



U.S. Department  
of Transportation

Federal Aviation  
Administration

FAA ORDER 3120.4H w/ CHG 1  
Effective Dates: 06/01/95 -

# *3120.4H Air Traffic Technical Training*

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## RECORD OF CHANGES

**DIRECTIVE NO.**

3120.4H

[illegible]

**CHANGE**

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

3120.4H CHG 1

4/28/95

SUBJ: AIR TRAFFIC TECHNICAL TRAINING

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1. PURPOSE. This change transmits revised pages to Order 3120.4H, Air Traffic Technical Training.
2. DISTRIBUTION. This change is distributed to selected offices in Federal Aviation Administration (FAA) headquarters, regional headquarters, FAA Technical Center, the Mike Monroney Aeronautical Center, all Air Traffic field offices, the FAA Academy, all International Aviation field offices, and interested members of the aviation public.
3. EFFECTIVE DATE. June 1, 1995.
4. EXPLANATION OF CHANGES.
  - a. The reorganization of ATR to ATZ has been addressed and corrections made as necessary.
  - b. The distinction between ATZ and Air Traffic has been addressed.
  - c. New course numbers for the en route and terminal training have been included.
  - d. Other editorial changes such as referring to (a) and (b) in lieu of 1 and 2 have been corrected.
  - e. The changes to Order 3120.24A, effective through Notice N 3120.103, have been incorporated into Chapter 3.
5. DISPOSITION OF TRANSMITTAL. Retain this transmittal until superseded by a new basic order.

## PAGE CONTROL CHART

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F-67 and F-68	6/1/95	F-67 and F-68	6/1/95

  
 Douglas R. Murphy  
 Program Director for Air Traffic  
 Program Management



**AIR TRAFFIC TECHNICAL TRAINING****3120.4H****FOREWORD**

This order prescribes instructions, standards, and guidance for Air Traffic managers in 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.



Douglas R. Murphy  
Program Director for Air Traffic  
Program Management



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## Chapter 1. INTRODUCTION

### Section 1. GENERAL

**1-1. PURPOSE.** This order conveys instructions, standards, and guidance for Air Traffic managers in the administration of Air Traffic technical training.

**1-2. DISTRIBUTION.** This order is distributed to selected offices in the Federal Aviation Administration (FAA) Headquarters, Regional Headquarters, FAA Technical Center, the Mike Monroney Aeronautical Center, all Air Traffic field offices, the FAA Academy, all International Aviation field offices, and interested members of the aviation public.

**1-3. CANCELLATION.**

- a. Order 3120.4G, Air Traffic Training, dated June 1, 1986.
- b. Order 3120.20, Direct Access Radar Channel (DARC) Training, dated April 11, 1980.
- c. Order 3120.24A, Air Traffic Control Specialist On-the-Job Training and Position Certification, dated December 3, 1991.
- d. Order 3120.28, Computerized Air Traffic Training System (CATTS), dated November 29, 1994.
- e. En Route Instructional Program Guide, EP12-0-1E, dated February 1988.
- f. Terminal Instructional Program Guide, TP12-0-1C, dated June 1990.
- g. Flight Service Instructional Program Guide, FP12-0-1C, dated July 1988.

**1-4. EFFECTIVE DATE.** This order is effective June 1, 1995.

**1-5. EXPLANATION OF CHANGES.** This order has been extensively revised and updated to incorporate the "Train to Succeed" philosophy and also to address many outstanding issues from the field facilities. Many issues previously answered through general notices (GENOTS), waivers, and clarifications have been addressed and/or clarified. A brief explanation of the significant changes to the order is listed below.

a. Definitions have been added for the terms "operational personnel" and "nonoperational personnel." Definitions and references to computer-based instruction (CBI) have been replaced by Computerized Air Traffic Training System (CATTS).

b. Terms have been updated and are now consistent with the "Train to Succeed" philosophy and Order 3120.24A.

c. The over-the-shoulder requirement for personnel other than OJT instructors (OJTIs) has been deleted.

d. References to Instructional Program Guide (IPG) specified hours and percentages have been deleted.

e. The recertification requirements (formerly Chapter 6 of order 3120.4G) have been moved to be included with the other types of training requirements (qualification, proficiency, refresher, remedial). (See Chapter 2, paragraph 2-14 of this order.)

f. The requirement to conduct tape talks as refresher training has been removed, since this process is now under the authority of Air Traffic System Effectiveness (ATH).

g. The former Chapter 7, Section 1, Technical Appraisal Program of Order 3120.4G, has been deleted because the requirement no longer exists.

h. Appendix A (formerly Appendix 3 of Order 3120.4G), Instructions for Completing FAA Form 3120-1, Training and Proficiency Record, has been updated to incorporate clarifications.

i. The title has been changed to identify this document as pertaining to "technical" training.

j. Requirements for enrollment in the Academy's Radar Training Facility (RTF) have been identified.

k. Wake turbulence has been added to the refresher training requirement as per National Transportation Safety Board (NTSB) application.

l. The role and responsibility of the Performance Verification Program (ATZ-400) has been defined.

\* m. Orders 3120.24, 3120.20, and 3120.28 and the En Route, Flight Service and Terminal Instructional Program Guides have been canceled and incorporated into this order.

n. The content of this order is being expanded to include all documents that pertain to Air Traffic technical training. As current documents are revised and/or updated, they will be incorporated into this order. Chapters that were reserved for other orders have been deleted.

o. References to the Familiarization and Currency requirement have been deleted from this order. This requirement is now under the authority of ATH.

p. The contract training and administration course required of training administrators (TAs) to attend has been replaced with the completion of the Facility Technical Liaison Officer CATTs course.

**1-6. AUTHORITY.** The Federal Aviation Act of 1958, as amended by the Department of Transportation Act of 1967, authorizes the Secretary of Transportation to provide necessary facilities and personnel for the protection and regulation of air traffic. The Secretary of Transportation is further authorized and directed to prescribe air traffic rules and regulations governing the flight of aircraft; the navigation, protection, and identification of aircraft; the protection of persons and property on the ground; and the efficient utilization of the navigable airspace, including rules for safe altitudes of flight and for prevention of collisions between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects. Also, the Secretary of Transportation is empowered to conduct a school or schools for the purpose of training employees in those subjects necessary for the proper performance of all authorized functions of the FAA.

**1-7. RESPONSIBILITY AND DELEGATION OF AUTHORITY.** As directed by the Director of Air Traffic (AAT-1), the Program Director for Air Traffic Program Management (ATZ-1) is responsible for Air Traffic technical training. By order of the director, all persons involved in Air Traffic technical training shall comply with this order. The Manager, Training Requirements Program (ATZ-100), is delegated authority in all matters related to the training programs and policies described in this order. Supplemental changes and requests for waivers to programs and policies transmitted by this order must receive prior approval through written requests to ATZ-100. If a conflict arises between the contents of this order and other FAA issuances, managers shall request clarification from ATZ-100 through their Air Traffic divisions. The FAA Academy should request any needed clarification from ATZ-100. ATZ-400 is delegated authority in all matters involving the performance verification process (PV) related to Air Traffic Initial Qualification training programs and the Terminal Radar Follow-On Course and is responsible for coursework/curriculum review and oversight for all Air Traffic training conducted at, or prepared by, the FAA Academy.



## Section 2. TERMS OF REFERENCE

### 1-8. WORD USAGE AND DEFINITIONS.

#### a. Word Usage.

1. *Shall* is used when an application of a procedure is mandatory.
2. *Shall not* means prohibited.
3. *Should* means recommended.
4. *May* means permitted.
5. *Will* is used only to indicate futurity and is never used to indicate a requirement.
6. Unless otherwise noted, singular shall indicate plural, and vice versa.

#### b. Definitions.

1. **Air Traffic.** Headquarters Air Traffic organization.
2. **Air Traffic Manager (ATM).** Individual responsible for the overall efficiency and effectiveness of the facility training program.
3. **Centralized Training.** Agency training conducted at a location other than the participant's regularly assigned facility (i.e., FAA Academy, Center for Management Development, etc.). **NOTE:** This may include resident courses conducted locally and funded centrally.
4. **Classroom Training.** Instructional presentations or self-study units administered away from operating positions.
5. **Computerized Air Traffic Training System (CATTS).** Instructional delivery method using interactive computer technology.
6. **Cooperative Education Training Program.** Work/study program providing students with training and work experiences in conjunction with related study at a university or college that prepares them for entry into developmental training.
7. **Correspondence Study.** Program conducted primarily by self-paced lesson plans. It is designed to complement other agency training programs (e.g., advanced training on new systems, refresher training, and supplementary instructions for OJT programs). It is also an integral part of individual development plans (Order 3110.2., Management Improvement Through Team Study (MITTS) Training Program).
8. **Currency.** Prescribed minimum time requirement necessary to work a position of operation independently under general supervision.
9. **Facility Training.** Training conducted at the employee's regularly assigned duty location.

10. **Instructional Program Guide (IPG).** Document that outlines required course content for certain National Air Traffic Training Programs.

11. **Laboratory Training.** Training conducted with job simulation techniques (i.e., nonradar, Dynamic Simulation (DYSIM)/Enhanced Target Generator (ETG)/Training Target Generator (TTG)).

12. **Nonoperational Personnel.** Facility managers, assistant managers, second-level supervisors, National Traffic Management supervisors, and staff specialists who, as a condition of employment, are not required to maintain currency.

13. **On-the-Job Training (OJT).** Training conducted at a worksite by the supervisor or designee (certified OJTI) that provides direct experience in the work environment in which the employee will be performing.

14. **Operational Personnel.** First-level supervisors (including facility managers who also serve as first-level supervisors), traffic management coordinators, full performance level (FPL) controllers, developmentals, and air traffic assistants.

15. **Out-of-Agency Training (OAT).** Training conducted for, contracted for, or otherwise obtained from sources other than the FAA for agency or agency-controlled personnel.

16. **Performance Verification Process (PV).** Academic and scenario-based assessment of students completing FAA Academy En Route Initial Qualification, Tower Initial Qualification, and Terminal Radar Follow-On courses.

17. **Predevelopmental Training Program.** Training program designed to prepare non-Air Traffic Control personnel to enter developmental training.

18. **Proficiency.** Knowing, understanding, and applying air traffic procedures in a safe, orderly, and expeditious manner.

19. **Proficiency Training.** A combination of refresher, supplemental, and remedial training conducted to maintain and update the knowledge and skills necessary to apply air traffic procedures in a safe, orderly, and expeditious manner.

20. **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.

21. **Self-Study.** Training situation wherein the study/learning is accomplished by the individual.

22. **Training Administrator (TA).** Individual designated (in writing) by the facility ATM to serve as the facility training manager.

**1-9. FORMS AVAILABILITY.** Additional copies of the following FAA forms may be ordered from the FAA Logistics Center at the Aeronautical Center.

a. FAA Form 3120-1, Training and Proficiency Record (NSN: 0052-00-077-8002; unit of issue: book).

b. Replacement pages:

1. FAA Form 3120-1.3, Qualification Training (continuation sheet) (NSN: 0052-00-863-7000; unit of issue: sheet).

2. FAA Form 3120-1.5, Proficiency Training (continuation sheet) (NSN: 0052-00-863-8000; unit of issue: sheet).
  3. FAA Form 3120-1.6, Technical Appraisal (continuation sheet) (NSN: 0052-00-863-9000; unit of issue: sheet).
  4. FAA Form 3120-1.7, Management and Other Training (continuation sheet) (NSN: 0052-00-864-0000; unit of issue: sheet).
  5. FAA Form 3120-1.8, Liaison Familiarization Travel (continuation sheet) (NSN: 0052-00-864-1000; unit of issue: sheet).
- c. FAA Form 3120-17, Assistant Controller Profile Report (NSN: 0052-00-857-7000; unit of issue: sheet).
  - d. FAA Form 3120-25, ATCT/ARTCC OJT Instruction/Evaluation Report (NSN: 0052-00-900-2001; unit of issue: sheet).
  - e. FAA Form 3120-26, FSS/AFSS OJT Instruction/Evaluation Report (NSN: 0052-00-900-3001; unit of issue: sheet).





## **Chapter 2. TECHNICAL TRAINING**

### **Section 1. GENERAL**

**2-1. TRAINING OF NON-FAA PERSONNEL.** Orientation or familiarization training may be provided at facilities to persons not employed by the Agency, provided Agency budgetary requirements are met. The scope of such training will be based upon the requirements of individuals or groups requesting this training, consistent with the workload and security restrictions that may exist. Training of non-FAA personnel will be provided in accordance with Agency agreements or memorandums of understanding.

**2-2. RAPCON OR RATCF TRAINING.** It is of national interest that military radar controllers have diversified radar training in order to become more fully qualified for further assignments. Military personnel assigned to a jointly staffed Radar Approach Control (RAPCON) facility or a U.S. Navy Radar Air Traffic Control Facility (RATCF) shall 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, FAA Form 7220-1, or AC Form 8080-2). Participants are expected to qualify in the same manner as FAA personnel. Military personnel must meet FAA requirements to remain current and proficient.

b. Such training shall be documented in the Training and Proficiency Record, FAA Form 3120-1 (see Appendix A of this order). All military participants who have successfully completed the training program shall receive appropriate FAA certificates and ratings and are qualified to be assigned to control positions under general supervision.



## Section 2. ROLES AND RESPONSIBILITIES

### 2-3. IDENTIFICATION OF TRAINING REQUIREMENTS.

a. The Training Requirements Program (ATZ-100), Air Traffic, regional offices, and field facilities, with the support of the FAA Academy, are responsible for a continuing identification and review of Air Traffic Control Specialist (ATCS) job functions and training requirements. Noted changes in specialist job functions shall be forwarded to Air Traffic. It is recognized that national requirements represent a common need; therefore, it is important to provide a means to identify, document, and communicate such requirements for consideration nationally.

b. The following steps shall be followed in the establishment of requirements for new Air Traffic training programs, courses, materials, equipment, etc., or the modification of any of these to meet identified training requirements:

\* 1. Air Traffic personnel shall give continuing consideration to the identification of new training requirements as described above. Any requirement thus identified shall be transmitted in the form of a training proposal through established administrative channels to ATZ-100. The Training Handbook, Order 3000.6, prescribes the appropriate format and requirements for developing training proposals.

2. Regional Air Traffic divisions shall review the proposal and make appropriate recommendations.

3. ATZ-100 shall review training proposals in light of possible National Air Traffic Technical Training application. If necessary, ATZ-100 may request through the Office of Human Resource Management that the FAA Academy Air Traffic Division (AMA-500) provide staff assistance.

4. ATZ-100 shall take appropriate action to establish training programs designed to satisfy identified requirements.

c. Any changes to equipment and/or procedures shall require training of the personnel who will be using the equipment/procedures. Operational personnel shall complete supplemental training prior to the effective date of such changes.

**2-4. NATIONAL SUPPORT.** ATZ-100 may obtain support for the pertinent features of training as required. These features specify parts of the planning, conduct, and administration of Air Traffic technical training and include the development, production, and distribution of training proficiency criteria and written examination materials, excluding En Route and Tower Initial Qualification Training and the Terminal Radar Follow-On course. The Performance Verification Program (ATZ-400) is responsible for the development and administration of the performance verification process (PV) for these courses.

a. ATZ-100 provides support for Air Traffic technical training through:

1. FAA Headquarters,

2. FAA management development programs (e.g., Executive School Program, Executive Potential Program),

3. FAA Academy,
4. Other educational institutions, or

5. Developing methods for evaluation of personnel performance and progress in Air Traffic technical training programs other than En Route Initial Qualification, Tower Initial Qualification, and Terminal Radar Follow-On courses.

b. If training support is not available through the sources listed above, ATZ-100 may coordinate to obtain support through:

1. An Air Traffic facility,
2. Regional offices, or
- \* 3. Any school or institution working under contract with Air Traffic. \*

**2-5. REGIONAL SUPPORT.** Regions shall administer training programs to meet operational requirements and facilitate normal career progression of Air Traffic personnel, consistent with the national Air Traffic Training Program (ATTP). Air Traffic division managers are responsible for implementation and evaluation of the Air Traffic technical training program in their respective regions.

**2-6. FAA ACADEMY SUPPORT.**

a. **National Program.** AMA-500 supports the administration of the national ATTP by performing the following functions:

1. Developing course control documents.
2. Developing and conducting courses of instruction to meet operational needs identified by Air Traffic.
3. Providing professional advice and assistance to aid field facilities in planning, developing, and standardizing Air Traffic technical training programs and courses as well as developing objectives and schedules related to Air Traffic technical training.
4. Developing and updating standardized training procedures and materials for Air Traffic facility training programs.
5. Recommending prerequisites for admission to Air Traffic technical training courses.
6. Assisting in the evaluation of ongoing training programs as required.

b. **Field Training Program Support.** AMA-500 provides the following support, as jointly approved by Air Traffic and ATZ-100:

1. Developmental Training:

(a) Developing IPGs and instructional materials (lesson plans, visual aids, handouts, CATTS, etc.) for each option of the national ATTP.

(b) Developing and distributing written examinations.

(c) Developing and distributing training manuals to support the national ATTP. These may be in any of three forms, as follows, and may be distributed in either hard copy or computerized format:

(1) Reference manuals providing information designed to broaden concepts of a subject and make required information taught in formal training courses easier to understand.

(2) Correspondence study manuals providing training or information that can be learned on a self-study basis.

(3) Programmed learning manuals providing more detailed training than correspondence study on subject matter for which it is impractical to provide formal classroom instruction.

2. Proficiency Training:

(a) Developing and distributing self-study materials, which may be in any of the three forms described in b(1)(c) above or in other forms, such as refresher units, designed to meet the specific objectives.

(b) Developing and distributing instructional materials in special training projects to satisfy immediate Air Traffic requirements.

(c) Administering special prototype programs in selected Air Traffic facilities.

(d) Developing and distributing appraisal instruments used in the field-conducted phases of the national ATTP.

**c. Control Tower Operator Certification.** AMA-500 prepares the control tower operator (CTO) examination in cooperation with the Airman Certification Branch (AVN-460), under the direction of ATZ-400.

**d. Tower Visibility Observation Certification.** The Meteorological Coordinator and Training Consultant (AMA-9) administers the Tower Visibility Observation Certification Program for all FAA and FAA-contract tower employees and maintains accountability for each certificate issued.

**e. Radar Air Traffic Control (ATC) Qualification Examination.** This examination shall be administered in accordance with the appropriate Instructional Program Guide (IPG). Specialists who do not attend Academy training shall be administered an Academy-prepared examination during initial radar training.

**f. En Route Flight Advisory Service (EFAS) Recertification Examination.** AMA-500 prepares and administers the EFAS recertification examination for flight service specialists in the field.

**g. Radar Remote Weather Display System (RRWDS) Certification Examination.** AMA-500 prepares and distributes to regional Training Program Management Officers an RRWDS certification examination to be administered to flight service specialists in the field.

**2-7. ADMINISTRATION.** Training programs shall be planned so that available training resources are fully utilized.

**2-8. TRAINING COURSE POLICY.** All training courses for national, regional, or facility use shall be developed and administered in conformance with the guidance contained in Order 3000.6, Training Handbook, as well as specific directives associated with the various training programs.

- \* **2-9. INSTRUCTIONAL PROGRAM GUIDES (IPGs).** These guides which govern the predevelopmental, the cooperative education, and the three qualification training programs, ensure a standardized evaluation of the training program. The IPG for each program transmits national Air Traffic training requirements. They are developed by ATZ-100 and the FAA Academy. These documents establish an orderly course structure and provide guidance in administering the respective training programs at the FAA Academy and field facilities. All personnel involved in the development or administration of Air Traffic technical training programs are required to maintain a comprehensive working knowledge of these documents. Additional IPGs may be developed for current or new training programs as required.

## **2-10. TRAINING EVALUATION.**

a. **Program Guidance and Evaluation.** ATZ-100 is responsible for program guidance. In cooperation with ATZ-400, ATZ-100 is responsible for operational effectiveness, and evaluation of Air Traffic technical training. Guidelines, procedures, and standards for evaluation are contained in Order 3000.6 and Order 7010.1, Air Traffic Evaluations.

b. **Coursework/Curriculum Review and Oversight.** ATZ-400 is responsible for coursework/curriculum review and oversight of FAA Academy-delivered and developed courses. The purpose of the review is to ensure that courses meet Air Traffic technical training requirements. ATZ-400 is additionally responsible for the oversight and monitoring of PV at institutions participating in the Collegiate Training Initiative (CTI).

**2-11. FACILITY TRAINING RESPONSIBILITIES.** The development and administration of Air Traffic technical training at the facility level is the responsibility of facility personnel, as outlined in this paragraph. The training curriculum shall conform to the applicable national and regional directives and policy statements. All personnel involved in Air Traffic technical training shall maintain a comprehensive working knowledge of the procedures and guidelines outlined in this order and the applicable national, regional, and local training directives.

a. **Air Traffic Manager.** Air Traffic Managers (ATMs) shall ensure that:

1. A training program is established and conducted in accordance with national, regional, and local orders, directives, and IPGs.
2. Training is organized, supervised, and administered; such training shall be described in a facility training directive.
3. Where authorized, an assistant manager for training (AMT) shall be selected and assigned or an individual shall be designated in writing to serve as the training administrator (TA) when no AMT is authorized.
4. Employees entering qualification training receive adequate facility orientation, are thoroughly briefed on training requirements prior to entering training, and are aware of their responsibilities.
5. OJT is accomplished in accordance with Chapter 3 of this order.
6. National Air Traffic Training Tracking Reports are submitted as required (Order 3120.22, National Air Traffic Training Tracking System).
7. FAA Forms 3120-1 are maintained in an accurate and timely manner (see Appendix A of this order).

8. Resource requirements necessary to conduct the facility training program are submitted to the regional Air Traffic division, in accordance with established procedures.

**b. Training Administrator (TA).** TAs shall administer the facility training program. At facilities with an AMT, the AMT will normally be assigned the responsibilities of the TA. Specifically, TAs shall:

1. Develop and maintain a staff of training specialists, where authorized.
2. Ensure that individuals who, as part of their documented job assignment conduct classroom training or develop lesson plans, attend an FAA-approved instructor training course within 1 year of occupying the position. Briefings conducted by staff personnel, or administration of simulated control scenarios, do not constitute classroom training.
3. Ensure that the facility training program is planned, conducted, assessed, and improved on a continuous basis.
4. Arrange for the development of local course materials, visual aids, and control scenarios to supplement nationally distributed materials.
5. Arrange for the evaluation of training progress of all facility personnel.
6. Maintain training records in accordance with paragraph 2-15 of this chapter and Appendix A of this order.
7. Maintain close communication with first- and second-level supervisors, OJTIs, and ATMs regarding all facility training programs and resources.

**c. Facility Training Staff.** The training staff shall:

1. Organize and conduct training.
2. Prepare and maintain training reference materials, tests, special briefings, and lesson plans as required to satisfy facility training requirements.
3. Provide qualification training materials for developmental specialists and Air Traffic assistants upon entry into training.
4. Develop, validate, administer, and evaluate lab scenarios as appropriate.
5. Develop and conduct proficiency training as appropriate.

**d. Second-Level Supervisor.** Second-level supervisors shall:

1. Maintain close communication with the TA and first-level supervisors regarding developmental and full performance level (FPL) controller training.
2. Review monthly performance skill checks.
3. Ensure that first-level supervisors complete the actions listed in paragraph 2-11(e) of this chapter.

