

b. Topics presented include human relations, FAA Academy rules and procedures, the flight service mission and training requirements, and career progression.

Block 2: ICSS (4 hour)

a. This block of instruction demonstrates the generic features of the integrated communications center (ICSS) and operating procedures of the direct access and indirect access keypads. It is intended to enable the student to function in the lab. The developmental/CPC-IT is required to successfully complete the appropriate ICSS specialist course that corresponds with their facility equipment prior to beginning OJT.

b. Limited hands-on practice and demonstrations are provided.

Block 3: M1FC Introduction (4 hours)

This block provides the fundamental knowledge of system components and their operation.

a. The academy uses a computer-based system to emulate M1FC functions. The display

is identical to M1FC in all respects, but there are differences in the keyboard. The keyboard has been modified to emulate the M1FC keyboard by replacing the key caps with the same keys as M1FC, but there are no function keys. The students are taught to type in the keywords rather than use function keys. Students will require additional M1FC function key training at the facility prior to beginning OJT.

b. M1FC keywords are taught throughout the course in the block of instruction to which they apply. The M1FC examination is given at the end of the course to verify student knowledge of the keywords. The student is required to pass this exam prior to beginning OJT. If the student does not pass this exam at the academy, it must be retaken at the facility until it is passed.

Block 4: Flight Data (32 hours instructor led, 14 sim)

a. Students are provided with the training and skills to process and modify flight plans and transmit and edit flight movement messages.

b. Specific instruction is given in IFR charts, flight plan processing, flight plan handling, and Service B edit procedures. Hands-on training is provided through practice and simulated exercises.

Block 5: Weather Analysis (100 hours instructor led, 28 sim)

a. In this block of instruction, students are taught the fundamentals of weather needed to provide effective pilot weather briefings.

b. Instruction is given in weather basics, weather products, and the hazardous effects on flight of certain weather phenomena.

c. Upon completion of this block, students are given the NWS pilot weather briefing certification examination.

Block 6: Service A/B Functions (18 hours)

a. This block of instruction provides training to retrieve weather information necessary for pilot weather briefings, including encoding and decoding of location identifiers, processing of NOTAM information, and surface weather observations.

b. Hands-on training is given through practice and simulated exercises.

Block 7: Broadcast (8 hours instructor led, 6 sim)

a. This block covers data analysis, format, and the recording procedures used for making unscheduled broadcasts, transcribed weather broadcasts, and hazardous inflight weather advisory service broadcasts.

b. Hands-on training is provided through practice and simulated exercises.

Block 8: Search and Rescue (14 hours instructor led, 10 sim)

a. This block provides students with training in the procedures and responsibilities for reporting and searching for missing/overdue aircraft and the rescue of aircrew and passengers.

b. Hands-on training is provided through practice and simulated exercises involving simulated missing/overdue aircraft scenarios.

Block 9: Aircraft Orientation (24 hours instructor led, 20 sim)

a. This block of instruction contains background information on orientation procedures. The student is introduced to operating principles of the non-directional beacon and very high frequency omnidirectional range (VOR) equipment. The student is taught phraseology used during an orientation.

b. Hands-on training is provided through practice and simulated exercises.

Block 10: Weather Radar (12 hours)

a. This block introduces students to the fundamentals of weather radar.

b. Topics include the NWS radar network, types of radars, components of the radar, characteristics of the radar beam, and interpretation of radar reports, charts, and the Weather Surveillance Radar-88D display.

c. Upon completion of this block, students are given the NWS weather radar certification examination.

Block 11: Preflight (16 hours instructor led, 22 sim lab)

a. Students are trained in the fundamentals of the three types of pilot weather briefings, logging the briefings, and providing telephone information briefing service.

b. Hands-on training is provided through the use of practice and simulated exercises.

Block 12: Inflight (22 hours instructor led, 20 sim lab)

a. This block provides procedures for soliciting and disseminating pilot reports, requesting and relaying ATC instructions, handling emergency inflight operations, and providing inflight services.

b. Hands-on training is provided through practice and simulated exercises.

Block 13: Weather Satellite (24 hours)

a. This block of instruction provides training in the interpretation of satellite photos. Emphasis is placed on the various cloud features that identify the locations, including altitude, of aviation weather hazards. Exercises are included for hands-on training.

b. Upon completion of this training, students are given the Weather Satellite Certification Examination (2 hours).

2. Evaluation.

a. Student proficiency is measured through a variety of methods. In addition to the certification examination, academic progress is assessed through the use of end-of-lesson exams and three academic block exams covering the following areas:

(1) Block Exam I: Blocks 2-4, 6-8.

(2) Block Exam II: Blocks 7, 9, 11-12.

(3) Pilot Weather Briefer Certification Exam-Block 5.

(4) Weather Radar Certification Exam-Block 10.

(5) Weather Satellite Data Interpretation Exam-Block 13.

(6) M1FC Keyword Examination-Block 3-4, 6-8.

b. Simulated exercises to evaluate performance skills are scheduled at the end of Blocks 4, 5, 7, 8, 9, 11, and 12.

Section 3. Stage 2: Automated Flight Service Station. Facility Qualification/Certification Training

Overview: Automated Flight Service Facility Qualification/Certification Training is comprised of several courses that are administered at the field facilities. Each course is described in detail on the following pages. Separate course numbers are listed for FSS facilities. Required positions and training hours are indicated in the facility training directive. Facilities using AISR for backup must include AISR equipment training.

Area Knowledge (FSS Course 55225): Provides the developmental/CPC-IT with knowledge specific to the assigned facility necessary to begin position qualification training in FSS.

Weather Observer (FSS Course 55226): Provides OJT for position qualification and certification to perform weather observer duties.

Flight Data (FSS Course 55229): Provides OJT for position qualification and certification to perform flight data duties.

NOTAM (FSS Course 55243): Provides OJT for position qualification and certification to perform NOTAM duties.

Preflight (FSS Course 55230): Provides OJT for position qualification and certification to perform preflight duties.

Broadcast (FSS Course 55228): Provides OJT for position qualification and certification to perform broadcast duties.

Inflight (FSS Course 55231): Provides OJT for position qualification and certification to perform inflight duties.

Coordinator (FSS Course 55246): Provides OJT for position qualification and certification to perform coordinator duties.

En Route Flight Advisory Service (EFAS) (FSS Course 55247): Provides OJT for position qualification and certification to perform EFAS duties at designated Flight Watch facilities. This course is available but not required for facility certification.

Section 3A. Area Knowledge

(Course 55239/55225)

General: The purpose of this development stage of training is to provide the developmental/CPC-IT with knowledge necessary to begin position qualification training. This section provides knowledge unique to each FSS.

Prerequisite: Successful completion of Section 2 FAA Academy Training, Alaskan flight service training initiative or equivalent, or previous FSS certification. Additional prerequisites may be established by the air traffic manager (ATM) and must be identified in the facility's training directive.

Objective: At the successful completion of this section of training and any required equipment training, the developmental/CPC-IT is qualified to begin position qualification training.

Training Length: In accordance with facility directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the ATM adopts this recommendation, the developmental/CPC-IT is processed in accordance with HRPM 1.14 or other appropriate directives.

Administration: This section of training is administered in a instructor-led environment using facility-developed training materials. The ATM or his/her designee administers the training.

The facility must develop a standard Area Knowledge package for its respective flight plan area (FPA). The Area Knowledge package is divided into two sections, an "open-book" and a "closed-book" section, and at the discretion of the ATM may consist of drawing maps, written exams, or both. Answer keys must be developed for all written exams.

This section of training is administered on a pass/fail basis. The developmental/CPC-IT is required to complete the:

- Open-book examination, using available reverences, with a minimum score of 90 %.
- Closed-book examination, without references, with a minimum score of 70 %.

1. Examinations.

a. Open Book. The open-book portion will require 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.

(2) Airways in the FPA.

(3) Air route traffic control center (ARTCC)/approach control sector boundaries in the FPA.

(4) General knowledge of adjacent FPAs.

(5) Use of aeronautical charts and publications.

(6) Interphone line structure in the FPA.

(7) Knowledge unique to the FPA.

(8) Military training route (MTR)/military operations area (MOA) structure in the FPA.

b. Closed Book. The closed-book portion will require a detailed knowledge and can include, but is not limited to, the following subjects with associated point values assigned.

(1) Major airports (as determined by ATM).

(2) VOR/VOR collocated tactical air (VORTAC) locations and identifiers (not frequencies) in the FPA.

(3) ARTCC boundaries in the FPA (not sectors).

(4) FSS remote communications outlet (RCO) locations in and adjacent to the FPA.

(5) Weather radar locations in and adjacent to the FPA.

(6) Restricted areas in the FPA.

(7) Prominent terrain features in the FPA (as determined by ATM).

(8) Weather patterns applicable or unique to the FPA (as determined by ATM).