**e. First-Level Supervisor.** First-level supervisors shall:

1. Direct the training effort of employees under their supervision.
2. Identify, recommend, coordinate, and schedule proficiency training.
3. Perform position certification and ensure that specialists meet all requirements. This includes making the certification signature entry in the employee's FAA Form 3120-1.
4. Perform OJTI evaluation. This shall be accomplished through personal observation of the employee's performance during OJT.
5. Counsel employees concerning performance requirements on positions of operation.
6. Administer OJTI over-the-shoulder evaluations for those OJTIs currently conducting training within 30 days of assignment and at least every 6 months thereafter, while they are performing OJTI duties. The evaluations shall be documented in the employee's FAA Form 3120-1.

**NOTE:** If the last evaluation has exceeded 6 months, an evaluation shall be conducted within 30 days upon resumption of OJTI duties.



## Section 3. TRAINING REQUIREMENTS FOR AIR TRAFFIC CONTROL SPECIALISTS

### 2-12. QUALIFICATION TRAINING.

a. Each ATCS shall complete the qualification training outlined in the IPG and be certified to perform associated operational duties within the hours outlined in the facility training directive.

b. Instruction shall be provided consistent with the types of air traffic services provided by the facility.

c. To the extent possible, traffic situations encountered should become progressively more complex.

d. If certification is not achieved, the ATM shall initiate action in accordance with Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, and/or other appropriate agency directives.

e. ATCSs assigned to terminal radar facilities shall complete Basic Radar Training at the FAA Academy's Radar Training Facility (RTF). Enrollment in this course will be limited to ATCSs assigned to or selected for radar approach control facilities who have not previously been radar certified.

**NOTE:** ATCSs at limited radar approach control (LRAC) facilities and visual flight rules (VFR) towers are not eligible to attend RTF. ATCSs at these facilities shall complete the bright radar indicator tower equipment (BRITE)/D-BRITE certification and radar qualification exams. In addition, specialists at LRAC facilities shall complete Stage VII Radar Control training (see Appendix F of this order).

### 2-13. PROFICIENCY TRAINING.

a. **Requirement.** Proficiency training is required for operational personnel to maintain and upgrade the knowledge and skills necessary to apply air traffic procedures in a safe, orderly, and expeditious manner. Proficiency training shall include all mandatory briefing items pertaining to qualification, certification, proficiency, or management training distributed by headquarters/regional offices/facilities. The purpose of this requirement is to ensure that the appropriate proficiency training is available to improve knowledge and skill levels and provided to all employees. All proficiency training shall be documented in the employee's FAA Form 3120-1.

**NOTE:** It is emphasized that proficiency training needs will differ from facility to facility and, therefore, should be tailored to meet identified requirements.

b. **Development.** The development of proficiency training shall be based on, but not limited to, the following types of performance measurements:

1. OJTI over-the-shoulder evaluations
2. Written/CATTS tests
3. Annual performance rating
4. Observed performance

c. **Refresher Training.** Each facility shall establish in writing an annual refresher training program for all operational personnel. Supervisors shall stress that the training described in this paragraph is for proficiency improvement, not performance evaluation.

1. This program shall include, but is not limited to, training on the following topics:

(a) Unusual situations, such as weather affecting flight, aircraft equipment failure, hijacking, and other types of emergencies.

(b) Seldom used procedures, such as transitioning to and applying nonradar separation and procedures for special flight handling.

(c) Safety alerts and traffic advisories in facilities that are required to provide these services.

(d) Wake turbulence information and application.

(e) Areas identified as needing reinforcement.

2. Terminal radar facilities shall include within their respective radar simulation training and refresher programs "real time" aspects, such as airspace intruders. Intruder refresher training shall be administered at least once a year. Scenarios shall include:

(a) Tracked and untracked targets, depending on equipment resource capability.

(b) Mode C as well as non-Mode C-equipped targets.

(c) Situations involving airspace violators who have established two-way radio communication and violators who have not established two-way radio communications.

3. Those facilities with simulation training capability (i.e., Enhanced Target Generator (ETG), Dynamic Simulation (DYSIM), Computerized Air Traffic Training System (CATTSS)) shall include at least 2 hours simulator training on the topics identified in paragraph 2-13(c)(1) above.

**NOTE:** En route centers are authorized to substitute video tapes and instruction in lieu of the simulation training methods required.

4. Operational personnel shall receive the following training in lost aircraft orientation:

(a) Terminal and en route personnel, annually.

(b) Flight service personnel, quarterly.

5. All certified tower visibility observers shall receive, at least annually, refresher training in tower visibility procedures.

6. En Route and terminal personnel required to maintain radar proficiency shall receive the following refresher training:

(a) Every 6 months: Review or demonstrate the steps for transitioning from the primary source of radar information to the primary backup system and vice versa.

(b) Annually: Review control procedures associated with operation in the primary backup mode (i.e., letters of agreement, handoffs, beacon code assignment, facility directives, and transition checklists) or utilize the primary backup mode for the actual separation and control of air traffic.

7. Air Traffic Facility Continuity Contingency Plan (refer to Order 7210.3, Facility Operation and Administration). Annually ensure familiarity with procedures and airspace based on the facility contingency plans dealing with loss of radar.

**d. Supplemental Training.** Supplemental training is conducted when changes occur pertaining to new/revised procedures, regulations, or equipment (e.g., GOES, ICSS, Model-1, Model-1FC, WSI Graphics, Low-Level Wind-Shear Alert System (LLWAS), etc.). Operational personnel shall complete training prior to the utilization of such changes.

**e. Remedial Training.** Remedial training is conducted to correct specific operational deficiencies. Emphasis shall be on the positive aspects of the training.

1. When an employee is to be given remedial training, he/she shall be notified in writing of the specific subject areas to be covered and the reasons therefore. Remedial training shall be confined to those subject areas.

2. The methods and contents will be tailored to individual requirements and may vary from laboratory scenarios to personalized instruction. Supervisors shall determine the most effective method.

## **2-14. RECERTIFICATION.**

**a. Unsuccessfulness/Restrictions.** Personnel who fail to meet currency requirements of this chapter and those restricted from working an operational position shall be recertified prior to the resumption of operational duties (Order 7210.3). Removal from an operational position, any subsequent training, and recertification shall be recorded in the employee's FAA Form 3120-1 as described in Appendix A of this order. In addition, FAA Form 3120-25, ATCT/ARTCC OJT Instruction/Evaluation Report, and FAA Form 3120-26, FSS/AFSS OJT Instruction/Evaluation Report, shall be used for the performance documentation of recertification (see Appendixes B and C). Recertification is required under two circumstances:

1. **Performance related:** This circumstance results from unsatisfactory performance observed by the supervisor or discovered as the result of reviewing facility records, data, and/or audio recordings or when it is determined that a controller is found to have contributed to an operational deviation/error. Concise data relating to the performance review or the deviation/error shall be entered in FAA Form 3120-1. Personnel decertified from an operational position as a result of performance-related circumstances shall receive remedial training.

(a) First-level supervisors shall ensure that all prerequisites have been met prior to performing the recertification.

(b) Recertification may be accomplished by individual position or a single action covering multiple positions at the discretion of the ATM.

2. Nonperformance related: This circumstance involves loss of currency as a result of a nonperformance-related absence (i.e., medical, detail, temporary duty assignment, collateral duty, etc.).

**b. Recertification Hours.**

1. Personnel who have not worked an operational position for 120 days or less may, at the discretion of the ATM or TA, be recertified and returned to operational duties without additional training; they may receive classroom/laboratory/OJT not to exceed 25 percent of the target hours prescribed prior to recertification evaluation.

2. Personnel who have not worked an operational position for more than 120 days but less than 1 year shall receive classroom/laboratory/OJT not to exceed 50 percent of the target hours prescribed prior to the recertification evaluation.

3. Personnel who have not worked an operational position for 1 year or more shall receive classroom/laboratory/OJT not to exceed 100 percent of the target hours prescribed prior to the recertification evaluation.

4. To be recertified, a person must demonstrate, under direct supervision, the ability to satisfactorily perform relevant operational duties during normal workload conditions, except in cases of operational errors or deviations, which are governed by Order 7210.3.

5. If recertification is not achieved, the ATM or TA may assign additional OJT hours and/or skill enhancement training as outlined in Chapter 3 of this order or may refer the individual to a training review board prior to initiating action in accordance with Order 3330.30 and/or other appropriate agency directives.

## Chapter 3. AIR TRAFFIC CONTROL SPECIALIST ON-THE-JOB TRAINING AND POSITION CERTIFICATION

### Section 1. GENERAL

**3-1. PURPOSE.** This chapter establishes procedures for standardization of instruction and evaluation of the on-the-job training (OJT) and position certification process for Air Traffic Control Specialists (ATCSs).

**3-2. DEFINITIONS.**

**a. Additional OJT Hours.** OJT hours beyond the target hours are referred to as additional OJT hours. On an individual basis, target hours may be extended up to 20 percent by the developmental's supervisor based on the recommendation of the training team. (See paragraphs 3-3, 3-10.)

**b. Certification Skill Check.** An assessment used to determine if a developmental demonstrates the knowledge and skill level necessary to certify on an operating position. (See paragraph 3-8.)

**\* c. Consolidated Positions.** Those operating positions of the same nature which are routinely combined; i.e., 6D/13D, 8R/10R, etc. ATMs may authorize training on consolidated positions when the consolidation of these positions is a routine configuration at a facility. Each facility shall identify in its training order those operating positions which are routinely combined. OJT time may be allotted between the consolidated positions based on traffic activity. If the developmental is certified on one of the consolidated positions, the full amount of OJT time may be allotted to the position on which the developmental is not certified. OJT skill checks are permitted on consolidated positions only if training occurred on these consolidated positions. Certification is permitted on consolidated positions only if recommendation for certification occurred while these positions were consolidated. A certification on consolidated positions certifies the developmental on each of the individual operating positions involved. \*

**d. Developmental.** Title applies to all GS-2152s entering the facility OJT training program. (See paragraph 3-19.)

**e. Developmental's Supervisor.** The supervisor of record for the developmental. (See paragraph 3-16.)

**f. Discontinuation of Training.** A result of a training review (paragraph 3-11) that recommends no further training be conducted. If this recommendation is adopted by the Air Traffic Manager (ATM), the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**g. Minimum Certification Hours.** A percentage of the target hours required before becoming eligible for certification on a given operating position within the facility. (See paragraph 3-3.)

**h. On-the-Job Familiarization (OJF) Hours.** Time that a developmental is assigned to monitor specialists who use various techniques and skills and to acquaint the developmental with the functions and operations of an operating position or area of specialization. OJF does not constitute OJT and shall not count as target hours. OJF shall be completed prior to beginning OJT. (See paragraphs 3-3, 3-5b.)

i. **OJT Instructor (OJTI).** A designated individual who instructs the developmental during OJT. (See paragraphs 3-4, 3-18.)

j. **Performance Skill Check.** An assessment used to compare the knowledge and skill levels of a developmental to those required for certification. Performance skill checks are used to assess training progress. (See paragraph 3-7.)

k. **Skill Enhancement Training.** Training used to improve knowledge level or skill performance. This training will not include OJT or count against target hours. (See paragraph 3-9.)

l. **Suspension of Training.** An action taken by the developmental's supervisor based upon training performance that ceases training pending the outcome of a training review. (See paragraph 3-16.) Suspension of training for reasons other than training performance may not require a training review.

m. **Target Hours.** The training hours normally required for certification on a given operating position within the facility. Each facility shall set target hours in accordance with the procedures in this order. Target hours are the number of OJT hours within which most individuals will be able to certify on a given operating position without needing additional training. Target hours do not include OJF time, additional OJT hours, skill enhancement training time, or the time used to conduct performance or certification skill checks. The target hours may vary for different categories of individuals in training. (See paragraph 3-3.)

n. **Training Team.** Designated individuals who facilitate the training of a developmental by continuously assessing the training progress and providing feedback that enhances training. (See paragraphs 3-5, 3-20.)

## Section 4. TRAINING AND PROFICIENCY RECORDS AND REPORTS

### 2-15. POLICY.

a. An FAA Form 3120-1 shall be prepared for each ATCS and will be maintained as a permanent part of the employee's training file. It shall 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 shall also be documented in the record. The guidance contained in Appendix A of this order shall be followed in making entries on FAA Form 3120-1, which is governed by the provisions of the Privacy Act of 1977.

b. For reporting purposes, the terms "student/trainee/developmental" 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, since each section/page is not labeled for each person.

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 should include (TEMPORARY) after the name of the facility.
3. Section III entries should correctly reflect that the training was completed, either in separate phases/positions or as a single action (all positions combined).
4. If no three-letter 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.

### 2-16. RESPONSIBILITIES.

a. The facility manager or designated representative shall be responsible for initiating and maintaining the employee's FAA Form 3120-1.

b. Upon completion of a centralized training course, the organization providing the course shall provide to the facility a record of each specialist's performance and achievement for inclusion in the specialist's FAA Form 3120-1.

**NOTE:** At the FAA Academy, AMA-500 shall operate as a field facility for the purposes of this directive in relationship to FAA Form 3120-1 management and administration.

**2-17. TRAINING RECORDS AND REPORTS.** A training report shall be completed on the appropriate FAA training form each time a specialist engages in OJT or laboratory training. Reports reflecting certifications shall contain the original signature of the certifying official. Specific instructions regarding completion of training reports are contained in Appendix B, Appendix C, and Chapter 3 of this order and facility training directives.

**2-18. RECORDING TRAINING.**

- a. Entries on training reports shall be sufficiently detailed to support appropriate administrative actions (i.e., promotions, awards, dismissals, reassignments, litigations, etc.).
- b. All training shall be entered in FAA Form 3120-1 as soon as possible, but in no case later than 30 days following the month in which training is completed. The certification signature shall be that of the certifying official. A signature stamp may be used by the certifying official.
- c. Mandatory briefing items not pertaining to qualification, certification, proficiency, or management training (i.e., standards and conduct, drug awareness, the Performance Management System (PMS), etc.), shall not be recorded in FAA Form 3120-1. Facilities shall maintain a record of completion of these mandatory briefings. This can be accomplished by whatever method is best for maintenance at the facility (i.e., a separate briefing list).
- d. When completing FAA Form 3120-1, enter only the required specific data. All information must be verified by the specialist initialing in the space provided or signing the approved appendix on monthly proficiency training, indicating that he/she received the training indicated on the form.
- e. At terminal facilities without published surveillance approach procedures, enter the notation "surveillance approaches not conducted in this facility" following the radar phase entry in Section III of each individual training record.

**2-19. DISPOSITION OF RECORDS AND REPORTS.**

- a. Training reports may be disposed of upon completion of each qualification course (e.g., skill enhancement, training plan, etc.). Exception: Reports reflecting position certification and all graded examinations required by the IPG shall be retained for 1 year after the employee is facility rated.
- b. In the event of a termination of employment due to a training failure, all training records, reports, training plans, etc., shall be retained at the facility for a period of 1 year. After 1 year, if appropriate, they shall be handled in accordance with Order 1350.15, Records Organization, Transfer, and Destruction Standards. (Procedures for record disposition may vary from region to region. Therefore, reference should be made to regional supplements regarding this process.)
- c. Upon termination of employment, except for training failures, FAA Form 3120-1 shall be forwarded to the regional Human Resources Management Division.
- d. The regional Air Traffic division may require retention of records beyond the periods specified above because of special circumstances (i.e., litigation, appeals, etc.). In these cases, facilities shall comply with Air Traffic division guidance.



## Section 2. OJT AND CERTIFICATION PROCESS

### 3-3. FACILITY TRAINING HOURS. Each facility shall:

- a. Establish target hours, minimum certification hours, and OJF hours for each operating position within the facility. Cross-sectional work groups shall be used to recommend these hours.
- b. Establish target hours, minimum certification hours, and OJF hours for categories of individuals in order to adjust training requirements for the level and recency of previous experience (e.g., those with no previous experience, individuals transferring from a same-type/same-level facility, individuals transferring from same-type/lower level facility, etc.).
- c. Evaluate established hours at least annually and, if necessary, adjust the hours to meet facility needs.

**NOTE:** OJF shall be required for two operating positions in a facility/area, as designated by the training team. OJF is optional on all other positions, based on the recommendation of the training team.

### 3-4. SELECTION OF OJTIs.

- a. The selection of OJTIs shall be accomplished as follows:
  1. To be eligible for selection as an OJTI, a candidate shall meet the following minimum qualification criteria:
    - (a) Qualified a minimum of 6 months on positions involved, except for transferring ATCSs with previous OJTI experience on the same-type position, who shall be qualified on the positions involved for a minimum of 60 hours. This requirement may be waived at the ATM's discretion for noncontrol positions.
    - (b) Operationally current on positions involved.
    - (c) Recommended by immediate supervisor.
  2. A panel shall be designated by the ATM to select OJTI candidates. Composed of a minimum of two people, the panel shall consider, as a minimum, the following personal attributes in its recommendation of OJTI candidates:
    - (a) Human relations skills.
    - (b) Communication skills.
    - (c) Motivation and attitude.
    - (d) Objectivity.
    - (e) Credibility.
  3. The panel shall forward its recommendation to the ATM or the ATM's designee for final approval.
- b. Prior to being designated an OJTI, the selectee shall successfully pass the approved FAA Air Traffic OJTI course.

**3-5. TRAINING TEAMS.**

a. A training team shall be established by the developmental's supervisor for each developmental. The training team shall consist of:

1. Two OJTIs. One OJTI will serve as the primary OJTI.
2. The developmental.
3. The developmental's supervisor.
4. Other person(s) if assigned by the ATM.

**NOTE:** The specific individuals on this team may change as the developmental's training progresses in order to meet individual and/or facility needs.

b. The training team shall:

1. Review the developmental's training history prior to that individual starting OJT. If practical, the other training team members should observe the developmental perform tasks in a simulated environment.

2. Determine the two operating positions for which OJF is required.

**NOTE:** OJF shall be completed prior to beginning OJT on positions for which OJF is assigned.

3. Determine the need for OJF other than on the two required operating positions.

4. Ensure continuous, objective assessment of progress during training and provide the assessment to other training team members.

5. Identify the need to improve performance and, as needed:

- (a) Recommend the types of skill enhancement training to be provided, and/or
  - (b) Recommend additional OJT hours.

6. Provide recommendations to the developmental's supervisor on the developmental's readiness for certification.

c. The developmental's supervisor shall act as the training team leader and shall retain the responsibility to direct the developmental's training by modifying the plan for training after considering the recommendations of the training team. The supervisor shall facilitate training team functions and seek support of facility management and staff personnel when necessary.

d. The two OJTIs shall be responsible for providing the majority of the developmental's OJT. The primary OJTI will usually train the developmental. The secondary OJTI will provide training when the primary OJTI is not available. When neither the primary nor the secondary OJTI is available, any OJTI may provide training.

**3-6. PLAN FOR TRAINING.**

a. The training team members shall discuss a plan for training before beginning OJT on positions. At a minimum, the discussion of the plan for training shall include requirements, team responsibilities, target hours, timeframes, and individual training needs.

b. A facility checklist may be used to facilitate the discussion.

c. The date that the plan for training was discussed shall be documented.

**3-7. PERFORMANCE SKILL CHECKS.**

a. Performance skill checks shall be used:

1. To compare the knowledge and skill levels of a developmental to those required for certification.

2. To identify those areas that require improvement to achieve certification.

b. Performance skill checks shall occur at least every calendar month on each position for which the developmental is receiving OJT. In addition, performance skill checks may occur at any time, based on the recommendation of the training team.

c. Performance skill-check time does not count toward OJT hours.

d. Performance skill checks shall be performed by the developmental's supervisor or a supervisor who maintains familiarity or currency on the operating position. In the event the supervisor only maintains familiarity on an operating position, an OJTI shall be plugged in and responsible for the position during the performance skill-check session.

e. The results of the performance skill check shall be documented on FAA Form 3120-25, ATCT/ARTCC OJT Instruction and Evaluation Report (see Appendix B), and FAA Form 3120-26, FSS/AFSS OJT Instruction/Evaluation Report (see Appendix C). The documentation shall include:

1. A description of performance.

2. Recommendations for performance improvement.

3. A recommendation for one of the following:

(a) Continuation of OJT.

(b) Skill enhancement training.

(c) Suspension of training.

f. After the performance skill check, the developmental's supervisor shall consider:

1. The developmental's performance during OJT.
2. The performance demonstrated during the performance skill-check session.
3. The recommendation(s) resulting from the performance skill-check session.
4. Input from other training team members.

g. The developmental's supervisor shall then take one of the following actions:

1. **Continuation of OJT.** The developmental will continue OJT. It is anticipated that certification will be attained within the target OJT hours or that additional OJT hours will be assigned.
2. **Skill Enhancement Training.** Training (other than OJT) will be provided in order to improve performance. The type(s) of training to be provided shall be recommended by the training team. This training shall not count toward OJT hours.
3. **Suspension of Training.** If training is suspended, a training review shall be conducted.

### 3-8. CERTIFICATION SKILL CHECKS.

a. Only the developmental's supervisor can certify the individual or suspend training. The developmental's performance of the knowledge and skills required for certification shall be assessed through a single certification skill-check session that may include verbal questioning, simulation, or other methods. This session shall:

1. Be conducted only after minimum certification hours have been completed.
2. Be recommended by the training team or conducted at the completion of OJT hours.
3. Be identified as a certification skill check prior to the session.
4. Not count toward OJT hours.

\* 5. Be performed by the developmental's supervisor or a supervisor who maintains familiarity or currency on the operating position. Where these requirements cannot be met, the hub manager or his/her supervisory designee shall perform the certification skill check. In the event the supervisor only maintains familiarity on an operating position, an OJTI shall be plugged in and responsible for the position during the certification skill-check session. \*

b. The results of the certification skill check shall be documented on FAA Forms 3120-25/26. The documentation shall include:

1. A description of performance.
2. Recommendations for performance improvement.

3. A recommendation for one of the following:

- (a) Certification.
- (b) Continuation of OJT.
- (c) Skill enhancement training.
- (d) Suspension of training.

c. After the certification skill check, the developmental's supervisor shall consider:

- 1. The developmental's performance during OJT,
- 2. The developmental's performance demonstrated during the certification skill-check session,
- 3. The recommendation(s) resulting from the certification skill-check session, and
- 4. Input from other training team members.

d. The developmental's supervisor shall then take one of the following actions:

1. **Certification.** For a certification skill check to result in certification, all applicable job functions must be rated as satisfactory or not observed. Verbal questioning, simulation, or other methods may be used to demonstrate knowledge of a job function when not observed. If a job function is not observed during this session, the supervisor must document that the developmental has demonstrated satisfactory performance/knowledge for that job function.

- 2. Continuation of OJT.
- 3. Skill enhancement training.
- 4. Suspension of training.

### **3-9. SKILL ENHANCEMENT TRAINING.**

a. The purpose of this training is to enable the developmental to return to OJT and perform at a level that will allow certification within the assigned OJT hours.

b. Skill enhancement training may be used:

- 1. To improve knowledge level or skill performance.
- 2. To develop skills that cannot be obtained in the operational environment (e.g., seasonal traffic).

c. This training shall not include OJT or count toward assigned OJT hours.

d. The developmental's supervisor shall identify the need for skill enhancement training using recommendations from the training team, if appropriate.

e. The training team shall recommend the type (e.g., computer-based instruction, simulation labs, classroom) of training to be provided, if appropriate.

f. The developmental's supervisor shall:

1. Coordinate the use of training resources.
2. Schedule the training.
3. Discuss the skill enhancement training with the developmental.
4. Document the plan in writing.

### **3-10. ADDITIONAL OJT HOURS.**

a. Additional OJT hours may be:

1. Used for those developmentals who cannot certify within the target hours but, in the opinion of the training team, can certify within the additional hours provided.

2. Recommended by the training team.

3. Assigned by the developmental's supervisor based on the recommendation of the training team. The additional hours may be up to 20 percent of target hours and shall be documented.

b. Upon the completion of additionally assigned OJT hours, a certification skill check shall be conducted.

c. After the certification skill check, additional OJT hours may be assigned as long as the total additional OJT hours do not exceed 20 percent of the target hours. If the additional 20 percent of the target hours has been used, the developmental's supervisor shall take one of the following actions:

1. Certification, or
2. Suspension of training.

### **3-11. TRAINING REVIEW PROCESS.**

a. The purpose of the training review process is to ensure that all opportunities for training success were utilized while maintaining the integrity of the training program. Training reviews shall be conducted when requested by an ATM/hub manager or when training has been suspended due to the developmental's training performance.

b. The results of the training review shall be communicated to the developmental as soon as possible, and in no case shall the training review process exceed 30 days.

c. The training review shall be conducted by the following group:

1. A minimum of two of the following individuals selected by the ATM/hub manager:

(a) A first-level supervisor other than the developmental's supervisor. (If not available onsite, the hub manager may designate this duty to any first-level supervisor within the hub.)

(b) A second-level supervisor at facilities that have onsite, second-level supervision (other than the ATM). (If not available onsite, the hub manager may designate this duty to any second-level supervisor in the hub.)

(c) Assistant Manager for Training (AMT) or Quality Assurance/Training Specialist (QATS) or Training Administrator (TA). (If not available onsite, the hub manager may designate any of these individuals from within the hub.)

2. A representative designated by the union.

d. The ATM and/or training team members may be asked to provide information during the training review process, but shall not be part of the training review process group.

e. This training review may include an assessment of the training history and interviews of the training team members and/or other persons, as appropriate.

f. At the completion of the review, recommendation(s) are forwarded to the ATM/hub manager. Recommendations shall include either 1 or 2 below:

1. Continuation of training, including:

(a) Reassignment to a new training team, and/or

(b) Assignment of skill enhancement training, and/or

(c) Assignment of a new amount of OJT hours, and/or

(d) Other actions that would help the individual to certify.

2. Discontinuation of training.

g. The ATM/hub manager shall consider the recommendation(s) resulting from the training review in making a final determination for continuation or discontinuation of training for the developmental.

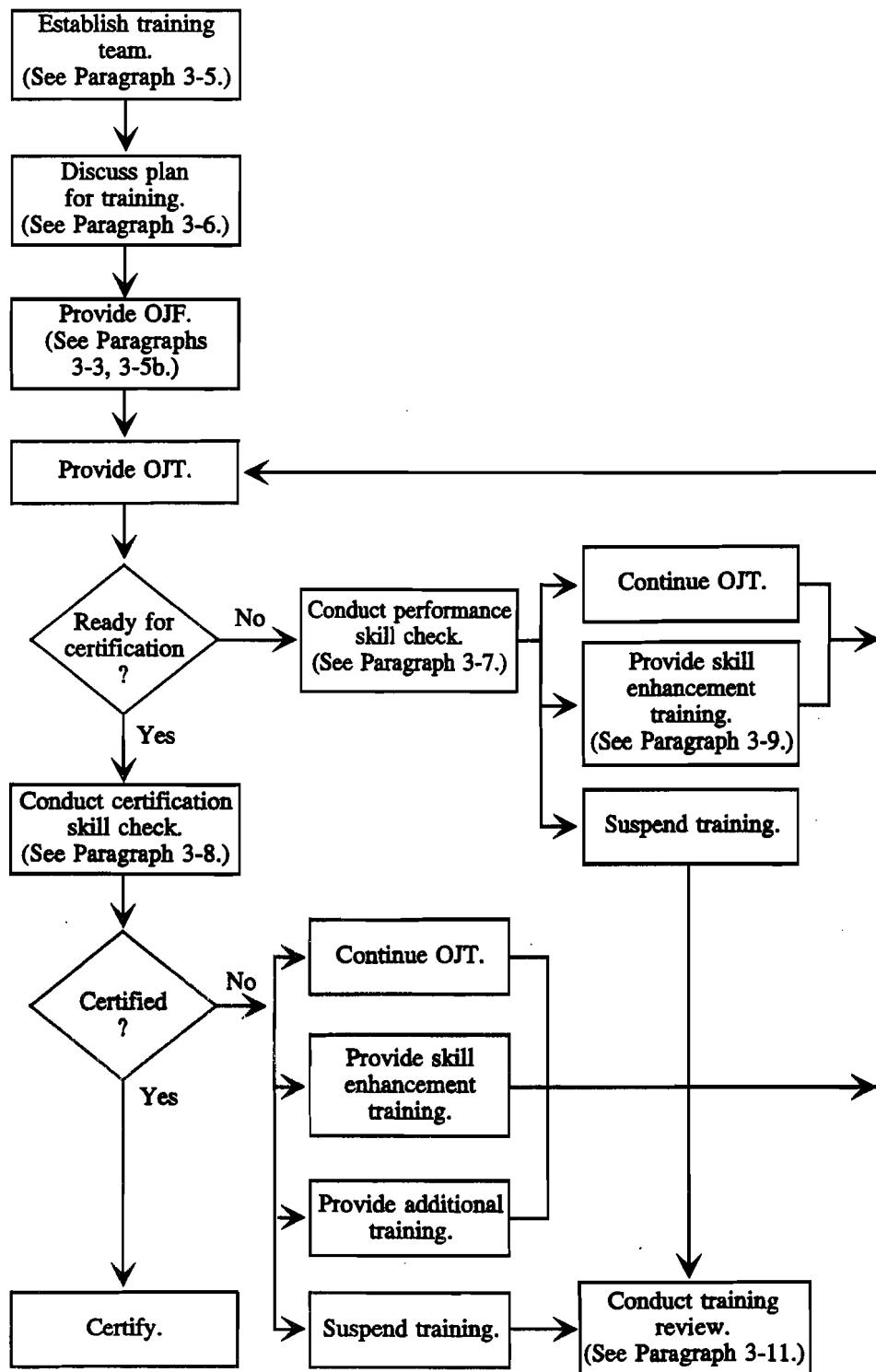
**NOTE:** Exceptions to the training review process may be approved by the regional Air Traffic Division manager, without coordination with headquarters.

**3-12. OJT AND CERTIFICATION PROCESS FLOWCHARTS**

a. Two graphic representations of the OJT and certification process in the form of flowcharts are presented on the following pages. The first flowchart is an abbreviated version of the process that provides a general overview of the basic steps involved in the OJT and certification process. (See Figure 3-1). The second flowchart is a more detailed representation of the OJT and certification process. (See Figure 3-2).

b. Neither flowchart is intended as a complete description of the OJT and certification process, or as a substitute for the policy set forth in this order. The flowcharts are, rather, intended to assist in the understanding of the revised OJT and certification process. Paragraph numbers have been included in the flowcharts to reference the location of specific policy information in the body of the order.





**FIGURE 3-1. OJT AND CERTIFICATION PROCESS  
(ABBREVIATED VERSION)**

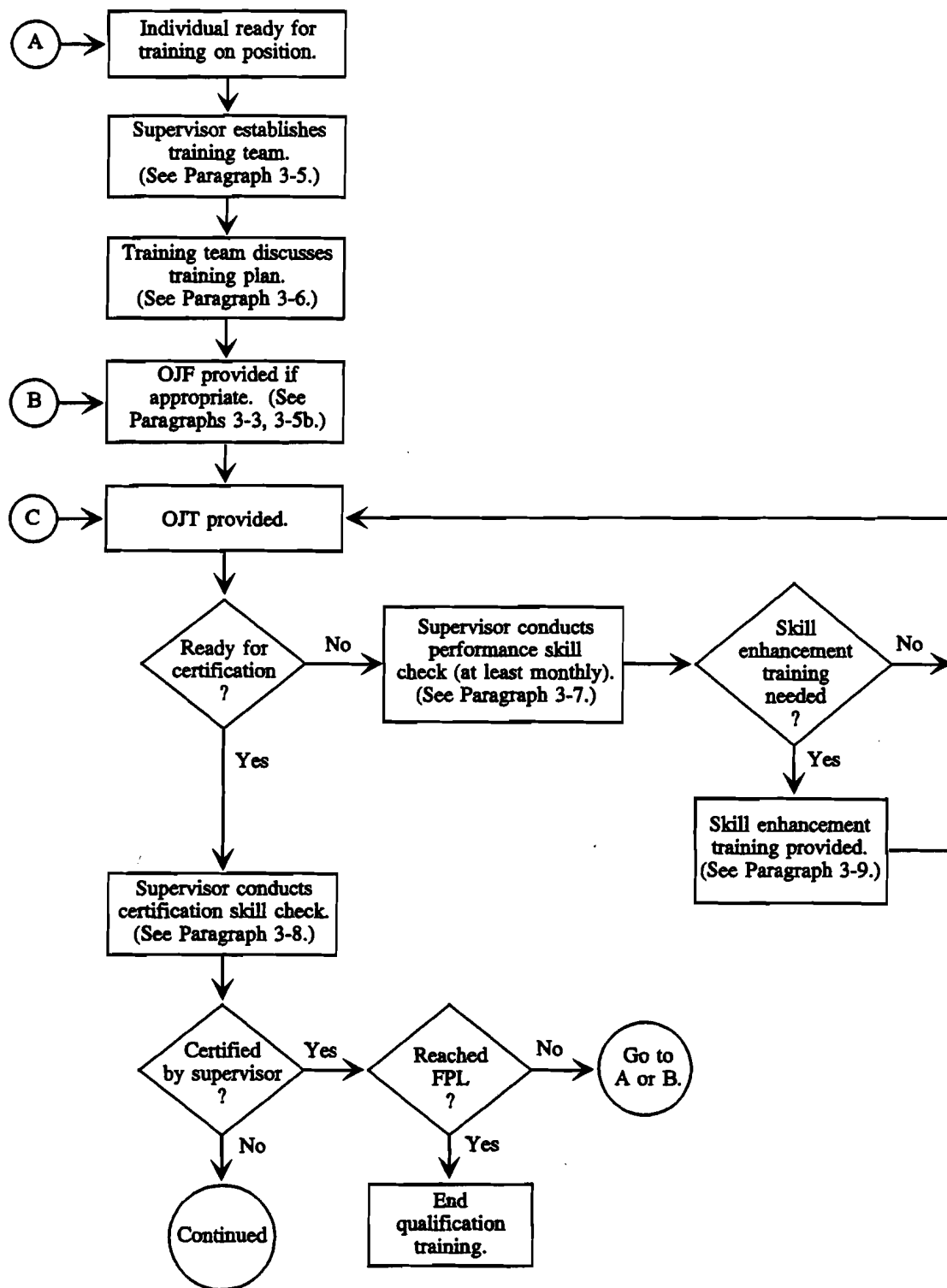


FIGURE 3-2. OJT AND CERTIFICATION PROCESS

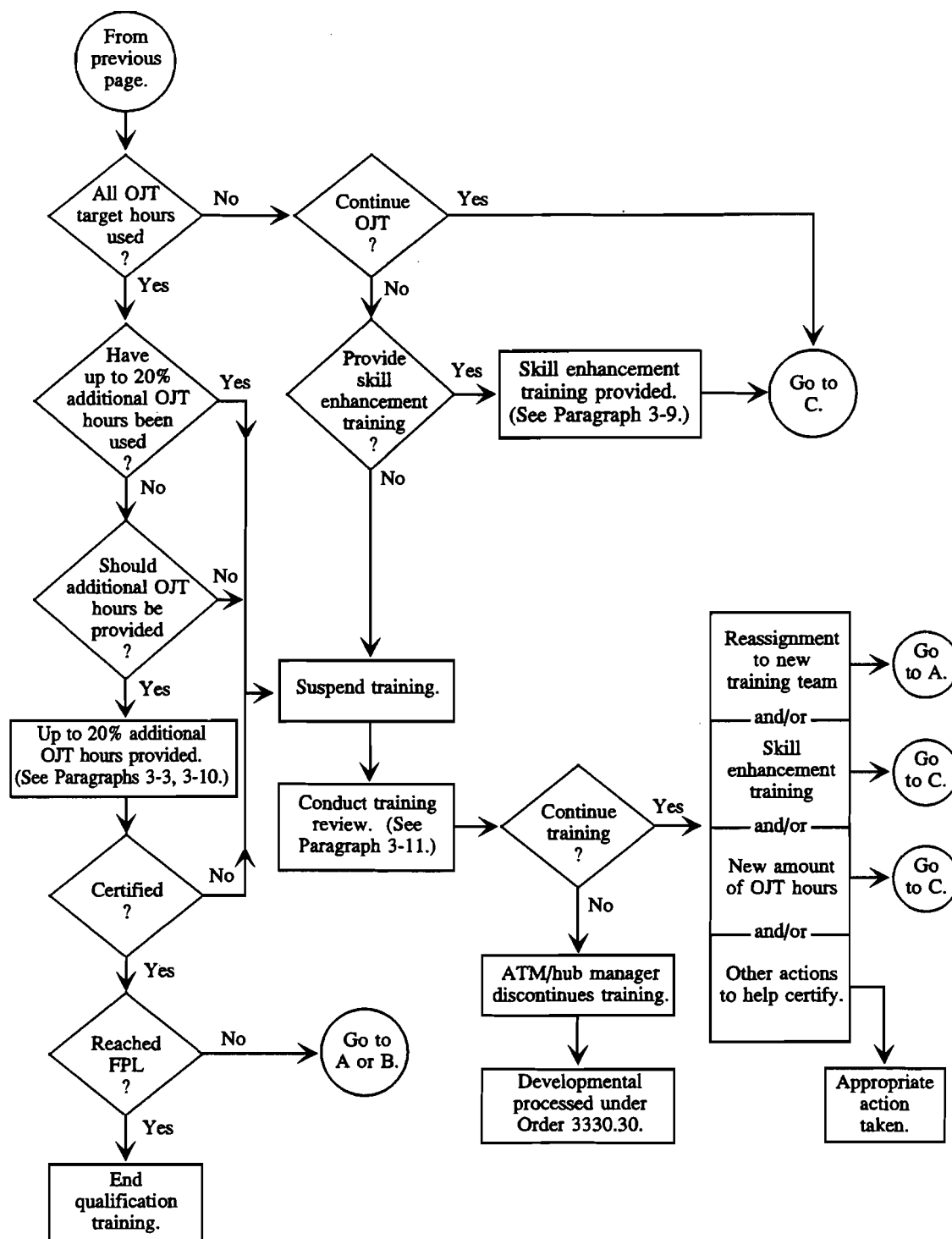


FIGURE 3-2. OJT AND CERTIFICATION PROCESS  
(Continued)



### Section 3. ROLES AND RESPONSIBILITIES

**3-13. AIR TRAFFIC MANAGER (ATM).** The ATM shall ensure the overall efficiency and effectiveness of the facility training program. In specific, the ATM shall:

- a. Ensure that a training program is established and conducted in accordance with national, regional, and local orders and directives.
- b. Designate, in writing, an individual to serve as the Training Administrator (TA). The ATM may be the designated TA.
- c. Ensure that individuals designated as TAs attend required training courses within 1 year of occupying the position. At facilities with contract training, the TA shall complete the Facility Technical Liaison Officer CATTS course within 1 year of occupying the position.
- d. Ensure that individuals who, as part of their documented job assignment, conduct classroom training or develop lesson plans, such as AMTs, TAs, training specialists, or QATS, attend an FAA-approved instructor training course within 1 year of occupying the position. Briefings conducted by staff personnel, or administration of simulated control problems, do not constitute classroom training.

**NOTE:** If resources do not permit a facility to meet the requirements of subparagraphs c and d, a waiver may be granted by the Program Director for Air Traffic Program Management (ATZ-1).

- e. Ensure that individuals entering certification training receive adequate facility orientation and are thoroughly briefed on the Instructional Program Guide (IPG); facility training directive; Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists; and other associated directives prior to entering training.
- f. Ensure that National Air Traffic Training Tracking Reports are submitted as required. (See the latest edition of Order 3120.22, National Air Traffic Training Tracking System.)
- g. Ensure that training reports are properly maintained and completed in accordance with Agency directives.
- h. Submit resource requirements necessary to conduct the facility training program to the regional Air Traffic Division, through the hub manager, in accordance with established procedures.
- i. Ensure that an annual schedule of required proficiency training is maintained and that proficiency training is accomplished in accordance with the latest edition of this order.
- j. Ensure that facility target hours, minimum certification hours, and OJF hours are established, maintained, and updated.
- k. Ensure that an annual evaluation of the efficiency and effectiveness of the OJT program is conducted and a written report is prepared. Use this report as a basis for improving the facility training program.
- l. Ensure adherence to procedures in national training directives unless operational circumstances necessitate alternative actions as authorized by the Office of Air Traffic Program Management, Training Requirements Program (ATZ-100), through the regional Air Traffic Division.

- m. Ensure that all OJTIs, supervisory ATCSs, and Control Tower Operator Examiners meet the qualification criteria in this order and the latest edition of Order 7220.1, Certification and Rating Procedures.
- n. Ensure that OJTIs are recommended and designated in accordance with the national policy.
- o. Ensure that training teams receive support of the TA and second-level supervisors, when applicable.
- p. Forward comments and information concerning curriculum or training requirements to ATZ-100 through established regional channels, with a copy to the regional Air Traffic Training Coordinator.
- q. Initiate the training review process.

**3-14. TRAINING ADMINISTRATOR (TA).** TAs shall administer the facility training program. At facilities with an AMT, the AMT will normally be assigned the responsibilities of the TA. Specifically, TAs shall:

- a. Develop and maintain a staff of training specialists, where authorized.
- b. Ensure that the training contract is managed so that quality training is being conducted and that instruction conforms to national, regional, and local orders and directives.
- c. Ensure that the facility training program is planned, conducted, assessed, and improved on a continuous basis.
- d. Monitor the performance of training specialists/contract instructors in classroom and laboratory training, and assess such performance on a continuous basis. Ensure that the training is of the highest possible quality and needed improvements occur in a timely manner.
- e. Ensure that local course materials, visual aids, and control problems are developed and properly labeled to support materials distributed nationally.
- f. Maintain close communication with first-level and second-level supervisors, where appropriate, and the ATM regarding all facility training programs and resources.
- g. Plan and direct the training of OJTIs and personnel conducting performance and certification skill checks.
- h. Establish and maintain the OJT documentation process.

**3-15. SECOND-LEVEL SUPERVISORS.** Second-level supervisors shall manage OJT of all personnel under their supervision. If a facility has no onsite second-level supervisors, these duties are to be delegated to the ATM or TA in the local training directive. The second-level supervisor shall:

- a. Maintain close communication with the AMT/TA and first-level supervisors regarding all training.
- b. Provide oversight and direction to first-level supervisors, where appropriate, to ensure compliance with training directives.

- c. Ensure that a review of documentation of performance skill checks is conducted.
- d. Ensure that training is provided to the maximum extent possible.
- e. Ensure that training teams receive support as directed by the ATM.

**3-16. DEVELOPMENTAL'S SUPERVISOR.** The developmental's supervisor of record shall direct training activities of employees under his or her supervision, promote cooperation and communication, and coordinate resources to assist training. The developmental's supervisor shall:

- a. Administer, assign, monitor, and facilitate training.
  - 1. Establish a training team for each developmental on each operating position.
  - 2. Ensure that OJF is provided for two operating positions.
  - 3. Ensure that OJF is provided for additional operating positions, based on the recommendation of the training team.
  - 4. Ensure that the training team OJTIs provide the majority of OJT.
  - 5. Initiate corrective actions when necessary.
  - 6. Ensure that OJT is productive, to the maximum extent possible, and commensurate with the level of experience of the developmental.
  - 7. Identify, recommend, coordinate, and schedule additional OJT hours and skill enhancement training, if necessary.
- b. Maintain communication among the training team, AMT/TA, and second-level supervisors, as appropriate.
- c. Provide feedback to OJTIs on the effectiveness of the training provided.
- d. Ensure that OJT reports are completed and discussed with the developmental as soon as possible after each session. This discussion should include an overview of the session, an identification of the strengths and weaknesses, and specific recommendations to improve performance.
- e. Ensure that OJF hours are documented. OJF hours may be documented on FAA Forms 3120-25/26, or in a regionally/locally approved format.
- f. Ensure that OJTIs have no other duties to perform during training sessions.
- g. Maintain either currency or familiarization on positions for which certifications are conducted.
- h. Sign the certification entry in the employee's Training and Proficiency Record, FAA Form 3120-1. This signature certifies that the employee has completed all certification training for the position.
- i. Promote teamwork skills for training team members.

j. Conduct performance and certification skill checks.

1. Document performance and certification skill-check results and recommendations on FAA Forms 3120-25/26.
2. Provide feedback to the individual after each performance or certification skill check.
3. Take one of the following actions:
  - (a) Certify the developmental,
  - (b) Continue OJT,
  - (c) Assign skill enhancement training, or
  - (d) Suspend OJT.

k. Serve as team leader for his or her developmentals' training team(s).

1. Make the final determination to modify the plan for training by providing skill enhancement training or additional OJT hours after considering training team recommendations.
2. Make the final determination regarding certification after considering training team recommendations.
3. Make the final determination regarding the suspension of training after considering training team recommendations.

**NOTE:** The developmental's supervisor shall retain the responsibility to direct the developmental's training by modifying the plan for training, and to continue or to suspend training after considering the recommendations of the training team.

**3-17. OTHER FIRST-LEVEL SUPERVISORS.** Other first-level supervisors shall:

a. Conduct performance and certification skill checks.

1. Document performance and certification skill-check results and recommendations on FAA Forms 3120-25/26.
2. Provide feedback to the individual after each performance or certification skill check.
3. Recommend one of the following actions:
  - (a) Certification,
  - (b) Continued OJT,
  - (c) Assignment of skill enhancement training, or
  - (d) Suspension of OJT.



4. Brief the developmental's supervisor on the performance and/or certification skill-check results and recommendation(s).

b. Ensure that OJT reports are completed and discussed with the developmental as soon as possible after each session. This discussion should include an overview of the session, an identification of the developmental's strengths and weaknesses, and specific recommendations to improve performance.

c. Serve on training reviews, if requested.

**3-18. ON-THE-JOB TRAINING INSTRUCTOR (OJTI).** The OJTI is responsible for assisting the developmental in acquiring the knowledge and skills necessary to certify. The OJTI shall:

a. Ensure that the OJT process includes preferred methods of teaching through a combination of direction, demonstration, and practical application.