(9) Airports with an instrument approach in the FPA.

(10) EFAS outlets controlled by the FSS flight watch control station (FWCS) and those outlets in the FPA controlled by other FWCSs.

(11) Facility directives and LOAs.

(12) FSS RCO locations adjacent to the FPA.

(13) Knowledge of ATC radar coverage in the FPA.

(14) Control tower and/or Class B, C, or D information.

2. Guidelines for Developing the Area Knowledge Package. The area knowledge guidelines are items that can be added to or deleted from, depending on the facility 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 or precision approach path indicator.

(13) UNICOM.

(a) Airports.

(b) Frequency.

(14) Two-way radio requirement.

(15) Check for overdue aircraft.

(a) Whom to contact.

(b) Method of contacting.

b. Navigational aids.

(1) VOR/VORTAC/Distance measuring equipment.

(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) Monitoring responsibilities.

(h) Issuing NOTAMs.

(2) Non-directional beacons.

(a) Location.

(b) Class.

(c) Identifier.

(d) Frequency.

(e) Usable distance.

(f) Monitoring responsibilities.

(g) Issuing NOTAMs.

(3) Radar.

(a) FAA facilities.

(b) Radar approach control (RAPCON).

(c) Radar air traffic control facility (RATCF).

(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.

(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.

(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.

(ii) Hourly.

(iii) Supplemental.

(b) Terrain affecting local weather.

(i) Mountains and mountain passes.

(ii) Rivers.

(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) FSSs (specific to FPA).

(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) EFAS.

(i) Locations.

(aa) High-altitude outlets.

(bb) Low-altitude outlets.

(ii) Frequencies.

(e) Local airport advisory service, remote airport advisory service, remote airport information service.

(i) Location.

(ii) Established frequencies.

(2) Air traffic control towers (ATCT), terminal radar approach controls, Air Force RAPCONs, and Navy RATCFs.

(a) Primary VHF local control frequency.

(b) Primary military VHF frequency.

(c) Primary military UHF frequency.

(d) Nonstandard guarding frequency.

(3) ARTCCs.

(4) Pilot-to-forecaster service—military.

(a) Location.

(b) Method of obtaining.

(c) Frequencies used.

f. Air traffic control procedures.

(1) Air traffic 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) Instrument landing system.

(b) Automatic direction finder (ADF).

(c) VOR.

(d) Others.

(3) SIDs/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) MTRs.

(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) Weather Bureau.

(d) Forest Service.

(e) Others (specify).

(2) Airports.

(a) Manager.

(b) Method of contacting.

(3) Airlines.

(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 checkpoint.

(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 service/search and rescue resources.

(1) Participating agencies/facilities/offices.

(a) FAA (location; when and how to contact).

(i) FSSs.

(ii) ARTCCs.

(iii) ATCTs.

(iv) Others (specify).

(b) Military agencies (location; when and how to contact).

(i) Air Force.

(ii) Army.

(iii) Navy.

(iv) Marines.

(v) Coast Guard.

(vi) National Guard.

(c) Civilian government, other than FAA (location; when and how to contact).

(i) Federal.

(aa) Forest Service.

(bb) Federal Communications Commission.

(cc) Federal Bureau of Investigation.

(dd) Bureau of 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) Sheriff.

(bb) Others (specify).

(d) Others.

(i) Civil Air Patrol.

(ii) Pilots and fixed-base operators.

(iii) Airlines.

(iv) Airport management.

(v) Telephone operators.

(vi) Ambulance service.

(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) Search and rescue control center.

(i) Ground/water rescue.

(ii) Leading aircraft service.

(b) Escort service.

(c) Fire fighting.

(d) Law enforcement.

(e) Medical.

(f) Others (specify).

Section 3B. Weather Observer

(Course 55240/55226)

General: The purpose of this development stage of training is to qualify and certify the developmental/CPC-IT for weather observer position duties at the assigned facility.

The NWS Weather Observer Examination is taken at the end of Course 57511, LAWRS. A score below 80% will require reexaming at the facility within the allotted training hours. The developmental/CPC-IT may start OJT prior to passing the NWS Weather Observer Examination.

The developmental/CPC-IT is now ready for OJT on the facility weather observer position under actual conditions.

Prerequisite: Satisfactory completion of Section 3A (Area Knowledge) and Course 57511, LAWRS. Additional prerequisites may be established by the ATM and are identified in the facility training directive.

Objective: At the successful completion of this section of training, the developmental/CPC-IT will be certified to perform all weather observer position duties at the facility.

Training Length: Weather observer position qualification/certification must be completed in accordance with the facility training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the ATM adopts this recommendation, the developmental/CPC-IT is processed in accordance with HRPM 1.14 or other appropriate directives.

Administration: This section of training is normally administered in an operational environment using OJT and the actual facility equipment. The ATM or his/her designee must assign the developmental/CPC-IT to training.

Satisfactory completion of the weather observer position training is accomplished when the developmental/CPC-IT has been certified by both the NWS and the ATM (or his/her designee).

This section of training is administered on a pass/fail basis.

Section 3C. Flight Data/Edit

(Course 55242/55229)

General: The purpose of this development stage of training is to qualify and certify the developmental/CPC-IT for flight data position duties at the assigned facility.

FAA Academy training has provided the basic knowledge and skills required for operation of a flight data position under simulated conditions.

The developmental/CPC-IT is now ready for OJT on the facility flight data position under actual conditions.

Prerequisite: Satisfactory completion of Section 3A (Area Knowledge), and the appropriate specialist course(s) corresponding to the facility equipment (operational and supportability implementation system (OASIS), ICSS, small tower voice switch (STVS), etc). Additional prerequisites may be established by the ATM and are identified in the facility's training directive.

Objective: At the successful completion of this section of training, the developmental/CPC-IT must be certified to perform all flight data position duties at the assigned facility.

Training Length: Flight data position qualification/certification must be completed in accordance with the facility's 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 ATM adopts this recommendation, the developmental/CPC-IT is processed in accordance with HRPM 1.14 or other appropriate directives.

Administration: This section of training is normally administered in an operational environment using OJT and the actual facility equipment. The ATM or his/her designee must assign the developmental/CPC-IT to training.

This section of training is administered on a pass/fail basis.

Section 3D. NOTAM

(Course 55243)

General: The purpose of this development stage of training is to qualify and certify the developmental/CPC-IT for the NOTAM position duties at the assigned facility.

FAA Academy training provided the developmental/CPC-IT with a basic knowledge of NOTAM responsibilities under simulated conditions.

The developmental/CPC-IT is now ready for OJT on the facility NOTAM position under actual conditions.

Prerequisite: Satisfactory completion of Section 3A (Area Knowledge) and the appropriate specialist course(s) corresponding to facility equipment (OASIS, ICSS, STVS, etc). Additional prerequisites may be established by the ATM and must be identified in the facility's training directive.

Objective: At the successful completion of this section of training, the developmental/CPC-IT must be certified to perform NOTAM position duties.

Training Length: NOTAM position qualification must be completed in accordance with the facility's training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the ATM adopts this recommendation, the developmental/CPC-IT is processed in accordance HRPM 1.14 or other appropriate directives.

Administration: This section of training is normally administered in an operational environment using OJT and the actual facility equipment. The ATM or his/her designee must assign the developmental/CPC-IT to training.

This section of training is administered on a pass/fail basis.

Section 3E. Preflight

(Course 55244/55230)

General: The purpose of this development stage of training is to qualify and certify the developmental/CPC-IT for preflight position duties at the assigned facility.

FAA Academy training has provided the basic knowledge and skills required for operation of a preflight position under simulated conditions.

The developmental/CPC-IT has been given the NWS Pilot Weather Briefing Certification Examination at the FAA Academy. A score of 70% or better is required on this examination. Failure to achieve a passing score will require reexaming at the facility within the allotted training hours. The developmental/CPC-IT may start OJT prior to passing the NWS Pilot Weather Briefing Certification Examination.

The developmental/CPC-IT is now ready for OJT on the facility preflight position under actual conditions.

Prerequisite: Satisfactory completion of Section 3A (Area Knowledge) and the appropriate specialist course(s) corresponding to facility equipment (OASIS, ICSS, STVS, etc). Additional prerequisites may be established by the ATM and must be identified in the facility's training directive

Objective: At the successful completion of this section of training, the developmental/CPC-IT will be certified to perform all preflight position duties at the assigned facility.

Training Length: Preflight position qualification/certification must be completed in accordance with the facility's training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the ATM adopts this recommendation, the developmental/CPC-IT is processed in accordance with HRPM 1.14 or other appropriate directives.

Administration: This section of training is normally administered in an operational

environment using OJT and the actual facility equipment. The ATM or his/her designee must assign the developmental/CPC-IT to training.

Satisfactory completion of the preflight training is accomplished when the developmental/CPC-IT has been certified by both the NWS and the ATM (or his/her designee). The NWS certification must be completed prior to the facility certification.