**NOTE:** OJT instruction shall be based on handbook requirements and procedures and should provide guidance on control judgment. Alternative techniques should be demonstrated by the OJTI.

b. Be familiar with the developmental's previous training performance prior to commencing OJT.

c. Document OJT results on FAA Forms 3120-25/26.

d. Discuss the performance as soon as possible after each session. This discussion should include an overview of the session, an identification of the developmental's strengths and weaknesses, and specific recommendations to improve performance.

e. Have only OJT duties to perform during training sessions.

**\* NOTE:** OJT instruction is not permitted where the instructor and the developmental are plugged into separate control positions. \*

f. Provide OJT to no more than one developmental at the same time.

g. Satisfy training objectives as specified in the IPG/plan for training.

h. Keep the developmental's supervisor informed of progress.

i. Assume the responsibilities of a training team member when assigned to a training team.

**3-19. DEVELOPMENTAL.** The developmental shall actively participate in training to achieve certification and perform operational assignments in order to maintain proficiency. The developmental shall:

a. Review and discuss the plan for training with the other members of the training team. Ensure that all aspects of the plan for training are understood.

b. Review, discuss, and sign FAA Forms 3120-25/26.

**NOTE:** Signing these forms does not necessarily imply agreement, only that the information was discussed. Written comments on the forms are permitted and should include items to be reviewed/discussed with the training team.

c. Advise his or her supervisor immediately of any extenuating circumstance(s) that might impede training progress.

d. Be physically and mentally prepared to receive OJT, exercise initiative, and study to ensure satisfactory training progress and certification.

e. Verify that all OJT/OJF times are recorded accurately.

f. Engage in OJT only on positions that have been assigned.

g. Be responsive to training performance feedback from OJTIs/supervisors.

**3-20. TRAINING TEAM.** The training team shall facilitate the training of a developmental by continuously assessing the training progress and providing feedback that enhances training. The training team shall consist of the developmental, two OJTIs, the developmental's supervisor, and any other personnel designated by the ATM. Each member of the training team shall:

a. Review and discuss the plan for training.

b. Determine the two positions for which OJF will be provided and determine the need for OJF on other operating positions.

c. Ensure continuous, objective assessment of progress during training and provide that assessment to other training team members.

d. Identify the need to improve performance and, as needed:

1. Recommend the types of skill enhancement training to be provided, and/or

2. Recommend additional OJT hours.

e. Provide recommendations to the developmental's supervisor on readiness for certification or suspension of training.

f. Provide information during the training review process, as requested.

## Chapter 4. COMPUTERIZED AIR TRAFFIC TRAINING SYSTEM (CATTS)

### Section 1. GENERAL

**4-1. PURPOSE.** This chapter establishes policy and procedures for the Computerized Air Traffic Training System (CATTS).

**4-2. DEFINITIONS.**

- a. **Authorware.** Icon-driven programming language software used to automate computerized courseware.
- b. **BBS.** Computerized bulletin board service.
- c. **CATTS.** Computerized Air Traffic Training System.
- d. **CATTS Platform.** The computer hardware, software, and support equipment used to develop and deliver CATTS lessons.
- e. **CPMIS.** Consolidated Personnel Management Information System.
- f. **CMI.** Computer-managed instruction.
- g. **Courseware.** Computer-based instruction (CBI) lessons delivered on CATTS.
- h. **TPMO.** Training Program Management Office.
- i. **Local Site (Facility).** Facilities with CATTS development capability. Hub sites and their satellite facilities are considered local sites.
- j. **CATTS Staff Coordinator.** Individual(s) in the FAA Academy, Air Traffic Division, who maintain system information for and coordinate responses to requests from CATTS users through the CATTS BBS.
- k. **Source Code.** Uncompiled computer programming, graphics including individual graphic components, wav files, text files, development and debugging tools, and any other course or lesson files related to the program in a format compatible with the CATTS platform.
- l. **SYSOP.** System operator responsible for ensuring that CATTS BBS hardware or software is operational.
- m. **Site Developer.** Person designated to develop local CATTS courseware, etc.
- n. **Training/Site Administrator.** Manager or designee responsible for administration of local CATTS training and development.

- o. Courseware validation.** Verification of technical accuracy, meeting training requirements, courseware functionality, and program execution.
- p. MPAS.** Micro PLATO Authoring System. PLATO courseware converted to run on the CATTS platform.
- q. CMI compliance.** Courseware that is executable on the CATTS platform under CMI. There are different levels of compliance based on data output.

## **Section 2. ROLES AND RESPONSIBILITIES**

### **4-3. TRAINING REQUIREMENTS PROGRAM (ATZ-100).**

- a. Authorize the allocation of resources.
- b. Coordinate the use of CATTS in regard to support of training needs.
- c. Manage the CATTS program.
- d. Designate efforts for courseware development, distribution, training requirements, validation, and maintenance of software/courseware.
- e. Authorize the release of source codes for local modifications.
- f. Authorize the National CBI Implementation Office (AMA-121) to distribute CATTS hardware and software to Air Traffic facilities.
- g. Oversee the CATTS BBS and authorize the files available for distribution.
- h. Review proposed CATTS development activities and coordinate those efforts for a maximum utilization of resources.
- i. Update the CATTS BBS on proposed national CATTS development efforts and completions.

### **4-4. REGIONAL RESOURCE MANAGEMENT BRANCH.**

- a. Maintain an awareness of development efforts through the CATTS BBS.
- b. Coordinate the distribution of locally developed lessons through ATZ-100.
- c. Provide and coordinate the use of subject matter experts for course review and front-end development efforts.

### **4-5. NATIONAL CBI IMPLEMENTATION OFFICE (AMA-121).**

- a. Ensure that contract maintenance support is provided for CATTS.
- b. Establish and maintain local- and wide-area networking.
- c. Provide ATZ-100 with information on software developed by other services.
- d. Provide hardware/software system upgrades.
- e. Distribute videodiscs provided by services.
- f. Master, duplicate, and distribute courseware on CD-ROM.
- g. Provide and maintain a virus management system for CATTS.

- h. Provide CMI compatibility support to courseware developers.
- i. Provide hotline support for all system-related issues.
- j. Prepare and update the FAA national catalog of available FAA CBI courseware.

#### **4-6. FAA ACADEMY, AIR TRAFFIC DIVISION (AMA-500).**

- a. Provide CATTS hotline to support courseware.
- b. Maintain technical accuracy/currency of CATTS courseware.
- c. Establish, maintain, and operate the CATTS BBS.
- d. Provide resources to review and validate courseware.
- e. Provide technical courseware development support to local developers.
- f. Maintain a database documenting the status of courseware development and availability. (The purpose of this database is to manage courseware distributed by Air Traffic from one local site to another.)
- g. Verify technical accuracy of any software developed prior to distribution.
- h. Establish CATTS Staff Coordinator position.
- i. Assist in management of courseware development.

#### **4-7. TRAINING ADMINISTRATOR (TA).**

- a. Implement CATTS training at each facility, including CMI.
- b. Secure and limit access to student data and records, testing materials, and the operating system.
- c. Update student records and ensure that data are entered into the CPMIS, when required, through the appropriate Air Traffic division to ensure that course credit is given.
- d. Direct development of local courseware and modification of national courseware for site-specific needs.
- e. Provide subject matter experts to review national courseware.
- f. Administer onsite CATTS training and maintenance of CMI.
- g. Maintain current and accurate information on the status of CATTS development efforts. Prior to undertaking any new CATTS development effort, review existing CATTS development projects through the CATTS BBS and log an entry of the proposed development effort in order to reduce redundancy and increase potential productivity.

**4-8. OFFICE OF HIGHER EDUCATION AND TRAINING, AIR TRAFFIC TRAINING PROGRAM DIVISION (AHT-500).**

- a. Provide technical and program management support to the service as requested.
- b. Provide a sharing environment of courseware development resources between services.
- c. Assist ATZ-100 with coordination, collection, and validation of Air Traffic requirements for Capital Investment Plan-funded projects.





### **Section 3. CATTS USE AND SYSTEM CONFIGURATION MAINTENANCE**

**4-9.** The CATTS platform shall be used for training purposes. TAs shall provide reasonable access to all employees.

a. The CATTS platform shall not be used as dedicated general office automation machines or for functions not related to training.

b. The CATTS equipment belongs to the FAA. The ownership of resource allocation under the program belongs to Air Traffic. ATZ-100, through coordination with regional offices, reserves the right to reallocate resources where the needs of the program dictate. All courseware/software developed by using the CATTS platform, other Government equipment, and/or Government time is the property of the FAA.

c. Data output shall be limited to information required for training purposes.

d. CATTS equipment shall be located in a secure space, thereby controlling access to prevent theft, vandalism, or violation of privacy. The central processing unit (CPU) chassis shall be locked and the keys stored in a secure area.

e. The hardware and software configuration of the CATTS equipment are under national configuration management. Data on the C drive and the E drive are required for the CMI to operate properly. Additions, deletions, or modifications to data on these drives are prohibited without the express written consent of ATZ-100.

f. Copyrighted materials (e.g., music, graphics, video, maps, text, cartoons, or programming code) shall not be used without the copyright owner's release or permission.



## Section 4. COURSEWARE AND LESSON DEVELOPMENT

### 4-10. LESSON DEVELOPMENT.

a. Local lesson development process shall include the following steps:

1. Step 1: Initial Design.

(a) During the initial design, the site developer should define the target audience for the lesson, the skills to be trained, the content to be presented, and the methods (e.g., tutorials, simulations, questions, games, etc.) and media (e.g., video, audio, graphic, etc.) to be used.

(b) Lesson design shall emphasize student control of movement through the lesson, interactivity, and immediate feedback.

2. Step 2: Lesson Development.

(a) During this step, the site developer should outline the content to be presented, create the lesson storyboards, write the test questions, and program the lesson.

(b) Lesson formats should include save-place capacity, page numbering or screen referencing, a help/reference menu, and a glossary of terms.

(c) The lessons shall execute on a CATTs platform under CMI.

3. Step 3: Testing.

(a) The lesson should be reviewed to ensure that all branches and interactions work as intended.

(b) Following this quality review, the lesson should be tested with representatives from the target audience. (See Figure 4-1 for an optional checklist to assist you when reviewing draft CATTs lessons.)

(c) The lesson shall be reviewed for technical accuracy and agency appropriateness of material.

4. Step 4: Finalize.

(a) The lesson should be finalized based on the results of the pilot test.

(b) Locally developed lessons shall be delivered to ATZ-100 or its designee through the regional office for review and validation prior to distribution to other field sites.

b. The national lesson development process shall include the following steps:

1. Step 1: Initial Design.

(a) During the initial design, the developer shall define the target audience for the lesson, the skills to be trained, the content to be presented, and the methods (e.g., tutorials, simulations, questions, games, etc.) and media (e.g., video, audio, graphic, etc.) to be used.

---

**Instructions:** You may want to use this checklist when reviewing draft CATTs lessons.

---

1. Instructions on how to use the lesson are clear.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Opportunities are provided for reviewing completed sections of the lesson where appropriate.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Opportunities are provided to exit the lesson. When returning, individuals can begin at the exit point rather than starting over.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
4. Lesson length does <u>not</u> exceed 20 to 30 minutes <u>or</u> the lesson is divided into separate modules.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5. Interactions are frequent and meaningful (i.e., require thought, not just pushing a key).	<input type="checkbox"/> Yes	<input type="checkbox"/> No
6. Motivation/interest is maintained throughout the lesson. When possible, the pace of the lesson is under the user's control.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7. Selected media supports the lesson content and is not distracting.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8. Lesson content and references are technically correct. Lesson completion date and/or date of the last technical update is provided.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9. Lesson content, graphic images, video, and audio are free of racial, ethnic, gender, and other stereotypes.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10. Lesson content is sequenced in a logical progression.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
11. Lesson content is at the appropriate level of depth for the objectives and for the intended users.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
12. Lesson content is complete. No key concepts or information have been omitted.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
13. Clear and simple sentences are used. Screen formats are attractive and uncluttered.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14. Test items are fair and provide all information needed to respond. Subject-matter experts have reviewed the test items.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
15. Feedback is provided after each response. Explanations are provided on <u>why</u> a response is correct or incorrect.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
16. All paths and branches have been tested to ensure that the lesson is free of bugs.	<input type="checkbox"/> Yes	<input type="checkbox"/> No

---

Figure 4-1. CATTs LESSON CHECKLIST

(b) Lesson design shall emphasize student control of movement through the lesson, interactivity, and immediate feedback.

(c) Designs shall be approved by ATZ-100 prior to lesson development.

2. Step 2: Lesson Development.

(a) During this step, the developer shall outline the content to be presented, create the lesson storyboards, write test questions, and program the lesson.

(b) Lesson formats shall include save-place capacity, page numbering or screen referencing, a help/reference menu, and a glossary of terms.

(c) Lessons shall be approved by ATZ-100 prior to field testing.

(d) Nationally developed courseware shall incorporate CMI compliance level 4.

3. Step 3: Testing.

(a) The lesson shall be reviewed by ATZ-100 to ensure that all branches and interactions work as intended.

(b) Following this quality review, the lesson shall be tested with a representative sample of field personnel. (See Figure 4-1 for an optional checklist to assist you when reviewing draft CATTS lessons.)

(c) The lesson shall be reviewed for technical accuracy and agency appropriateness of material.

4. Step 4: Finalize.

(a) The lesson shall be finalized based on the results of the pilot test.

(b) The lesson shall be approved by ATZ-100 prior to distribution.

**4-11. LESSON DISTRIBUTION.**

a. National distribution shall be authorized by ATZ-100. Targeted facilities shall receive:

1. CD-mastered lessons as they become available.

2. Videodisc lessons as required.

b. Lesson distribution shall include written information on the target audience, the relevance to the curriculum, any required prerequisite knowledge, a summary of the course content (including course length), and the type of training (e.g., mandatory, annual, currency, required, etc.).

c. Source-code versions of lessons shall be provided to site developers as instructed by ATZ-100.

**4-12. COURSEWARE MODIFICATION AND MAINTENANCE.**

- a. An entry of proposed CATTS efforts shall be logged on the CATTS BBS prior to modifying lessons.
- b. Local site modification to national lessons shall be limited to adding or supplementing relevant site-specific content without disabling functionality, impacting CMI compatibility, or removing course content.
- c. Maintaining technical accuracy and currency in locally developed or modified lessons shall be the responsibility of the development site. Updated copies shall be sent semiannually to ATZ-100 through the regional office, Resource Management Branch.

**4-13. STUDENT INFORMATION.**

- a. A student's social security number (SSN) shall be used to register for CATTS lessons and to maintain student training records.
- b. Student information shall be limited to those items needed for enrollment purposes and for updating training records and lesson validation.

**4-14. QUALITY CONTROL.** Technical accuracy and validity of site-developed courseware/software utilized locally is the responsibility of the developing site or hub. A final version of all site-developed courseware/software shall be delivered to ATZ-100 through the regional office. The distribution of all courseware/software between sites shall be routed through ATZ-100. All courseware/software will then be obtainable from ATZ-100 through the CATTS BBS. Direct distribution between sites is not permitted. In addition, courseware/software sent for evaluation or review is not to be redistributed, except through ATZ-100.

**4-15. BULLETIN BOARD SERVICE (BBS).**

a. **Purpose.** The CATTS BBS shall provide information exchange among site developers and site administrators.

- 1. Site developers shall share and exchange information on available resources (e.g., FAA-developed graphics, site-developed lessons, or knowledge of active lesson development).
- 2. Training/site administrators shall be able to obtain on-line support for lesson development and delivery.

b. **Management.** The BBS SYSOP shall evaluate requests and respond appropriately.

- 1. The BBS SYSOP shall maintain a current system operation scheme to include service rules, login/access procedures and requirements, and a system backup plan.
- 2. Excluding weekends and holidays, the BBS SYSOP operating hours shall be 8:00 a.m. e.s.t. to 7:00 p.m. e.s.t.

c. **Content.** The CATTS Staff Coordinator shall, as a minimum, maintain the following for users of the CATTS BBS:

1. A library of FAA-owned or FAA-created graphics, templates, and programs, which shall be made available for dissemination and distribution through the CATTS BBS.

2. A log of active and proposed development projects, validated lessons, and courseware, including information on the training needs to be met, the target audience, and a synopsis of content.





**MEMORANDUM OF UNDERSTANDING**  
**between the**  
**NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION**  
**and the**  
**FEDERAL AVIATION ADMINISTRATION**

1. This Memorandum of Understanding concerns the implementation of the Computerized Air Traffic Training System (CATTS) in the NATCA bargaining unit. It represents the results of all the Parties' collective bargaining obligations under the Title 5 U.S.C. Chapter 71, Executive Order 12871, and Article 7 of the Parties' collective bargaining agreement.
2. The Union shall designate two bargaining unit members (one enroute and one terminal) to serve as NATCA's technical representatives concerning CATTS. These representatives shall be the Agency's national-level points of contact for the following purposes:
  - a. designation of subject matter experts requested by the Agency for input into design and development of software, and to assist in course review and front-end development efforts;
  - b. any significant technical issues concerning CATTS which either Party wishes to discuss.

If the technical representatives identified in this Section are required by the Agency to travel in connection with their responsibilities, the Agency will pay their travel and per diem. These responsibilities will be performed on duty time.

3. The Agency will notify the Union of any proposed uses for CATTS beyond those specified in Chapter 4 of this order.
4. The Agency shall notify the Union at the national level of any and all future test sites in which it plans to install the CATTS system. The Union shall also be given prior notification of the installation and deployment dates for CATTS at these sites.
5. The Union at the national level will be notified in accordance with Article 7 of the Parties' agreement of major upgrades to CATTS which will impact bargaining unit members.
6. In the event that local software is developed and/or deployed, the local Union representative will be notified and given the opportunity to provide input concerning that software.
7. In accordance with Article 67, Section 2 of the Parties' agreement, the Union shall be given the opportunity to comment on the formulation of proficiency and development training programs.
8. CATTS will be administered in compliance with all relevant Agency Orders and Directives.

9. This Memorandum supersedes any existing Memoranda of Understanding between the Agency and NATCA at any level concerning CATTS.

10. This Memorandum may be reopened only by mutual consent of the Parties.

27 Sept 1994

Date

For NATCA

For the Agency

Susan Lou

Tom C. G. L.

Kate Burke

Acord Kellman

## APPENDIX A

# INSTRUCTIONS FOR COMPLETING TRAINING AND PROFICIENCY RECORD FAA Form 3120-1

**a. INTRODUCTION.** This appendix conveys instructions for recording training and certification entries on FAA Form 3120-1, Training and Proficiency Record.

1. Air Traffic Managers (ATMs) shall 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 appendix. The requirements described herein are not retroactive.

2. Training, certification, recertification, technical performance appraisal, and operational error information shall 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.

3. All entries, except for the employee's initials, shall be recorded no later than 30 calendar days following the month in which the training was completed. Employees shall initial for training received within 30 calendar days of the date that training was recorded. By initialing, the employee acknowledges that the training recorded has been provided. Operating initials shall be used.

4. Entries on FAA Form 3120-1 reflecting position certification/recertification (Section III) and performance reviews (Section VI) shall be signed by the employee's first-level supervisor, even though this individual may not have performed the position certification or appraisal. This signature indicates that the entry (information) logged in FAA Form 3120-1 is accurate.

5. The certification signature for any classroom training conducted, including briefings, indicates that the entry is correct. Therefore, the certification signature for classroom training entries may be that of the facility's Air Traffic staff member or supervisor who has knowledge that the training was conducted.

6. Training record entries shall be complete and accurate. Entries shall be typed or written in blue or black ink. Entries shall not be erased or otherwise obliterated. If an entry must be changed, the incorrect entry shall be lined out and the correct information shall be inserted. Employees who had initialed the erroneous entry shall initial such changes. The person making the change shall initial the new entry.

7. A signature stamp may be used by the certifying official or supervisor as an aid to reduce workload. A signature stamp may only be used by the person whose signature is on the stamp.

8. Each training entry shall have a separate signature and set of initials, except as noted in Section V.

The following sections explain in detail how to complete each section of FAA Form 3120-1.

b. **SECTION I, EMPLOYMENT DATA.** The entries in this section pertain to specific employment information.

Section—I  
**EMPLOYMENT DATA**

EMPLOYEE'S NAME <i>SE</i> Erica S. <del>Smith</del> Gardner 12/26/88			DATE EOD WITH FAA 1/2/85		
FACILITY C	EOD D	EMPL INIT E	FACILITY C	EOD D	EMPL INIT E
MLC FSS III	4/2/85	<i>SE</i>			
APA ATCT II	5/1/86	<i>SE</i>			
APA ATCT III	1/9/90	<i>SE</i>			
ZAU ARTCC III	11/20/92	<i>SE</i>			

**Figure A-1**

**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 within 30 days of the date of the 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-letter 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 within 30 days of the date of the entry.

**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.

c. SECTION IIA, AIR TRAFFIC CERTIFICATES.

1. 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.

2. Entries to indicate on-the-job training (OJT) course completions are made in this section.

Section—IIA  
**AIR TRAFFIC CERTIFICATES**

CERTIFICATE TITLE	A	CERTIFICATE NUMBER	B	DATE ISSUED	C	EMPL INIT	D
Control Tower Operator		447612340		4/15/93		LP	
Pilot Weather Briefing Certificate		68359		10/15/93		LP	
NOAA/FAA Agreement TWR Visibility Cert		157-34-2232		10/19/95		LP	
Air Traffic Control Specialist (ATCS) Certificate		N/A		11/16/96		LP	
OJT Instructor		N/A		9/2/97		LP	

PAGE 1

**Figure A-2**

**Block A**      **CERTIFICATE TITLE:** Enter the title or the official abbreviation 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 within 30 days of the date of the entry.

d. **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 requirements of the Control Tower Operator (CTO) and/or Air Traffic Control Specialist (ATCS) certification for that facility or area.

Section—IIB  
**AIR TRAFFIC RATINGS**

RATING	A	FACILITY	B	DATE ISSUED	C	EMPL INIT	D
Facility		MLC FSS		10/4/85		BD	
Facility		APA ATCT		3/3/89		BD	
East Area		ZAU ARTCC		3/12/94		BD	
East Area—Rating Suspended		ZAU ARTCC		7/10/94		BD	
East Area		ZAU ARTCC		10/16/94		BD	

PAGE II

**Figure A-3**

- Block A**     **RATING:** Enter the title of the rating or the suspended rating.
- Block B**     **FACILITY:** Enter the facility's three-letter identifier and type.
- Block C**     **DATE ISSUED:** Enter the effective date of the rating or the suspension.
- Block D**     **EMPL INIT:** The employee must initial in this block within 30 days of the date of the entry.

**e. SECTION III, QUALIFICATION TRAINING.** Initial qualification training requirements are described in Appendixes C through E of this order. Training relating to position qualification shall be recorded in this section, including the date that the plan for training was discussed, skill enhancement training, and additional OJT hours as designated in Chapter 3.

1. To record Academy initial courses, use the following numbers:
  - (a) Screening, Placement, and Training Program—Course 50330.
  - (b) Terminal Follow-On Training—Course 50023.
  - (c) En Route Follow-On Training—Course 50130.
  - (d) Flight Service Station (FSS)—Course 50220.
2. For other courses, use the following numbers:
  - (a) Traffic Management Coordinator (TMC) Specialized Training—Course 50115.
  - (b) Cadre Training for Traffic Management Unit—Course 50403.
  - (c) Traffic Management Unit—Course 55139 (40 hours).
  - (d) Terminal Controller-in-Charge—Course 55024 (32 hours).
  - (e) En Route Controller-in-Charge—Course 55108.
  - (f) FSS Controller-in-Charge—Course 55025.

The following examples explain how to correctly record position qualification training.

## e. SECTION III, QUALIFICATION TRAINING. (Continued)

Section—III

Terminal

## QUALIFICATION TRAINING

A PHASE OF TRAINING	B FAC IDENT	C DATE STARTED	D NO OF AUTH HOURS	E EMPL INIT	F DATE COM- PLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
55058	AAC	1/2/96		Ky	4/25/96		Ky	T. Williams
Training Plan	PHL	4/28/96					Ky	T. Williams
55060 Flight Data	PHL	5/1/96	16	Ky	5/4/96	16	Ky	T. Williams
55060 OJT	PHL	5/8/96	20	Ky	5/15/96	11.5	Ky	T. Williams
55061 Clearance Delivery	PHL	5/5/96	5	Ky	5/6/96	5	Ky	T. Williams
55061 OJT	PHL	5/8/96	20	Ky	5/15/96	11.5	Ky	T. Williams
55062 Ground Control	PHL	5/22/96	16	Ky	5/23/96	16	Ky	T. Williams
55062 OJT	PHL	5/24/96	60	Ky	6/26/96	51	Ky	T. Williams
55063 Asst Local/ Local	PHL	6/27/96	16	Ky	6/28/96	8	Ky	T. Williams
55063 Asst Local OJT	PHL	6/29/96	20	Ky	8/8/96	10	Ky	T. Williams
55063 Local OJT	PHL	7/8/96	60	Ky	8/8/96	45	Ky	T. Williams
55064 Non-Radar								
55059 RTF								
55065 Terminal Radar	PHL							
55065 Radar Pos. OJT	PHL							

Figure A-4



## e. SECTION III, QUALIFICATION TRAINING. (Continued)

Section—III

Terminal

## QUALIFICATION TRAINING

A PHASE OF TRAINING	B FAC IDENT	C DATE STARTED	D NO OF AUTH HOURS	E EMPL INIT	F DATE COM- PLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
Arrival Data (AD)	PHL	8/5/96	30	Ky	12/19/96	22	Ky	T. Williams
Dept. Data (DD)	PHL	8/5/96	40	Ky	12/19/96	28	Ky	T. Williams
Dupont(D)	PHL	1/6/97	90	Ky	5/20/97	82.5	Ky	T. Williams
Skill Enhance- ment	PHL	3/23/97	10	Ky	3/25/97	10	Ky	T. Williams
South Dept (SD)	PHL	12/20/96	90	Ky	5/20/97	65.7	Ky	T. Williams
Pottstown (P)	PHL	5/25/97	90	Ky	9/3/97	65	Ky	T. Williams
North Arrival (NA)	PHL	1/6/98	90	Ky	3/15/98	34.4	Ky	T. Williams
North Dept. (ND)	PHL	8/22/97	90	Ky	12/1/97	53	Ky	T. Williams
Yardley(Y)	PHL	12/8/97	90	Ky	3/2/98	62.6	Ky	T. Williams
South Arrival (SA)	PHL	3/5/98	90					
Final Vector(FV)	PHL	6/2/97	90	Ky	8/15/97	34.6	Ky	T. Williams
Modena (M)	PHL	8/22/97	90	Ky	12/1/97	18.3	Ky	T. Williams
Woodstown (W)	PHL	3/5/98	90					
ASR	PHL	9/2/96	N/A	Ky	9/7/96	N/A	Ky	T. Williams

Figure A-4 (Continued)

## e. SECTION III, QUALIFICATION TRAINING. (Continued)

\*

En Route

Section—III

## QUALIFICATION TRAINING

A PHASE OF TRAINING	B FAC IDENT	C DATE STARTED	D NO OF AUTH HOURS	E EMPL INIT	F DATE COM- PLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
55052	AAC	1/2/96		me	4/4/96	512	me	B. Jones
55053 Asst. Control- ler	ZDV	4/1/96	48	me	6/9/96	48	me	B. Jones
Training Plan	ZDV				6/9/96		me	B. Jones
55053 OJT	ZDV	6/12/96	80	me	6/25/96	18.7	me	B. Jones
55054 Prelim. Non- Radar/ Radar- Assoc.	ZDV	7/9/96	240	me	8/25/96	240	me	B. Jones
55054 Non- Radar/ Radar- Assoc. Training	ZDV	8/28/96		me	12/5/96	494	me	B. Jones
55054 Pos. OJT	ZDV							
RAP HIGH (32)	ZDV	12/9/96	120	me	2/25/97	94	me	B. Jones
MBW HIGH (34)	ZDV	2/28/97	120	me	4/2/97	85.7	me	B. Jones
DARC	ZDV	4/7/97	4	me	4/7/97	4	me	B. Jones
BFF HIGH (33)	ZDV	4/10/97	80	me	5/25/97	65	me	B. Jones
CYS LOW (22)	ZDV	6/1/97	80	me	7/5/97	60	me	B. Jones
RAP LOW (31)	ZDV	7/9/97	80	me	8/15/97	56.5	me	B. Jones
GLL LOW (21)	ZDV	8/19/97	80	me	10/1/97	33	me	B. Jones

Figure A-5

\*

## e. SECTION III, QUALIFICATION TRAINING. (Continued)

\* En Route

Section—III  
QUALIFICATION TRAINING

A PHASE OF TRAINING	B FAC IDENT	C DATE STARTED	D NO OF AUTH HOURS	E EMPL INIT	F DATE COM- PLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
BRUIT HIGH (35)	ZDV	10/8/97	80	me	11/1/97	31.7	me	B. Jones
55055 Radar Training	ZDV	1/8/98		me	3/20/98	360	me	B. Jones
55055 Pos. OJT	ZDV							
MBW HIGH (34)	ZDV	3/25/98	120	me	6/18/98	113.5	me	B. Jones
BFF HIGH (33)	ZDV	6/21/98	120	me	8/15/98	91	me	B. Jones
DARC	ZDV	8/18/98	4	me	8/18/98	4	me	B. Jones
BRUIT HIGH (35)	ZDV	8/22/98	80	me	9/16/98	33.3	me	B. Jones
CYS LOW (22)	ZDV	9/25/98	80	me	11/9/98	74.7	me	B. Jones
RAP LOW (31)	ZDV	12/1/98	80	me	2/12/99	80	me	B. Jones
Addt. OJT RAP LOW	ZDV	2/15/99	16	me	2/22/99	12	me	B. Jones
RAP LOW Certifi- cation(31)	ZDV				2/23/99	2.5	me	B. Jones
RAP HIGH (32)	ZDV	2/27/99	80	me	4/15/99	34.5	me	B. Jones
GLL LOW (21)	ZDV	4/21/99	80	me	5/18/99	35.9	me	B. Jones

Figure A-5 (Continued)

## Section—III

## Flight Service

## QUALIFICATION TRAINING

A PHASE OF TRAINING	B FAC IDENT	C DATE STARTED	D NO OF AUTH HOURS	E EMPL INIT	F DATE COM- PLETED	G HOURS	H EMPL INIT	I CERTIFICATION SIGNATURE
COU AFSS								
55239 Area Knowledge	COU	7/9/93	80	sf	7/21/93	52	sf	K. Yung
55242 Flight Data OJT	COU	8/23/93	100	sf	9/2/93	80	sf	K. Yung
55246 Coordinator OJT	COU	9/12/93	100	sf	9/24/93	70	sf	K. Yung
55241 Broadcast OJT	COU	9/30/93	100	sf	10/12/93	65	sf	K. Yung
55244 Preflight OJT	COU	10/14/93	140	sf	1/5/94	120	sf	K. Yung
55245 Inflight OJT	COU	1/20/94	240	sf	5/8/94	200	sf	K. Yung

Figure A-6

e. **SECTION III, QUALIFICATION TRAINING.** (Continued)

- Block A**      **PHASE OF TRAINING:** Enter the course number for en route and FSS. For terminal field training, indicate whether the training was classroom, laboratory, and/or OJT.
- Block B**      **FAC IDENT:** Enter "AAC" if Academy conducted. Enter the three-letter 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. The number of hours entered shall not exceed those indicated in the appropriate directive. The hours allowed shall be derived from the IPG or from the facility training directive. No entry is required for Academy-conducted training.
- Blocks E and H**      **EMPL INIT:** The employee must initial in these blocks within 30 days of the date of the entry.
- Block F**      **DATE COMPLETED:** Enter the date the employee successfully completed, withdrew from, received an incomplete in, or failed this training course. (If the employee did not successfully complete the training, enter "W" for withdrawal, "I" for incomplete, or "F" for failure in Block A. Also, indicate the position involved.) It is important that this information be accurately logged. Refer to Order 3120.22, National Air Traffic Training Tracking System, for further guidance regarding this requirement.
- Block G**      **HOURS:** Enter the actual number of clock hours, to the nearest tenth of an hour, the employee used in this portion of the training program.
- Block I**      **CERTIFICATION SIGNATURE:** The certifying official shall sign or use a signature stamp in this block.

## f. SECTION IV, EQUIPMENT CERTIFICATION.

1. Only equipment training that specifically requires a certification examination shall be entered in this section:

- (a) BRITE
- (b) Radar qualification examination

2. Other equipment training that is associated with position certification, such as communications, lighting systems, recording, and other air traffic control (ATC) equipment, shall 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 IPG 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.

Section—IV  
EQUIPMENT CERTIFICATION

A DATE	B EQUIPMENT	C FAC IDENT	D CERTIFICATION SIGNATURE	E EMPL INIT
5/1/92	BRITE II	DFW	<i>V. Conrad</i>	<i>JD</i>
9/15/92	RADAR QUALIFICATION EXAM	DFW	<i>V. Conrad</i>	<i>JD</i>

PAGE IV

Figure A-7

- 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-letter facility identifier.
- Block D**     **CERTIFICATION SIGNATURE:** The certifying official shall sign or use a signature stamp in this block.
- Block E**     **EMPL INIT:** The employee must initial in this block within 30 days of the date of the entry.

**g. SECTION V, PROFICIENCY TRAINING (Refresher, Supplemental, Remedial).** Entries in this section shall specifically describe the training provided. Refer to Chapter 2, paragraph 2-13 of this order, Proficiency Training, for the type of training to be entered in this section. 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 shall 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 shall 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)

The example on the following page illustrates how to correctly record proficiency training.

## Section—V

## PROFICIENCY TRAINING (Refresher, Supplemental, Remedial)

A DATE	B MAJOR SUBJECT AREAS	C TYPE 1/	D DATE COM- PLETED	E HOURS	F CERTIFICATION SIGNATURE	G EMPL INIT
1/15/94	Wake Turbulence—Film	1	1/10/94	.5	B. Taylor	AT
2/1/94	Radar Vectoring Techniques	1	1/21/94	1.5	B. Taylor	AT
2/1/94	Tower Visibility	1	1/22/94	CATTS	B. Taylor	AT
3/10/94	Aircraft Characteristics—Climb Rates, Vertical Sep, STDS	3	3/3/94	2	B. Taylor	AT
4/1/94	Nonradar Procedures	1	3/15/94	2.5	B. Taylor	AT
5/1/94	Tape Talk	1	4/10/94	1.2	B. Taylor	AT
6/22/94	Review: Radar Vector Procedures, Effect of Temperature on Climb Rates, Coordination Procedures (Facility SOP on Position Relief Briefings)	3	6/15/94	8	B. Taylor	AT
6/22/95	ETG Lab Problems 2, 8, 11, 21, 22, 23, 24, 25	3	6/21/95	16	B. Taylor	AT
6/23/95	NAS FY-87 Goals	2	6/23/95	4	B. Taylor	AT
6/30/95	Lost Aircraft Orientation	1	6/30/95	2	B. Taylor	AT
7/1/95	Pilot Weather Briefing	1	7/1/95	2	B. Taylor	AT
8/3/95	Annual Tower Visibility Review	1	7/3/95	.5	B. Taylor	AT
<u>1</u> TRAINING TYPE CODE    1-Refresher    2-Supplemental    3-Remedial						

Figure A-8



**g. SECTION V, PROFICIENCY TRAINING (Refresher, Supplemental, Remedial). (Continued)**

- Block A**      **DATE:** Enter the date the training was entered in FAA Form 3120-1.
- Block B**      **MAJOR SUBJECT AREAS:** Specifically describe or use a coded entry for refresher or supplemental training. Remedial training entries shall specifically describe the training conducted. Coded entries shall not be used for remedial training. If the facility is maintaining a master code/decode sheet, a single entry (e.g., 1/2), may be utilized if both refresher and supplemental training items were provided during a single briefing. If a master code/decode sheet is maintained, training items shall be identified by a singular training type.
- Block C**      **TYPE:** Indicate the type of training by number: 1 = Refresher, 2 = Supplemental, 3 = Remedial.
- Block D**      **DATE COMPLETED:** Enter the date the training was completed.
- Block E**      **HOURS:** Indicate the number of actual training hours to the nearest tenth of an hour. If training is conducted via CATTS, enter CATTS.
- Block F**      **CERTIFICATION SIGNATURE:** The certifying official shall sign or use a signature stamp in this block.
- Block G**      **EMPL INIT:** The employee must initial in this block within 30 days of the date of the entry.

**h. SECTION VI, TECHNICAL APPRAISAL.** The technical appraisal section for all options shall include specific data regarding operational errors/deviations and the OJT instructor (OJTI) evaluation described in Chapter 2, paragraph 11e(6) of this order.

**NOTE:** An operational error/deviation shall be recorded on a separate page in accordance with Order 7210.3, Facility Operation and Administration.

## Section—VI

**TECHNICAL APPRAISAL**

Part A—OVER-THE-SHOULDER TRAINING REVIEW				
DATE COMPLETED A	OVER-THE-SHOULDER B	DATE DISCUSSED C	SUPERVISOR/EPDS SIGNATURE D	EMPL INIT E
6/25/95	Arrival West-Satisfactory/Recertified	6/25/95	<i>[Signature]</i>	JM
9/25/95	East Arrival-OJTI Evaluation-Satisfactory	9/25/95	<i>[Signature]</i>	JM

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Figure A-9

## Section—VI

**TECHNICAL APPRAISAL**FOR FSS  
USE ONLY

Part B—1. OVER-THE-SHOULDER PERFORMANCE TEST				
DATE A	PERFORMANCE TEST TITLE B	DATE DISCUSSED C	EMPL INIT D	SUPERVISOR'S SIGNATURE E
11/3/94	Inflight-OJTI Evaluation-Satisfactory	10/29/94	R.S.	T. Yen

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Figure A-10

Section—VI  
**TECHNICAL APPRAISAL**

Part A—OVER-THE-SHOULDER TRAINING REVIEW				
DATE COMPLETED	OVER-THE-SHOULDER	DATE DISCUSSED	SUPERVISOR/EPDS SIGNATURE	EMPL INIT
	FACILITY OE/OD NUMBER: XXX-X-XX-X-XX			
	Classification: ERROR			
	DATE: July XX, 19XX			
	CAUSAL FACTOR/SUMMARY			
	Controller Oversight. Aircraft #2 was south of Aircraft #1 and both were at FL330, on parallel headings. Employee A turned Aircraft #1 right to a 150 heading for westbound traffic climbing to FL350, which was a factor. Employee A forgot about Aircraft #2 and after Aircraft #1 turned right, separation was lost with Aircraft #2.	7/XX/XX	Jane Doe	ST
	REMEDIAL TRAINING: 2 Hours OJT @ XXX-R			
	REMOVAL DATE: January XX, 19XX			
	30 DAY EVALUATION: August XX, 19XX			
	6 MONTH EVALUATION: January XX, 19XX			

Figure A-11

**h. SECTION VI, TECHNICAL APPRAISAL. (Continued)*****EN ROUTE/TERMINAL:***

- Block A**      **DATE COMPLETED:** Enter the date shown on the appraisal form.
- Block B**      **OVER-THE-SHOULDER:** 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 OJT duties. Indicate recertification if appropriate.
- Block C**      **DATE DISCUSSED:** Enter the date the appraisal was discussed with the employee.
- Block D**      **SUPERVISOR/EPDS SIGNATURE:** The person who conducted the appraisal must sign or use a signature stamp in this block.
- Block E**      **EMPL INIT:** The employee must initial in this block within 30 days of the date of the entry.

***FSS:***

- Block A**      **DATE:** Enter the date shown on the appraisal form.
- Block B**      **PERFORMANCE TEST TITLE:** 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 OJT duties. Indicate recertification if appropriate.
- Block C**      **DATE DISCUSSED:** Enter the date the appraisal was discussed with the employee.
- Block D**      **EMPL INIT:** The employee must initial in this block within 30 days of the date of the entry.
- Block E**      **SUPERVISOR'S SIGNATURE:** The person who conducted the appraisal must sign or use a signature stamp in this block.

i. **SECTION VII, MANAGEMENT AND OTHER TRAINING.** All management and other Agency-approved training not previously listed shall 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 which was completed during employment with FAA shall be recorded in this section.

## Section—VII

**MANAGEMENT AND OTHER TRAINING**

A DATE	B COURSE	C LOCATION	D HOURS	E EMPL INIT
5/5/90	ARTS IIIA for DSS 53010	FAA Academy	240	RZ
6/12/91	Fundamentals of Supervision 14002	Correspondence Course	150	RZ
11/19/91	Aviation—A Global History	Princeton University	3 Qtr	RZ
6/12/92	Weather Satellite Data Interpretation 50206	FAA Academy	32	RZ
9/8/92	Facility Instructor Training 10501	FAA Academy	80	RZ
8/15/94	OJT Techniques—Instructors 05581	ZAU ARTCC	24	RZ
11/30/94	Invest in Excellence	OCCC College OKC	32	RZ

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PAGE VII

**Figure A-12**

**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 for this information. Unless specified in FAA directives or other transmittals, only courses of 8 hours or more shall be recorded in this section.

**Block C**     **LOCATION:** Enter the location where the training was conducted (i.e., 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 within 30 days of the date of the entry.

j. **SECTION VIII, LIAISON AND FAMILIARIZATION TRAVEL.** Refer to Order 7210.3, Facility Operation and Administration, for policy and guidance regarding this program.

Section—VIII  
**LIAISON FAMILIARIZATION TRAVEL**

A CARRIER/FLT NO	B EMPLOYEE DUTY STATUS	C TRIP DATES FROM TO	D EMPL INIT
UAL / 232	<input checked="" type="checkbox"/> DUTY <input type="checkbox"/> NONDUTY	10/1/93 TO 10/4/93	LC
DAL / 121	<input type="checkbox"/> DUTY <input checked="" type="checkbox"/> NONDUTY	11/2/93 TO 11/10/93	hc
Private / C150	<input checked="" type="checkbox"/> DUTY <input type="checkbox"/> NONDUTY	5/5/94 TO 5/5/94	LC
Auto / STL FSS	<input checked="" type="checkbox"/> DUTY <input type="checkbox"/> NONDUTY	5/4/94 TO 6/4/94	hc
SWA / 812	<input type="checkbox"/> DUTY <input checked="" type="checkbox"/> NONDUTY	7/1/94 TO 7/2/94	hc
COA / 9800	<input type="checkbox"/> DUTY <input checked="" type="checkbox"/> NONDUTY	7/1/94 TO 7/2/94	hc
AAL / 6875	<input checked="" type="checkbox"/> DUTY <input type="checkbox"/> NONDUTY	7/10/94 TO 7/13/94	hc

One  
Trip

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**Figure A-13**

**Block A CARRIER/FLT NO:** Enter the carrier's three-letter identifier and flight number (only the outbound flights) or type of conveyance. If the trip included familiarization at a destination, indicate the location.

**Block B EMPLOYEE DUTY STATUS:** Enter whether the travel was duty or nonduty.

**Block C TRIP DATES:** Enter the travel dates.

**Block D EMPL INIT:** The employee must initial in this block within 30 days of the date of the entry.

**NOTE:** When a change of carriers is made to reach the final destination, record the out-bound legs of each flight and bracket those entries in the right margin to indicate one trip.

## APPENDIX B

# ATCT/ARTCC GUIDE FOR THE OJT INSTRUCTION/EVALUATION REPORT FAA Form 3120-25

**a. INTRODUCTION.** This appendix contains instructions for completing the ATCT/ARTCC OJT Instruction/Evaluation Report (FAA Form 3120-25). FAA Form 3120-25 is used by OJTIs and first-level supervisors to record their observations of the performance and progress of the developmental ATCS during OJT instruction and skill-check sessions. The form is provided on pages B-5 and B-6 of this appendix.

**b. USING THE FORM.** Complete the following items. Block numbers correspond to the numbered blocks on the form.

**Block 1**      **NAME:** Print developmental'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 VFR, MVFR, 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 traffic volume. 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, equipment outages, configurations, and/or restrictions 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 OJF or skill enhancement training and document specific use in Block 12. Indicate "Simulation" if simulation laboratory is used, as required in the IPG. The supervisor checks "Evaluation" when administering a performance skill check or checks "Certification" if administering a certification skill check.

**Block 10**     **ROUTING:** According to facility requirements.

**Block 11 PERFORMANCE:** Block 11 of the form consists of the performance section. This section contains critical job elements (CJE), job function categories, and job functions used as a basis for instructing and evaluating the developmental ATCS.

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 and adaptation.

a. OJTIs place checkmarks in the columns "OBSERVED" and "COMMENT" as follows:

1. **OBSERVED:** A checkmark in this column indicates that the operation or procedure was observed during the period, but that no significant comments are made.
2. **COMMENT:** A checkmark 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 supervisor who conducts the skill checks uses the columns "SATISFACTORY," "NEEDS IMPROVEMENT," and "UNSATISFACTORY." OJTIs do not make checkmarks in these columns since these terms are evaluative. The terms are defined as follows:

1. **SATISFACTORY:** A checkmark in this column indicates that the developmental's observed performance this session meets expected performance requirements and indicates that the developmental demonstrates the ability to work independently for this performance item. Examples of exemplary performance and specific comments, along with suggestions for improvement, shall be stated in Block 12 of the form for each job function indicated.
2. **NEEDS IMPROVEMENT:** A checkmark in this column indicates that the developmental's observed performance is acceptable at this stage of training, but must improve in order to meet expected performance. Examples of exemplary performance and specific comments, along with suggestions or requirements for improvement, shall be stated in Block 12 of the form for each job function indicated.
3. **UNSATISFACTORY:** A checkmark in this column indicates that the developmental's observed performance is unsatisfactory at this stage of training. Suggestions and recommendations for correcting each unsatisfactory job function must be stated in Block 12, except at the 100-percent level. Examples of exemplary performance and specific comments, along with suggestions or requirements for improvement, shall be stated in Block 12 of the form for each job function indicated.

c. To certify on a 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 that the developmental 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.



- 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 the supervisor who conducted the skill check, the comment block provides space for the documentation of the developmental's performance during OJT instruction and skill-check sessions.

**OJTIs Use of the Comment Block:**

This block is used by the OJTI to document an observation when a checkmark is made in the "Comment" column on the front of the form. The comments:

- a. May be specific or general.
- b. May include exemplary, noteworthy, or unusual events.
- c. Shall describe any observed performance deficiencies. In the case of performance deficiencies, or when improvement is needed in a specific area, references shall be made to applicable procedures, letters of agreement (LOAs), orders/directives, etc.