This section of training is administered on a pass/fail basis.

Section 3F. Broadcast

(Course 55241/55228)

General: The purpose of this development stage of training is to qualify and certify the developmental/CPC-IT for broadcast position duties at the assigned facility.

FAA Academy training has provided the basic knowledge and skills required for operation of a broadcast position under simulated conditions.

The developmental/CPC-IT is now ready for OJT on the facility broadcast position under actual conditions.

Prerequisite: Satisfactory completion of Section 3A (Area Knowledge) and the appropriate specialist course(s) corresponding to facility equipment (OASIS, ICSS, STVS, etc). Additional prerequisites may be established by the ATM and must be identified in the facility's training directive

Objective: At the successful completion of this section of training, the developmental/CPC-IT will be certified to perform all broadcast position duties at the assigned facility.

Training Length: Broadcast position qualification/certification must be completed in accordance with the facility's training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the ATM adopts this recommendation, the developmental/CPC-IT is processed in accordance HRPM 1.14 or other appropriate directives.

Administration: This section of training is normally administered in an operational environment using OJT and the actual facility equipment. The ATM or his/her designee must assign the developmental/CPC-IT to training.

This section of training is administered on a pass/fail basis.

Section 3G. Inflight

(Course 55245/55231)

General: The purpose of this development stage of training is to qualify and certify the developmental/CPC-IT for inflight position duties at the assigned facility.

FAA Academy training has provided the basic knowledge and skills required for operation of an inflight position under simulated conditions.

The developmental/CPC-IT is now ready for OJT on the facility inflight position under actual conditions.

Prerequisite: Satisfactory completion of Section 3A (Area Knowledge) and the appropriate

specialist course(s) corresponding to facility equipment (OASIS, ICSS, STVS, etc). Additional prerequisites may be established by the ATM and must be identified in the facility's training directive.

Objective: At the successful completion of this section of training, the developmental/CPC-IT will be certified to perform inflight position duties at the assigned facility.

Training Length: Inflight position qualification/certification must be completed in accordance with the facility's training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the ATM adopts this recommendation, the developmental/CPC-IT is processed in accordance with HRPM 1.14 or other appropriate directives.

Administration: This section of training is normally administered in an operational environment using OJT and the actual facility equipment. The ATM or his/her designee must assign the developmental/CPC-IT to training.

The developmental/CPC-IT 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. If the facility is equipped with direction finder equipment, training must be provided on the operation of this equipment and the developmental/CPC-IT must demonstrate proficiency by completing a minimum of one satisfactory orientation on the equipment.

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 3H. Coordinator

(Course 55246)

General: Though not part of Course 50244, the coordinator field training and evaluation guidelines have been incorporated in this order for FSS evaluation standardization.

Each facility's training directive should include the coordinator position where applicable.

Facilities that have identified the need for the coordinator position must provide training and assign those duties in accordance with local facility directives.

The coordinator position may be combined with other position(s) in accordance with facility directives.

Prerequisite: Successful completion of Section 3A (Area Knowledge) and certification on all operational positions except EFAS at the assigned facility. Additional prerequisites may be established by the ATM and must be identified in the facility's training directive.

Objective: At the successful completion of this section of training, the specialist will be certified to perform coordinator position duties at the assigned facility.

Training Length: Coordinator position qualification/certification must be completed in accordance with the facility's training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If the ATM adopts this recommendation, the developmental/CPC-IT is

processed in accordance with HRPM 1.14 or other appropriate directives.

Administration: This section of training is normally administered in an operational environment using OJT and the actual facility equipment. The ATM or his/her designee must assign the specialist to training.

The coordinator duties and requirements are outlined in local facility directives.

This section of training is administered on a pass/fail basis.

Section 3I. En Route Flight

Advisory Service (EFAS)

(Course 55247)

General: Though not part of Course 50244, the EFAS field training and evaluation guidelines have been incorporated in this order for evaluation standardization.

The facility training directive at each facility should include an EFAS position where applicable.

The purpose of this section of training is to qualify and certify the specialist for EFAS position duties at the assigned facility.

FAA Academy training has provided the basic knowledge and skills required for operation of an EFAS position under simulated conditions.

The specialist is now ready for OJT on the facility EFAS position under actual conditions.

Prerequisite: Two years experience as a full-performance level and completion of Course 50201 (EFAS). Additional prerequisites may be established by the ATM and must be identified in the facility's training directive.

Objective: At the successful completion of this section of training, the specialist must be certified to perform EFAS position duties at the assigned facility.

Training Length: EFAS position qualification/certification must be completed in accordance with the facility's training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted.

Administration: This section of training is normally administered in an operational environment using OJT and the actual facility equipment. The ATM or his/her designee must assign the specialist to training.

Specific FSSs have been designed as FWCSs. EFAS duties and requirements are outlined in Orders 7110.10 and 7210.3.

This section of training is administered on a pass/fail basis.

Appendix F. Terminal Instructional Program Guide

Section 1. Introduction.

This instructional program guide (IPG) includes information about the following seven development stages:

1. FAA Academy Training (Courses 50043, 50046, 50055001, and 50034)
2. Flight Data (FD) (Course 55060)
3. Clearance Delivery (CD) (Course 55061)
4. Ground Control (GC) (Course 55062)
5. Local Control/Cab Coordinator (LC/CC) (Course 55063)
6. Non-radar/Handoff/Coordinator (NR/HO/CI) (Course 55064)
7. Radar Control (RC) (Course 55065)

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. For example: 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 Certified Professional Controller (CPC).

Section 2. Stage 2: Flight Data Position Training.

(Course 55060)

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 Air Traffic Control Tower (ATCT) and/or Terminal Radar Approach Control (TRACON) and to attain certification on those positions.

This stage of training is administered in two parts: instructor-led training and on-the-job-training (OJT). The instructor-led training uses facility-prepared instructional materials to supplement the FAA Academy prepared materials. When training Certified Professional Controllers (CPC) who have lost operational currency or have transferred from another facility or area of specialization, the Training Administrator (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.

Prerequisite: Successful completion of Stage 1 or individual meets direct entry qualifications established for specific hiring source.

Location: Field facility

Training Length: Site specific

Administration: Facilities with limited training resources must utilize FAA Academy student lesson plans and develop 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 lesson plans developed by the FAA Academy and/or the facility 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 the operational environment in accordance with Chapter 4 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.

Instructor led Training. The individual must successfully demonstrate the skills listed below in accordance with FAAO 7110.65, FAAO 7210.3, and local directives, and must pass an examination with a score of 90% 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% or higher (a CLEP style opportunity), 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 based on facility specific Flight Data functions.

(1) Airport Diagram. Given an airport diagram depicting the location of runways, taxiways, navigational aides (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 Instrument Landing System (ILS) critical areas, as applicable.

(2) ATCT Airspace. Given the Air Traffic Control Tower (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 order) which portions of the following items are to be administered in the instructor-led 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; and

(b) Locate the interphone and radio jacks/dual jack module at the controller position; and

(c) Identify and state the function of a headset versus a handset.

(d) Identify and state the function of the operating communication console system; and

(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:

(a) Post and forward flight plan information.

(b) Apply flight data procedures applicable to the ATCT and/or TRACON.

(c) Format the Automated Terminal Information Services (ATIS) for non-digital applications, if applicable.

(d) 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) Flight Data Input-Output (FDIO) keyboard and subsequent printer.

(b) Digital ATIS (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.

2. Lesson Plans.

Note: The following FAA Academy developed lesson plans (if available) must be taught via instructor-led training, computer-based instruction (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 order), 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.

Lesson plan TM-4-1: FDIO System User Manual

Lesson plan AC-00-45F: Aviation Weather Services

Lesson plan METAR: Aviation Routine Weather Report

Lesson plan: Communications Console

Lesson plan: FDIO CBI

3. 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.

4. 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.

5. 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: Clearance Delivery Position Training.

(Course 55061)

General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of the Clearance Delivery position within the Air Traffic Control Tower (ATCT) and/or Terminal Radar Approach Control (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 on-the-job training (OJT). The instructor-led training uses facility-prepared instructional materials to supplement the FAA Academy prepared materials. When training Certified Professional Controllers (CPC) who have lost operational currency or have transferred from another facility or area of specialization, the Training Administrator (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.

Prerequisite: Successful completion of Stage I

Location: Field facility

Training Length: Site specific

Administration: Facilities with limited training resources must utilize FAA Academy student lesson plans and develop 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 lesson plans developed by the FAA Academy and the facility and conducted under the direction of the TA. Facility lesson plans must be developed for:

- Airport layout and/or TRACON airspace.
- 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 the operational environment in accordance with Chapter 6 of this order.

Note: Facilities may delay CD OJT until the completion of FD-GC-LC/CC instructor-led and simulation training.