The OJTI shall sign and date this block.

**Examiner's Use of the Comment Block:**

This block shall be used by the supervisor who conducted the skill check to:

- a. Document performance/progress.
- b. Describe performance rated as "Needs Improvement" or "Unsatisfactory" and list references to specific procedures, LOAs, or directives that should be reviewed by the developmental so that the performance problem may be corrected.
- c. Make recommendations for performance improvement, if needed.
- d. Recommend one of the following:
  - 1. Continuation of OJT
  - 2. Skill enhancement training
  - 3. Suspension of training
  - 4. Certification (when appropriate)

The examiner shall sign and date this block.

**NOTE:** An examiner is defined as a supervisor conducting a skill check.

- Block 13**     **EXAMINER'S COMMENTS FOR SUPERVISORY CONSIDERATION: DO NOT USE THIS BLOCK.**
- Block 14**     **EMPLOYEE'S COMMENTS:** This block may be used by the developmental for making comments pertaining to the training period, 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 developmental.
- Block 15**     **CERTIFICATION:** This block is used by the developmental's supervisor to document position certification/recertification. Record position of operation, sign, and date.

<b>ATCT/ARTCC</b> <b>OJT INSTRUCTION/EVALUATION REPORT</b>											
1. Name			2. Date		3. Position(s)						
4. Weather <input type="checkbox"/> VFR <input type="checkbox"/> MVFR <input type="checkbox"/> IFR			5. Workload <input type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy		6. Complexity <input type="checkbox"/> Routine Not Difficult <input type="checkbox"/> Occasionally Difficult <input type="checkbox"/> Mostly Difficult <input type="checkbox"/> Very Difficult			7. Hours This Session  8. Hours (%) This Position			
9. Purpose of Report <input type="checkbox"/> OJT <input type="checkbox"/> Evaluation <input type="checkbox"/> Certification <input type="checkbox"/> Recertification <input type="checkbox"/> Simulation <input type="checkbox"/> Other								10. Routing			
Performance	CJE	Job Function Category	Job Function				Observed	Comment	Satisfactory	Needs Improvement	Unsatisfactory
	Operating Methods and Procedures	A. Separation	1. Separation is ensured.								
			2. Safety alerts are provided.								
			3. Awareness is maintained.								
		B. Control Judgement	4. Good control judgment is applied.								
			5. Control actions are correctly planned.								
			6. Positive control is provided.								
		C. Methods & Procedures	7. Prompt action to correct errors is taken.								
			8. Effective traffic flow is maintained.								
			9. Aircraft identity is maintained.								
			10. Strip posting is complete/correct.								
			11. Clearance delivery is complete/correct/timely.								
			12. LOA's/Directives are adhered to.								
			13. Provides general control information.								
			14. Rapidly recovers from equipment failures and emergencies.								
			15. Visual scanning is accomplished.								
			16. Effective working speed is maintained.								
			17. Traffic advisories are provided.								
	D. Equipment	18. Equipment status information is maintained.									
		19. Computer entries are complete/correct.									
		20. Equipment capabilities utilized/understood.									
		21. Required coordinations are performed.									
		22. Cooperative, professional manner is maintained.									
	E. Communication/Coordination	23. Communication is clear and concise.									
		24. Uses prescribed phraseology.									
		25. Makes only necessary transmissions.									
		26. Uses appropriate communications method.									
27. Relief briefings are complete and accurate.											
F. Other											

12. Comments:			
Signature: _____		Date: _____	
13. Examiner's Comments for Supervisory Consideration:		<input type="checkbox"/> Continue OJT	<input type="checkbox"/> Certification Evaluation
		<input type="checkbox"/> Suspend OJT	
14. Employee's Comments:			
This report has been discussed with me (signature): _____		Date: _____	
15. Certification			
I certify that this employee meets qualification requirements for position and is capable of working under general supervision.			
Signature of Certifier: _____		Date: _____	

# **ATCT/ARTCC JOB FUNCTIONS AND INDICATORS CHECKLIST FOR THE OJT INSTRUCTION/EVALUATION REPORT**

## **TABLE OF CONTENTS**

<b>TITLE</b>	<b>APPENDIX B, PAGE:</b>
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Equipment	
<b>COMMUNICATION .....</b>	<b>B-16</b>
Communication/Coordination	



**ATCT/ARTCC  
JOB FUNCTIONS AND INDICATORS CHECKLIST  
FOR THE OJT INSTRUCTION/EVALUATION REPORT**

**CJE: OPERATING METHODS AND PROCEDURES**

**Job Function Category: Separation**

Job Function	Indicator
<p>1. <i>Separation is ensured.</i> Provides control instructions or restrictions to ensure separation standards are maintained at all times.</p>	<p>a. Issues appropriate control instructions or restrictions, including speed control and vectoring techniques.</p> <p>b. Ensures traffic entering/departing his/her airspace is not in conflict or about to lose separation.</p> <p>c. Obtains specific approval prior to entering another position's/facility's area of jurisdiction.</p>
<p>2. <i>Safety alerts are provided.</i> Recognizes that safety alerts are a first priority duty along with separation of aircraft, and remains constantly alert for unsafe proximity situations.</p>	<p>a. Displays appropriate filter limits.</p> <p>b. Maintains awareness of untracked, unassociated, or primary targets within delegated airspace.</p> <p>c. Informs pilot or appropriate controller when unsafe situation has been observed.</p> <p>d. Remains aware of previously coordinated traffic.</p> <p>e. Issues alternate course of action when feasible.</p>

**CJE: OPERATING METHODS AND PROCEDURES (Continued)****Job Function Category: Control Judgment**

Job Function	Indicator
<p>3. <i>Awareness is maintained.</i> Maintains awareness of total traffic situation. Continuous attention is provided to all facets of the control environment to ensure that discrepancies do not exist.</p>	<p>a. Ensures future separation or flow problems will not exist. Keeps alert for possible problem situations from other controllers/facilities.</p> <p>b. Uses control procedures that do not place workload and stress on other controllers/facilities.</p> <p>c. Verifies if a discrepancy exists anytime an unusual or nonstandard situation occurs.</p> <p>d. Considers subsequent controller requirements.</p> <p>e. Ensures strip information is in agreement with aircraft/route position.</p>
<p>4. <i>Good control judgment is applied.</i> Issues control instruction or restrictions that are correct. Carefully plans procedures prior to issuing instructions.</p>	<p>a. Controls in a manner that avoids compromising situations and slowing of traffic.</p> <p>b. Adheres to priority of <del>maneuvers</del>.</p> <p>c. Uses correct speed control procedures/techniques.</p> <p>d. Applies effective vectoring techniques.</p> <p>e. Considers aircraft performance capabilities on control decisions.</p> <p>f. Demonstrates awareness of aircraft equipment capabilities and limitations that affect air traffic control instructions.</p>



**CJE: OPERATING METHODS AND PROCEDURES (Continued)****Job Function Category: Control Judgment (Concluded)**

Job Function	Indicator
4. <i>Good control judgement is applied.</i> Issues control instructions or restrictions that are correct. Carefully plans procedures prior to issuing instructions. (Concluded)	g. Avoids the use of excessive separation or restrictions. h. Informs aircraft and appropriate personnel of significant situations. i. Does not place aircraft in handoff status in conflict or a situation leading to possible loss of separation. j. Makes decisions and issues instructions that are correct and do not require additional instructions or corrections.
5. <i>Control actions are correctly planned.</i> Control actions are planned to provide safe, expeditious traffic flow.	a. Ensures control procedures are orderly and do not result in an unnecessary slowdown of traffic. b. Properly sequences traffic. c. Does not terminate or activate radar control prematurely.
6. <i>Positive control is provided.</i> Takes command of control situations and does not act in a hesitant or unsure manner.	a. Demonstrates confidence. b. Takes command of control situations. c. Maintains positive control during stressful situations. d. Issues only necessary instructions/information.

**CJE: OPERATING METHODS AND PROCEDURES (Continued)****Job Function Category: Methods and Procedures**

<b>Job Function</b>	<b>Indicator</b>
7. <i>Prompt action to correct errors is taken.</i> Recognizes when an error exists and takes prompt action to correct the error.	a. Acts rapidly to correct errors or discrepancies. b. Recognizes when incorrect information has been passed to aircraft or other positions.
8. <i>Effective traffic flow is maintained.</i> Takes into account aircraft characteristics and their effect on traffic control. Uses runway and taxiways to best advantage. Observes present and considers forecasted traffic to predict if an overload may occur, and takes appropriate action to prevent or lessen the situation.	a. Makes effective use of runways and taxiways. b. Provides orderly traffic flow with proper aircraft spacing. c. Considers aircraft characteristics and their effect on traffic flow. d. Manages ground traffic effectively and efficiently. e. Recognizes potential overload situations. f. Implements holding procedures. g. Implements flow control procedures.
9. <i>Aircraft identity is maintained.</i> Maintains positive identification during the entire time the aircraft are within his/her area of responsibility.	a. Uses radar displays to assist in maintaining identity. b. Does not fail to re-identify aircraft when doubt exists. c. Detects errors in aircraft identity. d. Employs correct beacon and radar procedures.

**CJE: OPERATING METHODS AND PROCEDURES (Continued)****Job Function Category: Methods and Procedures (Continued)**

Job Function	Indicator
10. <i>Strip posting is complete/correct.</i> Posts all required information on strips and updates as required.	<ul style="list-style-type: none"> <li>a. Distributes strips to correct operational positions.</li> <li>b. Posts all required information on strips and updates as required.</li> <li>c. Posts data in correct area on strips.</li> <li>d. Ensures postings are legible.</li> <li>e. Detects and corrects strip errors.</li> </ul>
11. <i>Clearance delivery is complete/correct/timely.</i> Issues clearances in correct format, is specific, and uses correct phraseology.	<ul style="list-style-type: none"> <li>a. Uses specific terms to describe a fix.</li> <li>b. Does not exceed clearance authority.</li> <li>c. Adheres to readback procedures.</li> </ul>
12. <i>LOAs/directives are adhered to.</i> Ensures performance of control instructions/duties is in compliance with handbooks, facility procedures, and directives.	<ul style="list-style-type: none"> <li>a. Adheres to noise abatement procedures.</li> <li>b. Adheres to facility directives and local routing instructions.</li> </ul>
13. <i>Provides general control information.</i> Follows the required format for providing navigational assistance and weather information.	<ul style="list-style-type: none"> <li>a. Provides navigational assistance when operational advantage would be gained by pilot or controller.</li> </ul>

**CJE: OPERATING METHODS AND PROCEDURES (Continued)****Job Function Category: Methods and Procedures (Continued)**

<b>Job Function</b>	<b>Indicator</b>
<p>13. <i>Provides general control information.</i> Follows the required format for providing navigational assistance and weather information. (concluded)</p>	<p>b. Provides significant weather information in a timely manner to aircraft and controllers/facilities.</p> <p>c. Solicits PIREPs as required.</p> <p>d. Adheres to NOTAM, SIGMET, and CV procedures.</p> <p>e. Issues complete traffic information in required format.</p> <p>f. Provides chaff services and bird activity information when necessary.</p>
<p>14. <i>Rapidly recovers from equipment failures and emergencies.</i> Handles emergencies and equipment failure correctly.</p>	<p>a. Handles aircraft emergencies effectively.</p> <p>b. Is aware of available backup equipment and properly transitions to its use.</p>
<p>15. <i>Visual scanning is accomplished.</i> Checks assigned control environment and equipment for changes in data or presentation.</p>	<p>a. Monitors equipment, equipment alarms, displays, and status information area for changes in data or presentation.</p> <p>b. Scans assigned control environment for potential conflicts and weather-related problems.</p> <p>c. Reviews and updates strips.</p> <p>d. Scans runways for landing, departing, and crossing situations.</p>

**CJE: OPERATING METHODS AND PROCEDURES (Continued)****Job Function Category: Methods and Procedures (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
16. <i>Effective working speed is maintained.</i> Paces control actions and associated tasks at an acceptable rate.	a. Expedites traffic as efficiently as traffic conditions permit. b. Expedites traffic through jurisdiction without creating unnecessary delay.
17. <i>Traffic advisories are provided.</i> Issues traffic advisories to aircraft on frequency when judgment determines proximity warrants pilot's attention.	Provides traffic advisories for radar-identified aircraft, aircraft that are not radar-identified, and aircraft displaying Mode C that are not radar-identified.

**Job Function Category: Equipment**

<b>Job Function</b>	<b>Indicator</b>
18. <i>Equipment status information is maintained.</i> Maintains knowledge of equipment operating status.	a. Determines status of equipment performance. b. Reports malfunctions.
19. <i>Computer entries are complete/correct.</i> Displays knowledge of the entries required.	a. Uses accurate computer entries. b. Enters necessary corrections/updates in a timely manner.
20. <i>Equipment capabilities are utilized/understood.</i> Uses available equipment to the fullest extent possible. Displays knowledge of capabilities and limitations of equipment and its associated backup.	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.

**CJE: OPERATING METHODS AND PROCEDURES (Continued)****Job Function Category: Equipment (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
20. <i>Equipment capabilities are utilized/understood.</i> Uses available equipment to the fullest extent possible. Displays knowledge of capabilities and limitation of equipment and its associated backup. (Concluded)	d. Demonstrates knowledge of procedures for operating all equipment. e. Is aware of equipment peculiarities.

**CJE: COMMUNICATION****Job Function Category: Communication/Coordination**

<b>Job Function</b>	<b>Indicator</b>
21. <i>Required coordinations are performed.</i> Coordinates all information that is pertinent to the situation. Ensures that personnel receiving the information have all the contents. Acknowledges all information received on position.	a. Performs handoffs/point outs correctly at the appropriate time/position. b. Coordinates restrictions or special instructions. c. Verifies aircraft position and altitude. d. Verifies and acknowledges all information exchanges. e. Ensures separation is not compromised after coordination is completed.

**CJE: COMMUNICATION (Continued)****Job Function Category: Communication/Coordination (Continued)**

<b>Job Function</b>	<b>Indicator</b>
22. <i>Cooperative, professional manner is maintained.</i> Conveys the impression of a skilled professional who can successfully handle the situation to other controllers, pilots, and related personnel.	<ul style="list-style-type: none"> <li>a. Maintains a spirit of cooperation.</li> <li>b. Is courteous and tactful.</li> <li>c. Is receptive to instructor's/supervisor's suggestions for improvement of job performance.</li> <li>d. Remains calm under stress.</li> </ul>
23. <i>Communication is clear and concise.</i> Ensures that all data passed or received are understood. Does not have to repeat information using different words to convey the intended meaning.	<ul style="list-style-type: none"> <li>a. Demonstrates pleasant and positive voice.</li> <li>b. Does not have a harsh voice.</li> <li>c. Demonstrates moderate, rather than too fast or too slow, speech rate.</li> <li>d. Listens carefully and verifies that correct information is transmitted and received.</li> <li>e. Demonstrates clear pronunciation.</li> <li>f. Does not transpose words, numbers, or symbols.</li> </ul>
24. <i>Uses prescribed phraseology.</i> Uses words and phrases in accordance with the requirements of the duty being performed.	<ul style="list-style-type: none"> <li>a. Uses approved procedures, words, phrases, and formats.</li> <li>b. Listens for acknowledgment.</li> <li>c. Issues instructions that are specific.</li> <li>d. Ensures readbacks are correct.</li> </ul>

**CJE: COMMUNICATION (Concluded)****Job Function Category: Communication/Coordination (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
25. <i>Makes only necessary transmissions.</i> Transmits only information that is required over radio or interphone. Does not transmit separate message when it would be more effective to combine information.	<ul style="list-style-type: none"> <li>a. Uses radio/interphone only when necessary.</li> <li>b. Transmits only required information/instructions.</li> <li>c. Does not use abusive or profane language.</li> </ul>
26. <i>Uses appropriate communications method.</i> Transmits information using the appropriate communications method.	<ul style="list-style-type: none"> <li>a. Formulates message before transmitter is keyed.</li> <li>b. Uses radio/interphone when required.</li> </ul>
27. <i>Relief briefings are complete and accurate.</i> Ensures that duty familiarization and transfer of position responsibility are complete and accurate. Follows approved checklist when exchanging information and both individuals acknowledge the positive transfer of responsibility.	<ul style="list-style-type: none"> <li>a. Communicates pertinent status information.</li> <li>b. Communicates weather information to relieving specialist as necessary.</li> <li>c. Communicates overall traffic situation.</li> <li>d. Ensures that unresolved questions about the operation of the position are resolved before transfer of responsibility.</li> <li>e. When assuming a position, completes the appropriate position log to indicate responsibility for a specific position or combined position.</li> </ul>



## APPENDIX C

# FSS/AFSS GUIDE FOR THE OJT INSTRUCTION/EVALUATION REPORT FAA Form 3120-26

**a. INTRODUCTION.** This appendix contains instructions for completing the FSS/AFSS OJT Instruction/Evaluation Report (FAA Form 3120-26). FAA Form 3120-26 is used by OJTIs and first-level supervisors to record their observations of the performance and progress of the developmental ATCS during OJT instruction and skill-check sessions. The form is provided on pages C-5 and C-6 of this appendix.

**b. USING THE FORM.** Complete the following items. Block numbers correspond to the numbered blocks on the form.

**Block 1**      **NAME:** Print developmental'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 VFR, MVFR, 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 traffic volume. 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, equipment outages, configurations, and/or restrictions 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 OJF or skill enhancement training and document specific use in Block 12. Indicate "Simulation" if simulation laboratory is used, as required in the IPG. The supervisor checks "Evaluation" when administering a performance skill check or checks "Certification" if administering a certification skill check.

**Block 10**     **ROUTING:** According to facility requirements.

**Block 11** **PERFORMANCE:** Block 11 of the form consists of the performance section. This section contains critical job elements (CJE), job function categories, and job functions used as a basis for instructing and evaluating the developmental ATCS.

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 and adaptation.

- a. OJTIs place checkmarks in the columns "OBSERVED" and "COMMENT" as follows:
  1. **OBSERVED:** A checkmark in this column indicates that the operation or procedure was observed during the period but that no significant comments are made.
  2. **COMMENT:** A checkmark 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 supervisor who conducts the skill checks uses the columns "SATISFACTORY," "NEEDS IMPROVEMENT," and "UNSATISFACTORY." OJTIs do not make checkmarks in these columns because these terms are evaluative. The terms are defined as follows:
  1. **SATISFACTORY:** A checkmark in this column indicates that the developmental's observed performance this session meets expected performance requirements and indicates that the developmental demonstrates the ability to work independently for this performance item. Examples of exemplary performance and specific comments, along with suggestions for improvement, shall be stated in Block 12 of the form for each job function indicated.
  2. **NEEDS IMPROVEMENT:** A checkmark in this column indicates that the developmental's observed performance is acceptable at this stage of training, but must improve in order to meet expected performance. Examples of exemplary performance and specific comments, along with suggestions or requirements for improving, shall be stated in Block 12 of the form for each job function indicated.
  3. **UNSATISFACTORY:** A checkmark in this column indicates that the developmental's observed performance is unsatisfactory at this stage of training. Suggestions and recommendations for correcting each unsatisfactory job function must be stated in Block 12, except at the 100-percent level. Examples of exemplary performance and specific comments, along with suggestions or requirements for improvement, shall be stated in Block 12 of the form for each job function indicated.
- c. To certify on a 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 that the developmental 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.

- 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 the supervisor who conducted the skill check, the comment block provides space for the documentation of the developmental's performance during OJT instruction and skill-check sessions.

**OJTI's Use of the Comment Block:**

This block is used by the OJTI to document an observation when a checkmark is made in the "Comment" column on the front of the form. The comments:

- a. May be specific or general.
- b. May include exemplary, noteworthy, or unusual events.
- c. Shall describe any observed performance deficiencies. In the case of performance deficiencies, or when improvement is needed in a specific area, references shall be made to applicable procedures, letters of agreement (LOAs), orders/directives, etc.

**Examiner's Use of the Comment Block:**

This block shall be used by the supervisor who conducted the skill check to:

- a. Document performance/progress.
- b. Describe performance rated as "Needs Improvement" or "Unsatisfactory" and list references to specific procedures, LOAs or directives that should be reviewed by the developmental so that the performance problem may be corrected.
- c. Make recommendations for performance improvement, if needed.
- d. Recommend one of the following:
  - 1. Continuation of OJT
  - 2. Skill enhancement training
  - 3. Suspension of training
  - 4. Certification (when appropriate)

The examiner shall sign and date this block.

**NOTE:** An examiner is defined as a supervisor conducting a skill check.

**Block 13**

**EXAMINER'S COMMENTS FOR SUPERVISORY CONSIDERATION: DO NOT USE THIS BLOCK.**

- Block 14**     **EMPLOYEE'S COMMENTS:** This block may be used by the developmental 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 developmental.
- Block 15**     **CERTIFICATION:** This block is used by the developmental's supervisor to document position certification/recertification. Record position of operation, sign, and date.

<b>FSS/AFSS</b> <b>OJT INSTRUCTION/EVALUATION REPORT</b>									
1. Name			2. Date		3. Position(s)				
4. Weather _____ VFR _____ MVFR _____ IFR _____ LIFR		5. Workload _____ Light _____ Moderate _____ Heavy		6. Complexity _____ Routine Not Difficult _____ Occasionally Difficult _____ Mostly Difficult _____ Very Difficult		7. Hours This Session			
9. Purpose of Report ___ OJT ___ Evaluation ___ Certification ___ Recertification ___ Simulation ___ Other						8. Hours (%) This Position			
9. Purpose of Report						10. Routing			
Performance	11.	CJE	Job Function Category	Job Function	Observed	Comment	Satisfactory	Needs Improvement	Unsatisfactory
	Operating Methods and Procedures		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.					
			C. Maintenance	9. Equipment malfunctions are recognized/restored.					
				10. Performs routine maintenance of NWS instruments.					
				11. Replaces expendable materials as necessary.					
				12. Preduty/Relief briefings are complete and accurate.					
	Communication		D. Communication/Coordination	13. Maintains cooperative professional manner.					
				14. Sensitive to needs of system users.					
				15. Communication is clear/concise.					
				16. Uses prescribed phraseology.					
				17. Coordination is thorough.					
				18. Makes only necessary transmissions.					
				19. Obtains sufficient background data.					
				20. Presents briefing in prescribed format.					
	Pilot Weather Briefing		E. Pilot Weather Briefing  EFAS	21. Briefs in a tailored/organized/clear/concise manner.					
				22. Maintains awareness of current weather and forecasts					
				23. Maintains required displays.					
				24. Candidly communicates with positive attitude.					
				25. Applies VNR procedures as prescribed					
				26. Maintains complete, accurate real-time weather.					
				27. Develops flight advisories for routes/altitudes.					
28. Coordinates with NWS and CWSU.									
F. Other									

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: \_\_\_\_\_

# FSS/AFSS JOB FUNCTIONS AND INDICATORS CHECKLIST FOR THE OJT INSTRUCTION/EVALUATION REPORT

## TABLE OF CONTENTS

The list of job functions/indicators specified for each position is stated in general terms to account for differences in equipment and to accommodate both FSSs and AFSSs. Some job functions/indicators may not apply at individual facilities because of equipment, staffing, or shift variations. The job functions/indicators for the Flight Data, 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 functions/indicators.