1. Instructor Led Training. The individual must successfully demonstrate the skills listed below in accordance with FAAO 7110.65, FAAO 7210.3, and local directives, and must pass an examination with a score of 90% 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 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% or higher (a CLEP style opportunity), he or she may be excused from taking the other lessons.

Note: The following FAA Academy developed lesson plans (if available) must be taught via instructor-led, computer-based instruction (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 I—Clearance Delivery. FAA Academy Lessons.

(1) State the functions of the clearance delivery 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” shall 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 II—Site-Specific Clearance Delivery.

(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 ARTS/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.

2. Lesson Plans. The following FAA Academy developed lesson plans (if available) must be taught via instructor-led, computer-based instruction (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 TS-3-1: Clearance Delivery.

3. Instructor led Training Evaluation.

a. Locally prepared evaluations must be administered on the following items, as applicable:

(1) Information contained in the Part 1 Academy lesson plans.

(2) Clearances and issuing various clearances.

(3) Weather and issuing weather.

(4) ARTS/STARS keyboard entries.

(5) PDC equipment and procedures.

(6) Local airport information.

(7) Local strip marking.

(8) Knowledge of Tower En Route clearance compositions and associated LOAs.

A training review board is not required for instructor-led or simulation training failure.

4. Simulation Training (if available and is optional).

a. General.

(1) 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 level.

(3) 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.

(4) 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.

(5) 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 order.

(a) Familiarization Scenarios. The developmental/CPC-IT must be given Clearance Delivery familiarization scenarios that cover all Clearance Delivery positions in the facility. These scenarios should emphasize the importance of effective interaction between the Clearance Delivery position and other Tower team members.

Example: The first two Familiarization Scenarios should also place additional emphasis on equipment (e.g., button logy, keyboarding).

(b) Instructional Scenarios. Instructional scenarios provide the developmental/CPC-IT with the opportunity to practice performing Clearance Delivery 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) DEVs/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

(6) If the developmental/CPC-IT does not meet the requirements for successful completion of an evaluation scenario, the TA may determine that skill enhancement training is warranted. The skill enhancement training may include:

(a) Instructor led training and/or

(b) Instructional scenarios.

Note: Skill enhancement training must be followed by an evaluation scenario at the same complexity level as the scenario that the developmental/CPC-IT was unsuccessful

(7) If the developmental/CPC-IT does not meet the requirements for successful completion after skill enhancement training, 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 Instrument Flight Rules (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.

Following in accordance with JO 7110.65:

(1) Issue IFR, SFVR, or VFR/OTP clearances using standard phraseology.

(2) Implement Gate Hold procedures.

(3) Process flight progress strips.

(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) Demonstrate knowledge of all applicable letters of agreement.

(9) Give and receive a position relief briefing both before and after a scenario.

d. 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 clearance delivery 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-0-1. Sample Simulation Scenarios

Scenario	Volume (%)	Type
A	70	Familiarization
B	70	Familiarization
C	75	Familiarization
D	75	Familiarization
E	75	Familiarization

Scenario	Volume (%)	Type
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)

e. 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.

5. 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

6. 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)

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 Air Traffic Control Tower (ATCT) and to attain certification on those positions.

This stage of training is administered in three parts: instructor-led training, simulation (if available), and on-the-job training (OJT). The instructor-led training will use facility-prepared instructional materials to supplement the FAA Academy prepared materials. When training Certified Professional Controllers (CPC) who have lost operational currency or have transferred from another facility or area of specialization, the Training Administrator (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.

Prerequisite: Successful completion of Stage 1.

Location: Field facility

Training Length: Site specific

Administration: Facilities with limited training resources must utilize FAA Academy student lesson plans and develop 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 lesson plans developed by the FAA Academy and the facility, and conducted under the direction of the TA. Facility lesson plans must be developed for:

- Airport layout
- Local procedures
- 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**: Facilities may delay GC OJT until completion of LC/CC instructor-led and simulation training.
>
> **Note:** 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 facilities must conduct simulation training utilizing either high-fidelity simulators or table-top simulations prior to starting OJT.
>
> **Exception:** Table-top/CAB LAB simulation training is not subject to the pass/fail evaluation.

1. 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% 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 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% or higher (a CLEP style opportunity), he or she may be excused from taking the other lessons.

Note: The following FAA Academy developed lesson plans (if available) must be taught via instructor-led, computer-based instruction (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 I—Ground Control. FAA Academy Lessons.

(1) Aircraft recognition and characteristics.

(2) Airport utilization.

(3) Console instruments.

(4) Ground control procedures.

(5) Taxi information and clearances.

(6) Emergency procedures and unusual situations.

b. Part II—Site-Specific Ground Control.

(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) Flight Data Input/Output (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) System Information Area (SIA).

(h) Light gun.

(i) Bright Radar Indicator Tower Equipment (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) Automated Radar Terminal Systems/Standard Terminal Automation Replacement System (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) Runup 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/Automated Flight Service Station (FSS).

(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.

2. Lesson Plans.

Note: The following FAA Academy developed lesson plans must be taught via instructor-led training, computer-based instruction (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).

Lesson plan TS-4-1 Aircraft Recognition and Characteristics

Lesson plan TS-4-2 Airport Utilization

Lesson plan TS-4-3 Console Instruments

Lesson plan TS-4-4 Ground Control Procedures

Lesson plan TS-4-5 Taxi Information and Clearances

Lesson plan TS-4-6 Emergency Procedures and Unusual Situations

3. 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 Academy 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: 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: A training review board is not required for instructor-led or simulation training failure.

4. Simulation Training.

Simulation training is being 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 Certified Professional Controller (CPC).

a. General.

(1) At facilities where simulation equipment is available, 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 order.

(4) Up to one 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% volume level and progressively increasing to the 110% volume level. The additional 10% 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% 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 Instrument Landing System/Microwave Landing System (ILS/MLS) 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 Estimated Departure Clearance Times (EDCT).

(15) React appropriately to emergency or unusual situations (for example, 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 one 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 skill enhancement training is warranted. The skill enhancement training may include:

(a) Instructor led training,

(b) CBI lessons, and/or

(c) Instructional scenarios.

(4) Skill enhancement training 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 instrument landing system/microwave landing system 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 EDCT.

(16) Handle emergency or unusual situations (for example, 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% traffic volume from an average period of a busy day (as defined and validated by the facility and included in the facility training order).

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., button logy, 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-0-2. Sample 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)

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.

5. 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.

6. 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 6. Stage 5: Local Control/Cab Coordinator Position Training.

(Courses 55063)

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 Air Traffic Control Tower (ATCT) and to attain certification on those positions.

This stage of training is administered in three parts: instructor-led training, simulation, and on-the-job training (OJT). The instructor-led training uses facility-prepared instructional materials to supplement the FAA Academy prepared materials. When training Certified Professional Controllers (CPC) who have lost operational currency or have transferred from another facility or area of specialization, the Training Administrator (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.

Prerequisite: Successful completion of Stage 2 Classroom Training.

Location: Field facility.

Training Length: Site specific.

Administration: Facilities with limited training resources must utilize FAA Academy student lesson plans and develop 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 lesson plans developed by the FAA Academy and the facility and conducted under the direction of the TA. Facility lesson plans must be developed for:

- Airport layout and Tower airspace layout.
- Local procedures.
- 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:** Facilities may delay GC OJTI until completion of LC-CC instructor-led and simulation training.
>
> **Note:** 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 facilities must conduct simulation training utilizing either high-fidelity simulators or table-top simulations prior to starting OJT.
>
> **Exception:** Table-top/CAB LAB simulation training is not subject to the pass/fail evaluation.

1. 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% or higher 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 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% or higher (a CLEP style opportunity), he or she may be excused from taking the other lessons.

Note: The following FAA Academy developed lesson plans (if available) must be taught via instructor-led training, computer-based instruction (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 I—FAA Academy 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) Bright Radar Tower Equipment (BRITE)

(13) Digital Bright Radar Indicator Tower Equipment (D-BRITE/TDW)

(14) Wind Effects

(15) Low Level Wind Shear Alert (LLWAS)

(16) TDWR and LLWAS

(17) Hazardous Weather

b. Part II—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) The individual must describe procedures for conducting/receiving position relief briefings.

(12) Missed approach procedures and altitudes.

(13) Special/Military Operations.

3. Instructor led Training Evaluation.

a. Locally prepared evaluations must be administered on the following items, as applicable:

(1) Information contained in the FAA Academy 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: 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: A training review board is not required for instructor-led or simulation training failure.

2. Lesson Plans.

Note: The following FAA Academy developed lesson plans must be taught via instructor-led training, computer-based instruction (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).

Lesson Plan	TS-5-1 General Control
Lesson Plan	TS-5-2 Local Control Duties and Responsibilities
Lesson Plan	TS-5-3 Airport Lighting
Lesson Plan	TS-5-4 Wake Turbulence
Lesson Plan	TS-5-5 Visual Flight Rules (VFR) Arrival Procedures
Lesson Plan	TS-5-6 VFR Departure Procedures
Lesson Plan	TS-5-7 Instrument Flight Rules (IFR) Arrival and Departure Procedures
Lesson Plan	TS-5-8 Visual Separation, VFR-ON-TOP and Special VFR
Lesson Plan	TS-5-9 Helicopter Aerodynamics and Operations
Lesson Plan	TS-5-10 Special Operations
Lesson Plan	TS-5-11 Emergency Procedures
Lesson Plan	TS-5-12 Bright Radar Tower Equipment (BRITE)
Lesson Plan	TS-5-13 Digital Bright Radar Indicator Tower Equipment (D-BRITE)
Lesson Plan	TS-5-14 Wind Effects
Lesson Plan	TS-5-15 Low Level Wind Shear Alert (LLWAS)
Lesson Plan	TS-5-16 TDWR and LLWAS
Lesson Plan	TS-5-17 Hazardous Weather

3. Instructor led Training Evaluation.

a. Locally prepared evaluations must be administered on the following items, as applicable:

(1) Information contained in the FAA Academy 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: 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: A training review board is not required for instructor-led or simulation training failure.

4. 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 Certified Professional Controller (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 order.

(4) Up to one 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% volume level and progressively increasing to the 110% volume level. The additional 10% 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% 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 one 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) Estimated Departure Clearance Times (EDCT).

(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 skill enhancement training is warranted. The skill enhancement training may include:

(a) Instructor led training.

(b) CBI lessons.

(c) Instructional scenarios.

(4) Skill enhancement training 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) 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% traffic volume from an average period of a busy day (as defined and validated by the facility and included in the facility training order).

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., button logy, 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) DEVs/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 3-3, Sample Simulation Scenarios shows how a training program may be designed to fulfill the requirements of this Stage.

Figure 3-0-3. Sample 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)

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.

5. 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.

6. 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 7. Stage 6: Non-radar/Handoff/Coordinator Training.

(Courses 55064)

General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of Non-radar/Handoff/Coordinator (NR/HO/CI) on all sectors within the Terminal Radar Approach Control (TRACON) and to attain certification on those positions if required.

> **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 on-the-job training (OJT). When training Certified Professional Controllers (CPC) who have lost operational currency or have transferred from another facility or area of specialization, the Training Administrator (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.

Prerequisite: Successful completion of Radar Terminal Facility (RTF).

> **Note:** TAs may assign individuals to the RC training track simultaneously with the NR/HO/CI controller training track, based on the facility's needs.

Location: Field facility.

Training Length: Site specific.

Administration: Facilities with limited training resources must utilize FAA Academy student lesson plans and develop 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 lesson plans

developed by the FAA Academy and the facility and conducted under the direction of the TA. Facility lesson plans must be developed for:

- Airspace layout.
- Local procedures.
- 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: Facilities may delay NR/HO/CI OJTI until completion of RC instructor-led and simulation training.

Note: 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 utilizing either high-fidelity simulators prior to starting OJT.

1. 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% 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 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% or higher (a CLEP style opportunity), he or she may be excused from taking the other lessons.

Note: The following FAA Academy-developed lesson plans (if available) must be taught via instructor-led training, computer-based instruction (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 I—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 conflictions.

(9) Apply inter-facility/intra-facility coordination requirements.

(10) Provide flight assistance services.

b. Part II—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) Aeronautical Information Manual (AIM).

(b) Describe procedures for conducting/receiving briefings before and after position relief.

c. Part III—Evaluation.

(1) Terminal control information.

(a) 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, the draw and identify:

(i) All items required on the flight data area map.

(ii) Primary and secondary holding fixes.

(iii) Holding patterns and altitudes.

(iv) Minimum safe altitudes.

(b) Given unlabeled approach plates, fill in or label the following:

(i) Transitions.

(ii) Transition altitudes.

(iii) Initial altitude at approach fix.

(iv) Procedure turn—direction from course.

(v) Final altitude until Final Approach Fix (FAF).

(vi) Heading—final approach course.

(vii) Minimum Descent Altitude (MDA), Height Above Touchdown (HAT),

Height Above Airport (HAA), and Decision Height (DH).

(viii) Missed approach.

(ix) Weather minimums.

2. Lesson Plans.

Note: The following FAA Academy 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) Recording Clearances and Control Information

(2) Radio and Interphone Communication

(3) Vertical Separation

(4) Longitudinal Separation

(5) Lateral Separation

(6) General Control and Board Management

(7) Instrument Flight Rules (IFR) Clearances and Route Assignments

(8) IFR Flight Direction, Altitude Assignment and Altimeter Setting

(9) Approaches

(10) Initial Separation of Departures/Arrivals and Visual Separation

(11) Holding Aircraft

(12) Forwarding Control Information

(13) Air Traffic Services

(14) Lost Communication Procedures

(15) Initiating Emergency Procedures

(16) Visual Flight Rules (VFR) and VFR-On-Top (OTP) Procedures

(17) Special VFR

b. Non-radar Instructor led Skills Development Exercises.

(1) Each facility, as determined by the TA, may develop (in accordance with the local training order) non-radar instructor-led skills development exercises that allow DEVs/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. DEVs/CPC-ITs must achieve a successful evaluation on these instructional scenarios at 70% and 100 % 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.

3. Instructor Led Training Evaluation.

a. Locally prepared evaluations must be administered on the following items, as applicable:

(1) Information contained in the FAA Academy 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: If the individual does not pass the final graded instructor-led evaluation the provisions 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.

4. 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 Certified Professional Controller (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 order.

(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% volume level and progressively increasing to the 110% volume level. The additional 10% 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% 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 a 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.

(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) Transfer of control and communications.

(j) Airfiles and pop ups.

(k) Pilot deviations.

(l) Requests for altitude change.

(m) Radar Team concepts and communications.

(4) Procedures.

(a) Interphone procedures.

(b) Traffic Management Initiatives.

(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 skill enhancement training is warranted. The skill enhancement training may include:

(a) Instructor led training.

(b) CBI lessons.

(c) Instructional scenarios.

(4) Skill enhancement training 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% traffic volume from an average period of a busy day (as defined

and validated by the facility and included in the facility training order).

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., button logy, 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) DEV's/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-0-4. Sample 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)

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.

Non-radar/Handoff/Coordinator (NR/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 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: 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	

5. 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.

6. 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 Controller Training.

(Courses 55065)

General: The purpose of this stage is to prepare the developmental/CPC-IT to perform independently (under general supervision) all duties of the Radar Controller (RC) within the Terminal Radar Approach Control (TRACON) and to attain certification on those positions.

This stage of training is administered in three parts: instructor-led training, simulation (if available), and on-the-job training (OJT). When training Certified Professional Controllers (CPC) who have lost operational currency or have transferred from another facility or area of specialization, the Training Administrator (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.

Prerequisite: Successful completion of Radar Terminal Facility (RTF) and/or Stage 6.

Location: Field facility.

Training Length: Site specific.

Administration: Facilities with limited training resources must utilize FAA Academy student lesson plans and develop 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 lesson plans developed by the FAA Academy and the facility, and conducted under the direction of the TA. Facility lesson plans must be developed for:

- Airspace layout.
- Local procedures.
- 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: Facilities may delay RC OJTI until completion of NR/HO/CI and RC instructor-led and simulation (if required) training.

Note: TAs may assign individuals to the RC training track simultaneously with the NR/HO/CI controller training track, based on the facility's needs.

Note: High-fidelity simulators (e.g., AT Coach**,** Electronic 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 utilizing either high-fidelity simulators prior to starting OJT.

1. 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% 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 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% or higher (a CLEP style opportunity), he or she may be excused from taking the other lessons.

Note: The following FAA Academy developed lesson plans (if available) must be taught via instructor-led, computer-based instruction (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 I—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, 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.

b. Part II—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:

(i) FAA orders and/or handbooks.

(ii) Facility directives

(iii) LOAs.

(iv) Position binders.

(v) 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:

(i) Identify personnel authorized to declare an emergency

(ii) Identify notification procedures and the parties to be notified in an emergency situation.

(iii) Identify the procedures for handling information requests and alert notices.

(iv) Identify the actions required in the event of a hijack or aircraft bomb threat.

(v) State minimum required information for in-flight emergencies.

(vi) State the methods of aircraft orientation.

(vii) State when to exercise priority or special handling

(viii) Describe the actions required when a pilot declares minimum fuel

(c) Describe procedures for conducting/receiving position relief briefings.

c. Part III—Evaluation.

(1) The Terminal Radar Qualification examination, CBI 57503, is distributed on the CBI national distribution. Successful completion requires a minimum score of 70%.

(2) At ARTS-IIA-equipped facilities, the Terminal Field Course package available from the FAA Academy must be administered to the individual.