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WEATHER OBSERVER .....	C-11
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  - Methods and Procedures
  - Equipment
  - Maintenance
- Communication
  - Communication/Coordination

BROADCAST .....	C-14
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- Operating Methods and Procedures
  - Methods and Procedures
  - Equipment
- Communication
  - Communication/Coordination
- Pilot Weather Briefing
  - Pilot Weather Briefing

FLIGHT DATA/NOTAM/COORDINATOR .....	C-17
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- Operating Methods and Procedures
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- Communication
  - Communication/Coordination

**TITLE****APPENDIX C, PAGE:****PREFLIGHT ..... C-21**

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Operating Methods and Procedures  
    Methods and Procedures  
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Communication  
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Pilot Weather Briefing  
    Pilot Weather Briefing



# FSS/AFSS ASSIGNMENT OF JOB FUNCTIONS TO POSITIONS

Job Function	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. Maintains cooperative, professional manner.	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	
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



**FSS/AFSS  
JOB FUNCTIONS AND INDICATORS CHECKLIST  
FOR THE OJT INSTRUCTION/EVALUATION REPORT**

**WEATHER OBSERVER**

**CJE: OPERATING METHODS AND PROCEDURES**

**Job Function Category: Methods and Procedures**

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

**WEATHER OBSERVER (Continued)****CJE: OPERATING METHODS AND PROCEDURES (Concluded)****Job Function Category: Equipment**

<b>Job Function</b>	<b>Indicator</b>
8. <i>Utilizes and maintains equipment capabilities.</i>	Operates position equipment/backup equipment using prescribed procedures.

**Job Function Category: Maintenance**

<b>Job Function</b>	<b>Indicator</b>
10. <i>Performs routine maintenance on National Weather Service (NWS) instruments.</i>	<ul style="list-style-type: none"> <li>a. Adjusts, cleans, resets, stores, makes minor routine repairs to, and replaces expendable materials in equipment.</li> <li>b. Performs adjustments to delicate precision instruments.</li> <li>c. Keeps instruments clean and protected from damage.</li> </ul>

**CJE: COMMUNICATION****Job Function Category: Communication/Coordination**

<b>Job Function</b>	<b>Indicator</b>
12. <i>Preduty/relief briefings are complete and accurate.</i>	<ul style="list-style-type: none"> <li>a. Follows position relief checklist when exchanging information.</li> <li>b. Ensures that both individuals acknowledge the positive transfer of responsibility.</li> <li>c. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</li> </ul>

**WEATHER OBSERVER (Concluded)****CJE: COMMUNICATION (Concluded)****Job Function Category: Communication/Coordination (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
13. <i>Maintains cooperative, professional manner.</i>	a. Maintains a spirit of cooperation. b. Is courteous and tactful. c. Is receptive to suggestions for improvement of job performance. d. Remains calm under stress. e. Does not use abusive or profane language.
15. <i>Communication is clear/concise.</i>	Demonstrates clear and understandable speech rate.
16. <i>Uses prescribed phraseology.</i>	Uses approved procedural words, phrases, and formats.

**BROADCAST****CJE: OPERATING METHODS AND PROCEDURES****Job Function Category: Methods and Procedures**

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

**Job Function Category: Equipment**

<b>Job Function</b>	<b>Indicator</b>
8. <i>Equipment capabilities are utilized/maintained.</i>	<ul style="list-style-type: none"> <li>a. Operates position equipment/backup equipment using prescribed procedures.</li> <li>b. Removes and replaces obsolete data.</li> <li>c. Records and monitors broadcast.</li> <li>d. Records and monitors weather advisories and surface reports.</li> </ul>

**BROADCAST (Continued)****CJE: OPERATING METHODS AND PROCEDURES (Concluded)****Job Function Category: Equipment (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
8. <i>Equipment capabilities are utilized/maintained (Concluded)</i>	<ul style="list-style-type: none"> <li>e. Records and monitors PIREP summaries, NOTAM, and MTR/MOA statements.</li> <li>f. Observes schedule and time restrictions.</li> <li>g. Announces missing items.</li> <li>h. Makes suspension announcements.</li> <li>i. Reads and resets counters.</li> </ul>
9. <i>Equipment malfunctions are recognized/restored.</i>	Notifies maintenance of malfunctions in accordance with prescribed local procedures.

**CJE: COMMUNICATION****Job Function Category: Communication/Coordination**

<b>Job Function</b>	<b>Indicator</b>
12. <i>Preduty/relief briefings are complete and accurate.</i>	<ul style="list-style-type: none"> <li>a. Follows position relief checklist when exchanging information.</li> <li>b. Ensures that both individuals acknowledge the positive transfer of responsibility.</li> <li>c. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</li> </ul>

**BROADCAST (Concluded)****CJE: COMMUNICATION (Concluded)****Job Function Category: Communication/Coordination (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
13. <i>Maintains cooperative, professional manner.</i>	a. Maintains a spirit of cooperation. b. Is courteous and tactful. c. Is receptive to suggestions for improvement of job performance. d. Remains calm under stress. e. Does not use abusive or profane language.
15. <i>Communication is clear/concise.</i>	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. <i>Uses prescribed phraseology.</i>	Uses approved procedural words, phrases, and formats.
18. <i>Makes only necessary transmissions.</i>	a. Radio/interphone are used only when necessary. b. Transmits only required information/instructions.

**CJE: PILOT WEATHER BRIEFING****Job Function Category: Pilot Weather Briefing**

<b>Job Function</b>	<b>Indicator</b>
24. <i>Applies VNR procedures as prescribed.</i>	Applies VNR procedures as prescribed.



**FLIGHT DATA/NOTAM/COORDINATOR****CJE: OPERATING METHODS AND PROCEDURES****Job Function Category: Equipment Methods and Procedures**

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

**FLIGHT DATA/NOTAM/COORDINATOR (Continued)****CJE: OPERATING METHODS AND PROCEDURES (Concluded)****Job Function Category: Equipment (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
6. <i>Equipment status is maintained.</i>	a. Maintains circuit operation, taking appropriate action during circuit interruptions. b. Uses weather chart reproduction and display equipment.
7. <i>Computer entries are correct.</i>	Uses prescribed procedures for computer entries.
8. <i>Equipment capabilities are utilized/maintained.</i>	Operates position equipment/backup equipment using prescribed procedures.
9. <i>Equipment malfunctions are recognized/restored.</i>	a. Activates spare/backup equipment when required. b. Notifies maintenance of equipment malfunctions in accordance with prescribed local procedures.

**Job Function Category: Maintenance**

<b>Job Function</b>	<b>Indicator</b>
11. <i>Replaces expendable materials as necessary.</i>	Correctly replaces ribbons and paper.

**FLIGHT DATA/NOTAM/COORDINATOR (Continued)****CJE: COMMUNICATION****Job Function Category: Communication/Coordination**

<b>Job Function</b>	<b>Indicator</b>
12. <i>Preduty/relief briefings are complete and accurate.</i>	<ul style="list-style-type: none"> <li>a. Follows position relief checklist when exchanging information.</li> <li>b. Ensures that both individuals acknowledge the positive transfer of responsibility.</li> <li>c. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</li> </ul>
13. <i>Maintains cooperative, professional manner.</i>	<ul style="list-style-type: none"> <li>a. Maintains a spirit of cooperation.</li> <li>b. Is courteous and tactful.</li> <li>c. Is receptive to suggestions for improvement of job performance.</li> <li>d. Remains calm under stress.</li> <li>e. Does not use abusive or profane language.</li> </ul>
14. <i>Sensitive to needs of system users.</i>	Listens and responds to user requests in a courteous and tactful manner.

**FLIGHT DATA/NOTAM/COORDINATOR (Continued)****CJE: COMMUNICATION (Concluded)****Job Function Category: Communication/Coordination (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
15. <i>Communication is clear/concise.</i>	<ul style="list-style-type: none"> <li>a. Answers calls in a timely manner.</li> <li>b. Has pleasant and positive voice.</li> <li>c. Has clear and understandable speech rate.</li> <li>d. Identifies calling facility when required.</li> <li>e. Uses correct communication line to forward data.</li> <li>f. Exchanges initials as required.</li> <li>g. Deactivates communication line.</li> </ul>
16. <i>Uses prescribed phraseology.</i>	<ul style="list-style-type: none"> <li>a. Uses approved procedural words, phrases, and formats.</li> <li>b. Listens for acknowledgment.</li> <li>c. Issues instructions that are specific.</li> <li>d. Ensures readbacks are correct.</li> </ul>
17. <i>Coordination is thorough.</i>	<ul style="list-style-type: none"> <li>a. Conducts intrafacility/interfacility coordination in a timely manner.</li> <li>b. Forwards IFR departures, progress reports, and arrival reports to ATC upon request.</li> </ul>

**PREFLIGHT****CJE: OPERATING METHODS AND PROCEDURES****Job Function Category: Methods and Procedures**

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

**Job Function Category: Equipment**

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

**PREFLIGHT (Continued)****CJE: COMMUNICATION****Job Function Category: Communication/Coordination**

<b>Job Function</b>	<b>Indicator</b>
12. <i>Preduty/relief briefings are complete and accurate.</i>	<ul style="list-style-type: none"> <li>a. Follows position relief checklist when exchanging information.</li> <li>b. Ensures that both individuals acknowledge the positive transfer of responsibility.</li> <li>c. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</li> </ul>
13. <i>Maintains cooperative, professional manner.</i>	<ul style="list-style-type: none"> <li>a. Maintains a spirit of cooperation.</li> <li>b. Is courteous and tactful.</li> <li>c. Is receptive to suggestions for improvement of job performance.</li> <li>d. Remains calm under stress.</li> <li>e. Does not use abusive or profane language.</li> </ul>
14. <i>Sensitive to needs of system users.</i>	Listens and responds to user requests in a courteous and tactful manner.
15. <i>Communication is clear/concise.</i>	<ul style="list-style-type: none"> <li>a. Has pleasant and positive voice.</li> <li>b. Has clear and understandable speech rate.</li> </ul>
16. <i>Uses prescribed phraseology.</i>	Uses approved procedural words, phrases, and format.

**PREFLIGHT (Concluded)****CJE: PILOT WEATHER BRIEFING****Job Function Category: Pilot Weather Briefing**

<b>Job Function</b>	<b>Indicator</b>
19. <i>Obtains sufficient background data.</i>	<ul style="list-style-type: none"> <li>a. Receives request and determines actions required.</li> <li>b. Obtains sufficient, pertinent information to properly conduct preflight briefing.</li> </ul>
20. <i>Presents briefing in prescribed format.</i>	Presents standard, abbreviated, or outlook briefing in accordance with prescribed procedures.
21. <i>Briefs in a tailored/organized/clear/concise manner.</i>	<ul style="list-style-type: none"> <li>a. Provides information tailored to a specific flight.</li> <li>b. Solicits PIREPs when applicable.</li> <li>c. Provides other prescribed assistance or information upon request.</li> </ul>
22. <i>Maintains awareness of current weather and forecasts.</i>	<ul style="list-style-type: none"> <li>a. Reviews and analyzes all weather and aeronautical data.</li> <li>b. Indicates recognition of all significant discrepancies between actual and forecast data.</li> <li>c. Takes correct action in accordance with prescribed procedures, when discrepancies exist.</li> </ul>
23. <i>Maintains required displays.</i>	<ul style="list-style-type: none"> <li>a. Plots/posts weather charts correctly.</li> <li>b. Maintains PIREP display.</li> </ul>
24. <i>Applies VNR procedures as prescribed.</i>	Applies VNR procedures as prescribed.

## INFLIGHT

## CJE: OPERATING METHODS AND PROCEDURES

## Job Function Category: Methods and Procedures

Job Function	Indicator
1. <i>Adheres to priority of duties.</i>	Performs all position functions in accordance with locally prescribed priority of duties.
2. <i>Demonstrates ability to handle unusual situations.</i>	Demonstrates ability to handle unusual situations.
3. <i>Initiates required search and rescue situations.</i>	a. Indicates recognition of overdue aircraft. b. Attempts radio contact of overdue aircraft.
5. <i>Compiles, evaluates, records, and disseminates data.</i>	a. Records aircraft contacts. b. Uses prescribed symbols/abbreviations. c. Provides weather advisories. d. Provides flight plan services. e. Solicits/prepares/disseminates PIREPs in prescribed format when applicable. f. Performs unscheduled broadcasts. g. Issues altimeter settings as prescribed. h. Provides Airport Advisory Services/Airport Information Services.



**INFLIGHT (Continued)****CJE: OPERATING METHODS AND PROCEDURES (Continued)****Job Function Category: Methods and Procedures (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
5. <i>Compiles, evaluates, records, and disseminates data. (Concluded)</i>	<ul style="list-style-type: none"><li>i. Provides SVFR services.</li><li>j. Provides hazardous area reporting services.</li><li>k. Provides emergency services.</li><li>l. Keeps airmen and weather information current.</li><li>m. Provides VFR cruising level advisories.</li></ul>

**Job Function Category: Equipment**

<b>Job Function</b>	<b>Indicator</b>
7. <i>Computer entries are correct.</i>	Uses prescribed procedures for computer entries.
8. <i>Equipment capabilities are utilized/maintained.</i>	<ul style="list-style-type: none"><li>a. Operates position equipment/backup equipment using prescribed procedures.</li><li>b. Uses primary/secondary radios selectively.</li><li>c. Compares console instruments.</li><li>d. Correctly uses circular slide rule to solve problems.</li></ul>

**INFLIGHT (Continued)****CJE: OPERATING METHODS AND PROCEDURES (Concluded)****Job Function Category: Equipment (Concluded)**

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

**CJE: COMMUNICATION****Job Function Category: Communication/Coordination**

<b>Job Function</b>	<b>Indicator</b>
12. <i>Preduty/relief briefings are complete and accurate.</i>	<ul style="list-style-type: none"> <li>a. Follows position relief checklist when exchanging information.</li> <li>b. Ensures both individuals acknowledge the position transfer of responsibility.</li> <li>c. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</li> </ul>
13. <i>Maintains cooperative, professional manner.</i>	<ul style="list-style-type: none"> <li>a. Maintains a spirit of cooperation.</li> <li>b. Is courteous and tactful.</li> </ul>

**INFLIGHT (Continued)****CJE: COMMUNICATION (Continued)****Job Function Category: Communication/Coordination (Continued)**

<b>Job Function</b>	<b>Indicator</b>
13. <i>Maintains cooperative, professional manner. (Concluded)</i>	<ul style="list-style-type: none"> <li>c. Is receptive to suggestions for improvement of job performance.</li> <li>d. Remains calm under stress.</li> <li>e. Does not use abusive or profane language.</li> </ul>
14. <i>Sensitive to needs of system users.</i>	Listens and responds to user requests in a courteous and tactful manner.
15. <i>Communication is clear/concise.</i>	<ul style="list-style-type: none"> <li>a. Has a pleasant and positive voice.</li> <li>b. Has clear and understandable speech rate.</li> <li>c. Responds promptly to aircraft calls.</li> <li>d. Relays ATC clearance/advisories verbatim.</li> <li>e. Formulates message before keying transmitter.</li> </ul>
16. <i>Uses prescribed phraseology.</i>	<ul style="list-style-type: none"> <li>a. Uses approved procedural words, phrases, and formats.</li> <li>b. Listens for acknowledgment.</li> <li>c. Issues instructions that are specific.</li> <li>d. Ensures readbacks are correct.</li> </ul>

**INFLIGHT (Continued)****CJE: COMMUNICATION (Concluded)****Job Function Category: Communication/Coordination (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
17. <i>Coordination is thorough.</i>	<ul style="list-style-type: none"> <li>a. Conducts intrafacility/interfacility coordination in a timely manner.</li> <li>b. Forwards IFR departures, progress reports, and arrival reports to ATC upon request.</li> </ul>
18. <i>Makes only necessary transmissions.</i>	<ul style="list-style-type: none"> <li>a. Uses radio/interphone only when necessary.</li> <li>b. Transmits only required information/instructions.</li> <li>c. Does not transmit separate messages when it would be more effective to combine information.</li> </ul>

**CJE: PILOT WEATHER BRIEFING****Job Function Category: Pilot Weather Briefing**

<b>Job Function</b>	<b>Indicator</b>
19. <i>Obtains sufficient background data.</i>	<ul style="list-style-type: none"> <li>a. Receives requests and determines actions required.</li> <li>b. Obtains sufficient, pertinent information to properly conduct preflight briefing.</li> </ul>
20. <i>Presents briefing in prescribed format.</i>	Presents standard, abbreviated, or outlook briefing in accordance with prescribed procedures.

**INFLIGHT (Concluded)****CJE: PILOT WEATHER BRIEFING (Concluded)****Job Function Category: Pilot Weather Briefing (Concluded)**

<b>Job Function</b>	<b>Indicator</b>
21. <i>Briefs in a tailored/organized/clear/concise manner.</i>	<ul style="list-style-type: none"> <li>a. Provides information tailored to a specific flight.</li> <li>b. Solicits PIREPs when applicable.</li> <li>c. Provides other prescribed assistance or information upon request.</li> </ul>
22. <i>Maintains awareness of current weather and forecasts.</i>	<ul style="list-style-type: none"> <li>a. Reviews and analyzes all incoming weather and aeronautical data.</li> <li>b. Indicates recognition of significant discrepancies between actual and forecast data.</li> <li>c. Takes correct action in accordance with prescribed procedures, when discrepancies exist.</li> </ul>
23. <i>Maintains required displays.</i>	<ul style="list-style-type: none"> <li>a. Plots/posts weather charts correctly.</li> <li>b. Maintains PIREP displays.</li> </ul>
24. <i>Applies VNR procedures as prescribed.</i>	Applies VNR procedures as prescribed.

## EFAS

## CJE: OPERATING METHODS AND PROCEDURES

## Job Function Category: Methods and Procedures

Job Function	Indicator
1. <i>Adheres to priority of duties.</i>	Performs all position functions in accordance with locally published priority of duties.
2. <i>Demonstrates ability to handle unusual situations.</i>	Demonstrates ability to handle unusual situations.

## Job Function Category: Equipment

Job Function	Indicator
6. <i>Equipment status is maintained.</i>	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 SVC A request/reply.
7. <i>Computer entries are correct.</i>	Uses prescribed procedures for computer entries.
8. <i>Equipment capabilities are utilized/maintained.</i>	Operates position equipment/backup equipment using prescribed procedures.
9. <i>Equipment malfunctions are recognized/restored.</i>	Notifies maintenance of malfunctions in accordance with prescribed local procedures.

## EFAS (Continued)

## CJE: COMMUNICATION

## Job Function Category: Communication/Coordination

Job Function	Indicator
12. <i>Preduty/relief briefings are complete/accurate.</i>	<ul style="list-style-type: none"> <li>a. Obtains preduty weather briefing from appropriate source.</li> <li>b. Follows position relief checklist when exchanging information.</li> <li>c. Ensures that both individuals acknowledge the positive transfer of responsibility.</li> <li>d. When assuming a position, completes the appropriate position log/computer entry to indicate responsibility for a specific position or combined position.</li> </ul>
13. <i>Maintains cooperative professional manner.</i>	<ul style="list-style-type: none"> <li>a. Maintains a spirit of cooperation.</li> <li>b. Is courteous and tactful.</li> <li>c. Is receptive to suggestions for improvement of job performance.</li> <li>d. Remains calm under stress.</li> <li>e. Does not use abusive or profane language.</li> </ul>
15. <i>Communication is clear/concise.</i>	<ul style="list-style-type: none"> <li>a. Has pleasant and positive voice.</li> <li>b. Has clear and understandable speech rate.</li> <li>c. Formulates message before keying transmitter.</li> </ul>

## EFAS (Continued)

## CJE: COMMUNICATION (Concluded)

## Job Function Category: Communication/Coordination (Concluded)

Job Function	Indicator
16. <i>Uses prescribed phraseology.</i>	a. Uses approved procedural words, phrases, and formats. b. Listens for acknowledgment. c. Issues instructions that are specific. d. Ensures readbacks are correct.
18. <i>Makes only necessary transmissions.</i>	a. Uses radio/interphone only when necessary. b. Transmits only required information/instructions.

## CJE: PILOT WEATHER BRIEFING

## Job Function Category: Pilot Weather Briefing

Job Function	Indicator
19. <i>Obtains sufficient background data.</i>	Receives requests and determines actions required.
21. <i>Briefs in a tailored/organized/ clear/concise manner.</i>	Provides information tailored to a specific flight.
24. <i>Applies VNR procedures as prescribed.</i>	Applies VNR procedures as prescribed.



## EFAS (Concluded)

## CJE: PILOT WEATHER BRIEFING (Concluded)

## Job Function Category: Pilot Weather Briefing (Concluded)

Job Function	Indicator
25. <i>Maintains complete, accurate, real-time weather.</i>	<ul style="list-style-type: none"> <li>a. Solicits, disseminates, and posts PIREPs according to prescribed local procedures.</li> <li>b. Reviews, describes, compares, and points out significant factors depicted on the various charts used at the position.</li> <li>c. Selects all new relevant charts and updated displays.</li> <li>d. Selects all new relevant SVC A data and updates flight advisory materials and displays.</li> <li>e. Modifies posted charts to reflect real-time weather.</li> </ul>
26. <i>Develops flight advisories for routes/altitudes.</i>	Advises aircraft of alternate routes/altitudes to avoid areas of hazardous weather.
27. <i>Coordinates with the National Weather Service (NWS) and the Center Weather Services Unit (CWSU).</i>	<ul style="list-style-type: none"> <li>a. Alerts WSFO, CWSU immediately when conditions are reported that differ from forecasts.</li> <li>b. Describes significant current weather changes.</li> <li>c. Verifies information with the NWS and CWSU.</li> </ul>



## APPENDIX D

# EN ROUTE INSTRUCTIONAL PROGRAM GUIDE

### Section 1. INTRODUCTION

**This Instructional Program Guide (IPG) includes information about the following four development stages:**

- I. Academy Training.** Prepares the individual to enter facility training.
- II. Facility Training—Assistant Controller.** Prepares the individual for assistant controller position qualification and certification. Includes on-the-job training (OJT) for qualification and certification on assistant controller positions.
- III. Facility Training—Nonradar/Radar-Associated Controller.** Prepares the individual for position qualification and certification on all nonradar/radar-associated positions. Includes OJT on nonradar/radar-associated positions, using radar separation extensively.
- IV. Facility Training—Radar Controller.** Prepares the individual for qualification and radar certification on all radar positions. Includes OJT on the full range of controller duties.

Target hours for the completion of each operating position shall be assigned according to the facility training directive. On-the-job familiarization hours (OJF) may be assigned at the discretion of the training team as specified in Chapter 3 of this order. Additional 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.

The instructional process is designed to provide facilities with the flexibility to tailor the training program to the needs of the individuals in training, thus allowing for a more effective and successful training experience. Performance and certification skill checks shall be performed and documented as specified in Chapter 3. Instructions for completing and submitting tracking reports are contained in Order 3120.22, National Air Traffic Training Tracking System.