(3) The individual must pass the facility-developed automation examination.

(4) 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.

(5) If the individual does not meet the requirements for successful completion of the examinations, the TA may determine that additional training is warranted.

(a) This training may include:

(i) Additional instructor-led training and/or

(ii) CBI training.

Note: 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: A training review board is not required for instructor-led or simulation training failure.

4. 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 Certified Professional Controller (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 order.

(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% volume level and progressively increasing to the 110% volume level. The additional 10% 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% 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 one 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 special use airspace.

(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) Transfer of control and communications.

(j) Airfiles and pop ups.

(k) Pilot deviations.

(l) Requests for altitude change.

(m) Radar Team concepts and communications.

(4) Procedures.

(a) Interphone procedures.

(b) Traffic Management Initiatives.

(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/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 skill enhancement training is warranted. The skill enhancement training may include:

(a) Instructor led training.

(b) CBI lessons.

(c) Instructional scenarios.

(4) Skill enhancement training 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. 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.

(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 % traffic volume from an average period of a busy day (as defined

and validated by the facility and included in the facility training order).

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) Developmental's/CPC-IT's 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-5, Sample Simulation Scenarios, shows how a training program may be designed to fulfill the requirements of this Stage.

Figure F-5. Sample 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)

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.

Radar Control (RC) 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 FAA O 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 nonverbal 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 contract 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.	Mimima. a. Broadband Radar System or Digital Terminal Automation System (DTAS) (includes single sensor). b. Stage A/Direct Access Radar Channel (DARC), 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: (i) 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.		
VII. Implement Special Handling			
A.	Priority Aircraft		
1.	Lifeguard.		
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 Equipments		
F.	Chaff Drop		
G.	Electronic Countermeasures (ECM) Activity		
VIII. 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.		
IX. 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., En Route Backup Surveillance System (EBUS)/DARC.		
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			

5. 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.

6. 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.

Course 55065 OJT CHECKLIST

Radar Control (RC) OJTI 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 FSL to ESL selection.			
b	Radar sight 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	Dependant 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.			
u	Initiating and/or accepting a non-radar block.			
v	Special military operations (site specific).			
w	Arial 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			

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)

General: The purpose of this stage is to train Certified Professional Air Traffic Control Specialists selected for Traffic Management Coordinator (TMC) 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 prior to October 1, 2004. It is strongly recommended that any person training to become a TMC/TMS receive this training within the first 18 months of accepting a Traffic Flow Management position. Certified TMC/TMS 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/TMS will have priority enrolling in the class.

Location: FAA Academy

Training Length: 64 hours

Administration: Training is administered in a instructor-led/simulated environment utilizing FAA Academy prepared instructional materials and computers for hands-on practice. Academic progress is assessed with an end-of-course exam on a pass/fail basis.

Training Contents:

- Traffic management System history and future
- Systems Thinking
- Communication and Conflict Management
- Traffic Flow Management
- Severe Weather Management
- Airport/Airspace Capacity and Delay Reporting
- Contingency Plans

- Weather Coordinator
- Mission Coordinator
- Traffic management Workstation
- Mozilla
- ETMS Reports
- Traffic Situation Display Menu Functions
- Flight Schedule Monitor
- Traffic Flow Management System (TFMS) System Email
- Traffic Flow Management System (TFMS) System Shell
- National traffic management Log
- Enhanced traffic management System Manager

Section 3. Stage 2: Facility Traffic Management.

Qualification and Certification

(Course 55116)

General: The purpose of this stage is to provide the TMC-in-training (TMCIT) 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 TMCIT for on-the-job training (OJT). Part B is to qualify the TMCIT 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 who have lost their currency or for TMCs 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

Prerequisite: Completion of Course 50115 or certification in the Traffic Management Unit (TMU) prior to October 1, 2004.

Location: Field Facility

Training Length: Site specific

Administration: Training is conducted in a instructor-led/simulated environment using an Academy developed outline and facility developed lesson plans, 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 that have been experienced by the facility or are likely to occur.

> **Note:** The Traffic Management Training Section of the FAA Academy, if requested and tasked, will assist and/or advise facilities with curriculum development.

Training Content: Course 55116 Part A may contain any of the following topics. 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.

- Introduction to facility and course
- Traffic management overview
- Airspace review and traffic flows
- Traffic management workstation (TMW)
- Severe weather management
- Routes
- Traffic management initiatives (TMI)
- Tower en route control
- Weather coordinator
- Mission coordinator
- Contingency plans
- Administrative and other duties

55116 PART B

Prerequisite: Completion of Course 55116 Part A

Location: Field Facility

Training Length: Determine on-the-job training (OJT) hours for each operational position as described in JO 3120.4.

> **Note:** In order to insure maximum use of personnel resources, OJT at air route traffic control centers (ARTCC) and terminals should be completed within 10 weeks. At the Air Traffic Control Systems Command Center (ATCSCC), OJT should be completed within 18 weeks.

Administration: OJT is conducted in accordance with JO 3120.4.

Part B of Course 55116 is administered on a pass/fail basis. The TMCIT must pass a certification evaluation for each traffic management position of operation in the facility.

1. Part B. Lesson Objective: The TMCIT will be able to perform all required traffic management duties and responsibilities under general supervision.

a. Job Functions: Through OJT, the TMCIT will be able to: (Because of fundamental differences in operation among traffic management units, the following job functions may not apply to all facilities.)

(1) Use the TMW.

(2) Use the traffic management briefing terminal.

(3) Use the traffic management main display monitor.

(4) Use communication equipment.

(5) Use any other equipment normally employed by facility TMCs.

(6) Monitor and analyze air traffic operations.

(7) Develop and implement traffic management programs and procedures necessary to regulate and balance arrival, departure, and en route traffic flows.

(8) Develop strategies to ensure maximum use of airspace.

(9) Analyze and implement TMIs requested by facility personnel, adjacent facilities, and the ATCSCC.

(10) Periodically review and, as necessary, modify or cancel TMIs.

(11) 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.

(12) 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.

(13) Establish and maintain effective and cooperative communication with intra/interfacility personnel.

(14) Document, maintain, and distribute accurate and timely records.

(15) Conduct and receive proper position relief briefings.

(16) Describe the duties of the TMC in charge.

2. Instructions for Completing the TMU 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, on-the-job training instructors (OJTI), and supervisory TMCs to record their observations of the performance and progress of the TMCIT during simulated control problems, OJT instruction, skill enhancement training, 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 numbers correspond to the numbered blocks on the worksheet.

Block 1 NAME: Print TMC-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 instrument flight rules (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. Indicate "Other" if used for skill enhancement training and document specific use in Block 12. The FLM checks "Evaluation" if administering a performance skill check or "Certification" if administering a certification skill check.

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 TMCIT. 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 entitled "Other" is intended for local use an adaptation.

a. OJTIs place a mark (for example, ✓, 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 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 observed performance this session meets expected performance requirements and indicates that the TMCIT 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 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 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 % 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 TMCIT 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 should be recorded as "N/A" (not applicable).

Block 12 COMMENTS: Used by the OJTI or by the FLM who conducted the skill check, the comment block provides space for the documentation of the TMC-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 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 TMCIT so that the performance problem may be corrected.

c. Recommend one of the following:

(1) Continuation of OJT

(2) Skill enhancement training

(3) Suspension of training

(4) Certification

d. The FLM must sign and date this block.

Block 13 EMPLOYEE'S COMMENTS: This block may be used by the TMCIT 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 TMCIT.

Block 14 CERTIFICATION: This block is used by the FLM to document position certification/recertification. Record position of operation, sign, and date.

Figure G-1. TMU OJT Instruction/Evaluation Report FAA Form 3120-32

TRAFFIC MANAGEMENT COORDINATOR
OJT INSTRUCTION / EVALUATION REPORT

1. Name	2. Date	3. Position(s)	
4. Weather ___ VFR ___ MVFR ___ IFR	5.Workload ___ Light ___ Moderate ___ Heavy	6. Complexity ___ Routine Not Difficult ___ Occasionally Difficult ___ Mostly Difficult ___ Very Difficult	7. Hours this session 8. Hours (%) this position
9. Purpose of Report □ OJT □ Certification □ Other			10. Routing

11.	CJE	Job Function Category	Job Function	Observed	Comment	Satisfactory	Needs Improvement	Unsatisfactory
Performance	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					
	Communi-cation	D. Communi-cation / Coordi-nation	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 TMU OJT Instruction/Evaluation Report FAA Form 3120-32 (Continued)

TRAFFIC MANAGEMENT COORDINATOR
OJT INSTRUCTION / EVALUATION REPORT

12. Comments

Signature: _____ Date: _____

13. Employee's Comments:

This report has been discussed
with me (signature): _____ Date: _____

14. Certification

I certify that this employee meets qualification requirements for position and is capable of working under general supervision.

Signature of Certifier: _____ Date: _____

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
1. Awareness is maintained.	a. Maintains awareness, and keeps appropriate personnel aware of: total traffic situation, current and forecasted weather conditions, traffic management programs/initiatives and equipment status. b. Remains alert for possible situations which may affect traffic flows. c. Manages saturation or traffic flow problems.
2. Good judgment is applied.	a. Adheres to priority of duties. b. Actions are planned in a complete, correct, and timely manner to provide a safe, orderly, and expeditious flow of traffic. c. Ensures traffic management programs/initiatives are necessary prior to implementation. d. Manages traffic in a manner which avoids inefficiencies and unnecessary delays.
3. Aware of controller and system user requirements.	a. Uses TMIs which consider field facilities/controllers, users, and other TMCs. b. To the extent that safety is not compromised, ensures the user is accommodated while maintaining equity of access among all users. c. Listens and responds to controller/supervisor requests. d. Listens and responds to user requests and offers advice or recommends options.
4. Handles unusual situations.	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 dictates.

Job Function Category: Methods and Procedures

Job Function	Indicator
5. Monitors system.	a. Understands job functions and analyzes conditions which may impact the system. b. Proactively manages system constraints.
6. Programs/initiatives are implemented correctly.	a. Makes a proper assessment of the situation and provides a valid justification for the program or initiative. b. Properly plans using reliable and accurate data. c. Considers other options. d. Actions are timely and correct. e. Organizes processes of implementation into logical sequences. f. Administers and cancels TMIs and programs.
7. Efficient traffic flow is maintained.	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. Manages departing, arriving, and en route traffic flows effectively and efficiently to ensure traffic volume is manageable.
8. Takes prompt action to correct deficiencies.	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. Data is handled correctly.	a. SIGMETs, CWAs, and MISs are disseminated correctly. b. PIREPs are properly written, recorded, and disseminated. c. Handling, use, and disposition of sensitive/classified documents is correct. d. Collects and disseminates traffic management information, equipment outages, and other data as necessary. e. Posts all required information appropriately. f. Ensures documentation reflects actual system performance. g. Operational information is documented in a correct and timely manner.

Job Function Category: Equipment

Job Function	Indicator
10. Equipment capabilities are fully used.	a. Uses equipment to fullest extent possible. b. Demonstrates knowledge of capabilities and limitations of equipment. c. Enters all required data into computer for area display. d. Displays appropriate area of responsibility on plan view display and traffic situation display. e. Adjusts displays appropriately. f. Demonstrates ability to retrieve information from all available equipment sources. This may include, but is not limited to, the TMW, weather and radar processor, KVDT, integrated terminal weather system, and telecommunications equipment.
11. Equipment malfunctions recognized.	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. Equipment status information is understood and posted correctly.
12. Computer entries are complete/correct.	a. Uses correct computer entries. b. Is aware of equipment peculiarities.

Job Function Category: Communication/Coordination

Job Function	Indicator
13. Required coordination is performed.	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, concise.	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.	a. Conveys the image of a skilled, capable professional to others. b. Is courteous, tactful, and displays a spirit of cooperation. 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.
16. Relief briefings are complete and accurate.	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.

Appendix H. Terminal and En Route Facility Controller-in-Charge Instructional Program Guide

Section 1. Introduction.

This instructional program guide (IPG) includes information about the following two development stages:

• Computer-Based Instruction (CBI)	Course 57057, En Route Course 57060, Terminal
• Controller-in-Charge (CIC) Training	Course 55072, En Route Course 55073, Terminal

Section 2. Stage 1: FAA Academy Training.

Controller-in-Charge CBI

(Course 57057, En Route)
(Course 57060, Terminal)

General: The purpose of this training is to provide the developmental/CPC-IT selected to be controllers-in-charge (CIC) in either the En Route or Terminal environment with a mandatory national computer-based instruction (CBI) course.

Prerequisite: Developmentals/CPC-IT s from the En Route or Terminal options that have been selected by the CIC selection official.

Location: Field facility

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.

Administration: This training is conducted in a CBI environment using FAA Academy developed lessons tailored to facility requirements.

Training Contents: Course 57057 contains these areas of instruction:

- Introduction to course layout and course content
- Position Overview: Overview of the general responsibilities of the CIC
- Supervising Personnel: Responsibilities for position assignments, position relief briefings, approving leave, training, safety, and drug exams
- Operations Management: Procedures and responsibilities associated with data logs, Notices to Airmen, equipment outages, and flight inspection of navigational aids
- Incidents: Responsibilities associated with near-midair collisions (NMAC), pilot deviations, and operational errors/deviations (OE/D)
- Critical Air Situations: Procedures and responsibilities associated with aircraft accidents, hijacked aircraft, bomb threats, flight assists, emergency locator transmitter signals and unusual and unusual aircraft activities.
- 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:

- (Terminal Only) Reporting Exercises: Practice completing reports associated with flight assists, pilot deviations, aircraft accidents, OE/Ds, and NMACs
- (Terminal Only) Public Relations: Procedures for handling public inquiries
- (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, En Route Part A)
(Course 55073, Terminal Part A)

General: Course 55072, Facility Controller-In-Charge (En Route Part A), is designed for certified professional controllers (CPC) and traffic management coordinators (TMC) 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 on the job training (OJT) for part B.

Course 55073, Facility Controller-In-Charge (Terminal Part A), is designed for CPCs and 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.

Prerequisite: Successful completion of Course 57057, En Route CBI

or

Course 57060, Terminal CBI

Location: Field facility determined

Training Length: Up to 12 hours for Course 55072 or up to 12 hours for Course 55073

Administration: Training is administered in a instructor-led/operational environment utilizing FAA Academy 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.

Training Contents: Course 55072 and 55073 contains these areas of instruction.

- Watch supervision requirements
- Operations management
- Resource management
- Unusual situations
- Accidents/Incidents
- Human relations and communications

- Leave administration
- Medical/drug/alcohol regulations
- Operational errors and deviations
- Training procedures
- Work environment and human relations

Section 4. Stage 2: Facility Controller-in-Charge

Qualification and Certification

(Course 55072 En Route Part B)
(Course 55073 Terminal Part B)

General: Course 55072, Facility Controller-In-Charge (En Route Part B), is designed for CPCs and 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 Controller-In-Charge (Terminal Part B), is designed for CPCs and 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.

Prerequisite: Successful completion of Course 55072, En Route, Part A

or

Course 55073, Terminal, Part A

Location: Field facility

Training Length: Facility determines OJT hours

Administration: Training is administered through OJT instruction, skill enhancement training, and skill check sessions. OJT is conducted in accordance with JO 3120.4.

> **Exception:** Due to the duties associated with watch supervision, the assignment of a training team is not required. OJT must be conducted by a Frontline Manager (FLM). Performance and progress are assessed through observations by FLMs.

Training Contents: Course 55072, En Route Part B contains these areas of instruction. (Because of differences in operations among terminal radar approach controls, towers, and air route traffic control centers, the following job functions may not apply to all facilities.)

- Make position assignments
- Provide breaks
- Combine/decombine positions
- Monitor/configure equipment
- Monitor weather for impacts on air traffic
- Assign OJT

- Ensure available resources are deployed for optimal efficiency
- Identify need for overtime
- Process leave requests
- Document time and attendance
- Process and document FAA/facility forms
- Implement contingency plans
- Respond to unusual situations/emergencies/accidents and incidents
- Coordinate special operations
- Respond to information requests
- Handle public complaints
- Make on-the-spot corrections
- Eliminate distractions
- Demonstrate runway selection responsibilities
- Through simulation, respond to bomb threats, hijacking, and UFO reports
- Adhere to guidance and goals for the shift
- Maintains situational awareness
- Conduct and receive position relief briefings
- When necessary, implement flow control
- Identify and report harassment incidents
- Report equipment malfunctions
- Prevent OE/D
- Provide assistance to specialists
- Report and process preliminary OE/D reports
- 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 FLMs to record their observations of the performance and progress of CPCs/TMCs selected as CIC during OJT instruction, skill enhancement training, 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. It is available in pad form through the FAA Logistics Center.

2. Using the Worksheet. Complete the following items. Block numbers correspond to the numbered blocks on the worksheet.

Block 1 NAME: Print CPC'/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. Indicate "Other" if used for skill enhancement training and document specific use in block 12. The FLM checks "Evaluation" if administering a performance skill check or "Certification" if administering a certification skill check.

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 developmental/CPC-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 (for example, 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 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 ATCS'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 ATCS'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 ATCS'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 % 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 DEVELOPMENTAL/CPC-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 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 should be recorded as "N/A" (not applicable).

Block 12 COMMENTS: This block is used for documentation of the ATCS's performance during OJT instruction or skill check sessions.

a. OJT: This block is used to document an observation when a mark is made in the "Comment" column on the front of the form. The OJT instructor 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 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 DEVELOPMENTAL/CPC-IT so that the performance problem may be corrected.

c. Recommend one of the following:

(1) Continuation of OJT.

(2) Skill enhancement training.

(3) Suspension of training.

(4) 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 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. Skill enhancement training.

e. Suspension of OJT.

Note: This block is not used for CPC performance skill checks.

Block 14 EMPLOYEE'S COMMENTS: This block may be used by the DEVELOPMENTAL/CPC-IT 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 DEVELOPMENTAL/CPC-IT.

Block 15 CERTIFICATION: This block is used by the employee's FLM to document position certification/recertification. Record position of operation, sign, and date.

Figure H-1. Controller-in-Charge OJT Instruction/Evaluation Report

1. Name:		2. Date:	3. Position(s):
4. Weather: ☐ VFR ☐ MVFR ☐ IFR	5. Workload: ☐ Light ☐ Moderate ☐ Heavy	6. Complexity: ☐ Routine, not difficult ☐ Occasionally Difficult ☐ Mostly Difficult ☐ Very Difficult	7. Hours this session: 8. Hours (%) this position:
9. Purpose: ☐ OJT ☐ Certification ☐ Other ☐ Evaluation ☐ Recertification ☐ 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					
			9. Handles data correctly					
		C. Equipment	10. Uses equipment capabilities fully					
			11. Recognizes equipment malfunctions					
			12. Makes complete/correct computer entries					
		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 with 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 accurate					
			23. Reports miscellaneous events accurately					
		H. Other						

FAA Form 3120-36 (8-00) NSN:0052-00-923-6000

Figure H-1. Controller-in-Charge OJT Instruction/Evaluation Report (Continued)

12. Comments	12A. References

Signature: _____ Date: _____

13. Recommendation ☐ Certification Skill Check ☐ Certification
☐ Continuation of OJT ☐ Skill Enhancement Training ☐ 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
1. Maintains awareness.	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.
2. Applies good judgment.	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.
3. Is aware of controller and system user requirements.	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.
4. Handles unusual situations.	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.

Job Function Category: Methods and Procedures

Job Function	Indicator
5. Monitors system.	a. Understands job functions and analyzes conditions which may impact the work environment. b. Manages system constraints proactively.
6. Implements programs/initiatives correctly.	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. Maintains efficient traffic flow.	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. Takes prompt action to correct errors.	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. Handles data correctly.	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 information, equipment outages, and other data as necessary. e. Ensures required information is appropriately posted. f. Ensures documentation reflects actual system performance. g. Documents operational information in a correct

	and timely manner.

Job Function Category: Equipment

Job Function	Indicator
10. Uses equipment capabilities fully.	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.
11. Recognizes equipment malfunctions.	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.
12. Makes complete/correct computer entries.	a. Uses correct computer entries. b. Is aware of equipment peculiarities.

Job Function Category: Resource Management

Job Function	Indicator
13. Staffs appropriately.	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.
14. Provides relief periods.	a. Accomplishes position rotation in an efficient manner. b. Gives meal breaks appropriate priority.

Job Function Category: Training

Job Function	Indicator
15. Accomplishes training.	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.
16. Documents training.	a. Ensures OJT assignments are appropriate for level of proficiency. Ensures OJT instruction reports are prepared.

Job Function Category: Human Relations and Communication

Job Function	Indicator
17. Communicates shift requirements effectively.	a. Provides on-the-spot corrections diplomatically. b. Manages workplace distractions utilizing courtesy and tact. c. Utilizes human relations skills when making operational assignments.
18. Communicates effectively with the public.	a. Coordinates facility visits. b. Responds to media inquiries appropriately. c. Communicates effectively with system users.
19. Maintains an effective work environment.	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.
20. Communicates effectively with management.	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.

Job Function	Indicator
21. Provides complete and accurate relief briefings.	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
22. Prepares accident and incident reports that are complete and accurate.	a. Notifies management in a timely manner. b. Applies and follows directives. c. Prepares and forwards documentation.
23. Reports miscellaneous events accurately.	a. Completes daily reports. b. Accomplishes QAR's. c. Records flight assists, noise damage issues, and complaints, reckless flying reports, and UFO reports and actions taken.

Appendix I. Reserved for OCEAN21

The guidance for OCEAN21 training requirements will be provided in notice form.

Appendix J. Definitions

1. Air Traffic Manager (ATM) - Individual responsible for the overall efficiency and effectiveness of the facility training program. In contract flight service stations, Operations Manager is synonymous with ATM

2. Air Traffic-Collegiate Training Initiative (AT-CTI) - A program, provided for by public law that allows the administrator to establish agreements with post-secondary educational institutions to prepare students for the position of air traffic controller with the FAA

3. Centralized Training - Agency training conducted at a location other than the participant's regularly assigned facility (for example, FAA Academy, Center for Management and Executive Leadership (CMEL , etc.). 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 (for example, 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 FAAO 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. 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

14. Direct Monitoring - Observing and listening to all activity at the operational position

15. District Manager – The ATM responsible for the oversight of terminal facilities within their assigned district

16. Facility Training - Training conducted at the employee's assigned duty location

17. Failed – Grade assigned to a student who does not satisfactorily complete a course

18. Familiarity - Knowledge of delegated airspace, adjacent facilities, frequencies, traffic flows and types, and procedures (for example, letters of agreement) associated with a sector/operational position

19. Front Line Manager (FLM) – Managerial personnel responsible for the direct supervision of operational personnel

20. Full Performance Level (FPL) – An air traffic control specialist (ATCS) who is or has been facility/area certified in the in the flight service option

21. Incomplete - Grade assigned to a student who does not complete a course because of mitigating circumstances which are not related to performance (for example, prolonged illness, death in family, etc.)

22. Instructional Program Guide (IPG) - Guide that outlines required course content for certain national air traffic qualification training programs

23. Instructor-Led Training (ILT) – Instructor-led training

24. Minimum Certification Hours - The number of training hours required before becoming eligible for certification on a given operational position

25. Non-Operational Personnel – Personnel who are not required to maintain operational currency

26. On-The-Job Familiarization (OJF) – An assignment of direct monitoring of an operational position

27. On-The-Job Training (OJT) - Training conducted by a qualified individual that provides direct experience in the work environment

28. On-The-Job Training Instructor (OJTI) - Non-supervisory personnel who conduct OJT

29. Operational Personnel – Personnel assigned to the operations quarters or in direct supervision of the operations quarters or individuals who maintain currency

30. Out-Of-Agency Training - Training conducted by or obtained from sources other than the FAA

31. 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

32. Performance Verification (PV) - Academic evaluation and/or simulation assessment of personnel

33. Proficiency - Knowing, understanding, and applying air traffic procedures in a safe and efficient manner

34. Proficiency Training - Training conducted to maintain and update the knowledge and skills necessary to apply air traffic procedures in a safe and efficient manner

35. 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

36. Refresher Training - Training conducted to maintain and update previously learned knowledge and skills

37. Remedial Training - Training provided to correct specific identified operational deficiencies

38. Self -Directed Study - Training accomplished by the individual without an instructor

39. Simulation Training - Training conducted in a simulated operational environment that allows personnel to apply and demonstrate basic skills and knowledge

40. Skill Enhancement Training – Training designed to improve an individual's knowledge, skills, and abilities

41. Supervisory Traffic Management Coordinator (STMC) – Managerial personnel responsible for the direct supervision of traffic management personnel.

42. Supplemental Training - Training provided prior to the use of new/revised procedures, regulations, or equipment

43. Suspension of OJT - An action taken by the developmental's FLM to temporarily stop OJT

44. Traffic Management Coordinator (TMC) - A CPC who is or has been certified on the required positions in a TMU

45. Target Hours – Number of hours established to achieve qualification training on an operational position

46. TMC-in-Training (TMC-IT) - A CPC who is in the process of obtaining certification in the TMU to which assigned

47. Tower Radar Display - General term used for equipment that provides radar data in a control tower (for example, DBRITE, R-ACD, TDW, STARS LITE, etc.)

48. Traffic Management Officer (TMO) – Manager responsible for the oversight of one or more Traffic Management Units

49. Trainee – Developmental, CPC-IT, FPL-IT or TMC-IT.

50. Training Administrator (TA) – Individual designated to administer the facility training program

51. Training Plan - A document used to outline the training objectives for a developmental/CPC-IT

52. Training Proposal - A written document that identifies a training need and specifies tasks, target audience, schedule, and priority for the proposed training

53. Training Team - Designated individuals who facilitate the training of a developmental/CPC-IT

54. TRAX - A software program that allows automated preparation and maintenance of employee training records

55. Web-Based Training - (also known as eLearning) 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. Web-Based and/or eLearning will most likely be utilized to reference out-of-instructor-led and in-instructor-led educational experiences via a computerized device.