## **Section 2. ACADEMY TRAINING**

### **(Course 55052)**

**GENERAL:** The purpose of this development stage is to provide new developmental specialists with an orientation and indoctrination to the FAA organization, to provide knowledge of job-related subjects in preparation for subsequent skill-oriented training, and to instruct in specific functions of the nonradar control positions while evaluating the potential of the developmental early in his/her prospective career.

This stage of training is administered in two parts: classroom instruction and classroom/laboratory environment.

**PREREQUISITE:**

Entry qualifications as established by the Office of Personnel Management announcements for ATCS positions.

**CLASSROOM TRAINING:**

The classroom portion of training is administered using lesson plans developed by the Academy.

**CLASSROOM/LABORATORY  
TRAINING:**

This training is administered in a classroom/laboratory environment, utilizing Academy-prepared instructional materials and a synthetic control area (Aero Center). This training is primarily oriented to procedural studies and demonstration/evaluation control problems.

**a. CLASSROOM TRAINING.****1. FAA Orientation.**

(a) The individual shall be thoroughly briefed on the following subjects:

- (1) Employment.
- (2) Civil rights.
- (3) Student travel.
- (4) Security.
- (5) Human relations:
  - a Value clarification.
  - b Communication with others.
  - c Team building.
  - d Principle responsibilities of an employee.
- (6) Employee handbook.
- (7) Drug Awareness Program.

(b) Evaluation. The primary purpose of this training is to indoctrinate the individual into the workings of the Federal Service. No examination is administered.

**2. Fundamentals of Air Traffic Control.** This training provides a basic knowledge of ATC-related subjects and is administered as a formal program of instruction.

(a) The individual shall successfully complete the following objectives:

- (1) Principles of flight.
- (2) Aircraft identification and performance.
- (3) Aviation weather.
- (4) Navigation.
- (5) Federal Aviation Regulations (FARs).
- (6) Air traffic control communications.

- (7) Air traffic services.
- (8) Radar.
- (9) Flight assistance service.
- (10) National Airspace System (NAS).

(b) Evaluation.

(1) Knowledge. Block and end-of-lesson examinations, designed to provide feedback on how well the academic material presented was mastered, will be administered.

a Additional training will be targeted toward any knowledge area that was not mastered on the examinations.

b At the conclusion of the additional training period, a second academic exam is given. This exam will include only those areas that were answered incorrectly on the first exam. Feedback will be provided at the conclusion of this exam.

(2) Counseling. Instructors are responsible for providing initial counseling. It is important that timely counseling be provided when developmental weaknesses are identified in an attempt to resolve problems impeding the developmental's progress. Formal documentation of each counseling session is required and will become part of the developmental's records.

**b. CLASSROOM/LABORATORY TRAINING.**

1. En Route Air Traffic Control.

(a) The individual will be instructed in strategies to master a synthetic area chart of Aero Center, as well as any other sector map. Given a chart of the control area depicting NAVAIDs, centers/sectors, and boundaries, the developmental will be able to draw and label the following:

- (1) Airways and jet routes, including radials.
- (2) NAVAIDs, those shown and not shown.
- (3) Center, sector, and adjacent facility boundaries.
- (4) Approach control boundaries and altitude limits.
- (5) MEAs, MRAs, MOCAs, and MCAs.
- (6) Intersections.
- (7) All mileages.
- (8) Airports depicted in relation to their NAVAID.

- (9) Uncontrolled airspace, the restricted area, and the prohibited area.
  - (10) All charted holding patterns.
  - (11) ILS course at OKC and TUL (including fan markers).
- (b) The individual shall be able to perform the following:
- (1) Record clearances and control information on strips using approved symbols and abbreviations, and forward all revisions as required.
  - (2) Use correct radio and interphone message format and communication procedures.
  - (3) Issue clearances:
    - a To provide separation.
    - b According to priority.
    - c That pertain to altimeters and altitude assignment.
    - d To holding aircraft.
    - e To departing and arriving aircraft.
  - (4) Encode and decode weather observations and PIREPs.
- (c) The individual shall be able to demonstrate the ability to perform the following:
- (1) Utilize a flight plan bay and load strip holders correctly.
  - (2) Given a proposal, departure, or flight plan estimate:
    - a Determine if the strip contains the data required.
    - b Determine the time between fixes within plus or minus 3 minutes.
    - c Enter the time on the strips in the correct place.
    - d Forward the data in the correct sequence and mark the strip to indicate the data have been forwarded.
  - (3) Given a proposal, departure, or flight plan estimate and revised information:
    - a Make necessary revisions.
    - b Determine if the revision needs to be forwarded and, if necessary, forward the revision to the appropriate sector or facility, and mark the strip to indicate the revision has been forwarded.



(4) Given traffic situations, issue clearances:

- a To departing, arriving, and holding aircraft.
- b To provide separation.
- c According to altitude assignments or lateral separation.

(5) Use radio and communication procedures.

(d) The individual will receive instruction and lab exercises that will familiarize him/her with nonradar Air Traffic Control techniques to include the following:

(1) The equipment associated with pilot/ghost position and the computer inputs to simulate aircraft movement and position roles.

(2) The overview of nonradar separation.

(3) The minimal procedures used in applying the appropriate vertical separation.

(4) Airspace to be protected along airways or routes, arcs, and holding patterns and the separation minimums and procedures used to apply the appropriate lateral separation.

(5) The longitudinal separation of aircraft procedures on the same, converging, crossing, and opposite direction courses, along with changing altitudes.

(6) IFR departure procedures, including VFR release of an IFR departure.

(7) The procedures and phraseology for forwarding arrival information to approach control facilities, VFR towers, and flight service stations. Also included are issuing advance descent and approach clearances.

(8) Rules, procedures, and phraseology used when issuing holding instructions to aircraft.

(9) Procedures, phraseology for initial separation of departures, separation between departure and arrivals, and visual separation.

(10) Methods and techniques of board management and rules for providing Air Traffic Control services.

(11) Nonradar visual scenarios—demonstration of nonradar rules by using radar as a visual aid.

(d) The individual will be given instruction and lab exercises on basic radar techniques to include the following:

(1) The fundamentals of primary and secondary radar.

- (2) Role of the radar controller.
  - (3) Functions of the components of the radar console.
  - (4) Meanings of the items that appear on the PVD display.
  - (5) RDP messages—their composition, format, and entry.
  - (6) Rules and procedures for beacon code assignments; radar identification; handoffs; pointouts; safety alerts; vectors; departures and arrivals; approach issuance; speed adjustments; additional services; emergencies; and the terminology, responsibilities, and phraseology associated with each.
  - (7) Aircraft transponder requirements and procedures for altitude confirmation, Mode C validation, and the associated phraseology.
  - (8) Radar separation standards, E-MSAW and conflict alerts, radar service to VFR aircraft, and the use of MIA charts.
  - (9) A brief history of the evolution and mission of the traffic management system and its programs, including the role of the participants in traffic management.
  - (10) Standard operating procedures (SOPs) and the controller responsibilities for conducting a position relief briefing.
- (e) The individual will be provided an overview of the radar associate position, to include the following:
- (1) A description of the role of the radar associate controller, including the tasks and responsibilities involved in performing coordination, handling unusual situations, and resolving conflicts.
  - (2) FDP messages, their composition, format, and entry.
  - (3) The identification of appropriate scanning techniques and the resolution of inaccurate or contradictory information.
  - (4) Sector organization, situation awareness, and control action prioritization.
  - (5) A definition of the roles of the radar team members, the communications, workload management, and team performance skills necessary within the team.
  - (6) The use of controller resource management and the recognition of human performance factors.
2. Evaluation.
- (a) Knowledge. Block and end-of-lesson examinations, designed to provide feedback on how well the academic material presented was mastered, will be administered.

(1) Additional training will be targeted toward any knowledge area that was not mastered on the examinations.

(2) At the conclusion of the additional training period, a second academic exam is given. This exam will include only those areas that were answered incorrectly on the first exam. Feedback will be provided at the conclusion of this exam.

**(b) Laboratory Assessment.**

(1) At the conclusion of laboratory training, each individual shall be given one assessment scenario during which a PV specialist will evaluate the individual's strengths and weaknesses.

(2) After a debriefing session with the individual's instructor, the PV specialist will debrief the developmental and issue a pass or fail assessment.

(3) Upon successful completion of PV, the individual will return to his/her facility for the next stage of training.

(4) If the individual receives a failing assessment, then targeted training shall be administered, followed by a re-assessment scenario conducted by PV.

(5) In the event the individual is still unsuccessful, PV shall issue a recommendation to the individual's Regional Office for action.

**(c) Counseling.** Instructors are responsible for providing initial counseling. It is important that timely counseling be provided when developmental weaknesses are identified in an attempt to resolve problems impeding the developmental's progress. Formal documentation of each counseling session is required and will become part of the developmental's records.



### Section 3. ASSISTANT CONTROLLER TRAINING (Course 55053)

**GENERAL:** The purpose of this development stage is to prepare the individual for qualification and certification on all assistant controller positions and obtain certification on those positions.

The individual has completed performance verification (PV), which covered the fundamentals of air traffic control (ATC) and afforded the first opportunity to apply control procedures in a simulated environment. The individual has also demonstrated a capability to perform in this environment and is now ready for training in the specific skills needed to enter OJT on the assistant controller position of operation. This stage of training is administered in two parts: classroom instruction and OJT. The classroom training uses facility-prepared instructional materials to supplement the Academy-prepared materials.

**PREREQUISITE:** Successful completion of PV.

**CLASSROOM TRAINING:** The classroom portion of training is administered using lesson plans developed by the Academy and the facility and conducted under the direction of the training administrator (TA). Facility lesson plans shall be developed for:

- The center/area of specialization chart.
- Flight data processing.
- Computer operations.

Evaluations shall be developed and administered for these lesson plans.

**ON-THE-JOB TRAINING:** OJT shall be conducted in the operational environment under the direction of the individual's training team. OJT shall be conducted after successful completion of required classroom training.

**a. CLASSROOM TRAINING.** The individual shall successfully demonstrate the skills and complete the following objectives.

**1. Center Area Chart.** Given a center area chart depicting the location of low- and high-altitude navigational aids (NAVAIDs), the individual will:

- (a) Label each NAVAID/fix with its correct identifier (including the first NAVAID outside the area).
- (b) Depict all airways and jet routes extending from the first NAVAID/fix outside the area and label each.
- (c) Depict and identify sector boundaries.
- (d) Depict and identify restricted and prohibited areas.
- (e) Identify adjacent center sectors.

**2. Area of Specialization Chart.** Given a chart of the area of specialization depicting low-altitude and high-altitude NAVAID locations and center boundaries, the individual will:

- (a) Execute all items in objective 1 above.
- (b) Indicate total mileage between NAVAIDs and/or fix posting.
- (c) Depict and label all intersections.
- (d) Depict and label restricted, prohibited, and warning areas and other special use airspace.
- (e) Depict and label all approach control airspace, visual flight rules (VFR) towers, flight service station (FSS) locations, and class B, C, D, and E airspace.

**3. Processing Flight Data (Nonautomated).** Given flight plan information, the individual will:

- (a) Compute sector fix postings.
- (b) Apply flight data procedures applicable to the assigned center.

**4. Operating Communication System.** Given a position of operation containing a communication system (i.e., 300 system, Voice Switching Control System [VSCS], etc.), the individual will:

- (a) Place outgoing calls:
  - (1) Locate the interphone jack at the assistant position.
  - (2) Locate the interphone and radio jacks at the controller position.
  - (3) Identify and state the function of the five components of a pushbutton dial.

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

(5) Place direct access calls.

(6) Place override calls.

(b) Receive incoming calls:

(1) Identify the basic components of the system on which incoming calls are received.

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

(3) Operate the radio transfer key when the:

a Controller uses the I/R jack.

b Controller uses the interphone jack.

c Controller answers an interphone line.

d Individual answers an interphone line.

**5. Flight Data Position (Nonautomated).** Given a position of operation and flight progress strips, the individual will:

(a) Perform the full range of flight data duties in the nonautomated mode.

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

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

**6. Flight Data Position (Automated).** Given a position of operation in an automated environment that contains a computer entry device, the individual will:

(a) Identify and state the function of the:

(1) Quick action keys (QAK).

(2) Alphanumeric keyboard (ANK).

(3) Computer readout device (CRD).

(4) Flight strip printer (FSP).

(5) Input/output typewriter (IOT).

(b) Prepare and enter computer messages in correct format.

- (c) Respond to computer-generated messages.

**b. CLASSROOM TRAINING EVALUATION.**

1. Locally prepared evaluations shall be administered on:

- (a) The center chart.
- (b) The area of specialization chart.
- (c) Processing flight data in the nonautomated and automated modes.
- (d) Computer message entry.

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

**c. ON-THE-JOB TRAINING (OJT).** Through OJT, the individual shall be able to demonstrate the following abilities.

1. Receive, process, and deliver flight plan information.
2. Communicate and/or coordinate effectively.
3. Enter flight data into the computer correctly.
4. Coordinate flight processing errors with the FDCS, DSC, or another controller, as required.
5. Service the flight strip printer.
6. Process flight plans manually.

**d. OJT EVALUATION.** An Assistant Controller Profile Form (FAA Form 3120-17) will be completed by the OJT Instructor (OJTI) for each session of training conducted. (See Section 6 of this Appendix for instructions.) The completed profile shall be discussed with the individual following the daily OJT period. Additional discussions between the individual and the individual's training team shall be conducted at timely intervals to review the individual's progress in training. The individual's supervisor shall conduct certification skill checks.



## Section 4. NONRADAR/RADAR-ASSOCIATED CONTROLLER TRAINING (Courses 55054 and 55056)

**GENERAL:** The purposes of this development stage are to: 1) provide the individual with background knowledge on special military operations, letters of agreement, phraseology, and strip marking; 2) provide the individual with the skills and knowledge necessary to perform nonradar/radar-associated controller duties under live traffic conditions; and 3) prepare the individual to demonstrate the ability to perform independently (under general supervision) all duties of the nonradar/radar-associated controller on all sectors within the assigned area of specialization and attain certification on those sectors.

This stage is subdivided into three types of training: preliminary classroom training, classroom/simulation training, and OJT. Portions of this stage of training may be used for specialists who have lost their "operationally current" status or specialists who have transferred from another facility or area of specialization. The Training Administrator (TA) shall ascertain which portions of this stage will be administered based on the needs of the specialist. Pass/fail criteria shall also apply to FPLs in this stage of training.

**PREREQUISITE:**

Successful completion of Assistant Controller Training.

**PRELIMINARY  
CLASSROOM  
TRAINING:**

This training is conducted under the direction of the facility Training Administrator (TA) using learning capsules, strip marking/phraseology exercises developed by the Academy and facility, letters of agreement, facility control procedures, Academy-developed course material, nonradar laboratory familiarization scenarios, and radar-associated control scenarios.

**CLASSROOM/  
SIMULATION  
TRAINING:**

This training is administered using Academy-developed and facility-developed course materials for instruction of ATC procedures.

Nonradar training consists of classroom instruction and adequate DYSIM laboratory time to administer the necessary familiarization and S.E.T. control scenarios on one sector.

Radar-associated training consists of classroom instruction, and adequate DYSIM laboratory time to administer the necessary familiarization and S.E.T. control scenarios on one sector.

**ON-THE-JOB  
FAMILIARIZATION:**

OJF shall be assigned at the discretion of the training team in accordance with Chapter 3 of this order.

**ON-THE-JOB TRAINING:**

OJT shall be administered in an operational environment as specified by Chapter 3 of this order.

**a. PRELIMINARY CLASSROOM TRAINING.** Preliminary classroom training shall be administered in the following sequence:

1. En route developmental study guide. (CATTS evaluation following each block with a comprehensive evaluation upon completion of all blocks.)

2. Special military operations. (CATTS evaluation following each element with a comprehensive evaluation upon completion of all elements.)

3. Letters of agreement/facility orders pertinent to the assigned area of specialization including a written or CATTS evaluation.

4. Phraseology/strip marking exercises including a written or CATTS evaluation.

5. Detailed chart of assigned area of specialization and evaluation. Using a chart of the assigned area of specialization depicting low-altitude and high-altitude NAVAID symbols, the individual will be able to:

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

(b) Depict and label adjacent sector and facility boundaries.

(c) Depict the airways extending from the first NAVAID outside the sectors and label each.

(d) Depict and label all intersections.

(e) Depict the mileage between NAVAIDs and/or fix postings on each route segment.

(f) Depict and label restricted, prohibited, and warning areas and other special use areas.

(g) Depict and label all standard instrument departures (SIDs)/standard terminal arrival routes (STARs).

(h) Depict and label all approach control airspace; VFR towers; FSSs; airports; class B, C, D, and E airspace; and instrument landing systems (ILSs).

(i) Label all minimum en route altitudes (MEAs), minimum reception altitudes (MRAs), minimum obstruction clearance altitudes (MOCAs), and minimum crossing altitudes (MCAs).

(j) Depict and label the following information for those airports within the area of specialization not served by an approach control facility that have published penetration/approach procedures:

(1) Published holding pattern direction and turns.

(2) Initial penetration/approach altitude.

(3) Initial penetration/approach fix.

- (4) Outbound and inbound heading/bearing/radial.
- (5) Direction of procedure turn (if applicable).
- (6) Missed approach procedure and altitude.

**6. Nonradar Familiarization Scenarios.**

(a) The individual will be given nonradar familiarization scenarios on one sector in the assigned area of specialization. The TA shall determine the number of nonradar familiarization scenarios the individual will complete.

(b) The individual will perform the following in accordance with Order 7110.65:

- (1) Issue clearances to departing, arriving, and holding aircraft.
- (2) Issue clearances to provide vertical, longitudinal, or lateral separation.
- (3) Issue clearances according to altitude assignments or altimeter settings.
- (4) Use radio and interphone communications procedures.
- (5) Record clearances and control information on strips, using approved symbols and abbreviations.
- (6) Forward control information and all revisions as required.
- (7) Obtain information from an aircraft in an emergency and notify the appropriate facilities.
- (8) Issue clearances to provide VFR-on-top and Special VFR (SVFR) separation.
- (9) State the requirements for position relief briefings.
- (10) Transfer position responsibility using approved procedures and standard practices.
- (11) Demonstrate knowledge of all applicable letters of agreement.
- (12) Demonstrate knowledge of the assigned area of specialization.

**b. PRELIMINARY CLASSROOM TRAINING EVALUATION.**

1. The training department shall monitor the individual's progress and administer all written and CATTS-administered evaluations.

2. The facility training department shall develop a standard map and point value for the area-of-specialization requirements.

**c. CLASSROOM/SIMULATION TRAINING.**

1. Nonradar Academic Procedures. Given traffic situations, and in accordance with Order 7110.65, the individual will:

- (a) Record clearances and control information on strips, using approved symbols and abbreviations.
- (b) Use correct radio and interphone message format and communications procedures.
- (c) Issue clearances to provide vertical, longitudinal, or lateral separation.
- (d) Issue clearances according to priority.
- (e) Issue clearances that pertain to altimeters and altitude assignments.

2. Nonradar S.E.T. Scenarios. Given S.E.T. scenarios on one sector in the assigned area of specialization, the individual will perform the following in accordance with Order 7110.65:

- (a) Issue clearances to departing, arriving, and holding aircraft.
- (b) Issue clearances to provide vertical, longitudinal, or lateral separation.
- (c) Issue clearances according to altitude assignments or altimeter settings.
- (d) Use radio and interphone communications procedures.
- (e) Record clearances and control information on strips, using approved symbols and abbreviations.
- (f) Forward control information and all revisions as required.
- (g) Obtain information from an aircraft in an emergency and notify the appropriate facilities.
- (h) Issue clearances to provide VFR-on-top and SVFR separation.
- (i) State the requirements for position relief briefings.
- (j) Transfer position responsibility using approved procedures and standard practices.
- (k) Demonstrate knowledge of all applicable letters of agreement.
- (l) Demonstrate knowledge of the assigned area of specialization.

3. Nonradar Sector Operation.

(a) Given a simulated nonradar sector in the assigned area of specialization, the individual will apply ATC procedures learned in nonradar academics, in accordance with Order 7110.65, during the administration of nonradar S.E.T. scenarios of increasing complexity.

(b) The TA shall determine the number of nonradar S.E.T. scenarios the individual will complete. Periodic evaluation scenarios shall be conducted to determine the individual's progress through the completion of the scenarios.

(1) Example: For areas of specialization that have no sectors where lack of radar coverage requires the extensive use of nonradar control procedures, the TA may require the administration of 11 S.E.T. problems with numbers 8 and 11 as pass/fail evaluations.

(2) Example: For areas of specialization that have no sectors where lack of radar coverage or existing procedures requires more than the occasional use of nonradar control procedures, the TA may require that no S.E.T. problems be administered.

(c) It is necessary to complete scenarios at the lowest complexity level first and progressively work up to the highest. Scenarios at a given complexity level may be administered in any order to provide variation.

(d) The results of the individual's performance during each scenario shall be recorded on the OJT Instruction/Evaluation Report, FAA Form 3120-25, and discussed with the individual (see Appendix B of this order for instructions). Forms used during the evaluation scenario shall be retained and filed in the individual's training folder.

#### 4. Laboratory Evaluation (Nonradar).

(a) If the individual's training program calls for the administration of facility-developed S.E.T. evaluation control scenarios, they shall be administered at regular intervals during the nonradar procedures laboratory segment of training. The evaluations shall be pass/fail. If the individual does not meet the requirements for successful completion of the scenario, the TA may determine that additional training is warranted. This training may include:

(1) Additional classroom instruction, and/or

(2) Additional instructional scenarios followed by an evaluation scenario.

(b) If the individual does not meet the requirements for successful completion after additional training, the provisions of Order 3330.30 shall be followed.

5. Radar-Associated Academic Procedures. Given traffic situations, and in accordance with Order 7110.65, the individual will:

(a) Identify the duties of the nonradar/radar-associated position.

(b) Identify aircraft, permanent echoes, weather, etc., on radar displays.

(c) Define beacon code assignments.

(d) Describe the radar identification procedures.

(e) Describe the transfer of radar identification procedures and standard operating practices.

- (f) State radar separation minimums.
- (g) Identify when to integrate nonradar procedures into a radar environment to ensure positive separation.
- (h) Describe the procedures for verifying and using Mode C.
- (i) State the procedures for issuing IFR clearances, using radar and nonradar data for departures and airfiles.
- (j) Enter computer messages for a nonradar/radar-associated position.
- (k) State the transition procedures to and from the primary backup system.
- (l) State the requirements for position relief briefings.

**6. Radar-Associated Sector Operation.**

- (a) Given a simulated sector in the assigned area of specialization, the individual will apply ATC procedures during the administration of S.E.T. radar-associated control scenarios of increasing volume/complexity in accordance with Order 7110.65.
- (b) The TA shall determine the number of radar-associated familiarization and S.E.T. scenarios the individual will complete. Periodic evaluation scenarios shall be conducted during the S.E.T. portion to determine the individual's progress through the completion of the scenarios.
  - (1) Example: For areas of specialization that have no sectors where lack of radar coverage requires the extensive use of nonradar control procedures, the TA may require the administration of 12 familiarization and 20 S.E.T. problems, with numbers 11, 14, 17, and 20 as pass/fail evaluations.
  - (2) Example: For areas of specialization that have no sectors where lack of radar coverage or existing procedures requires more than the occasional use of nonradar control procedures, the TA may require the administration of 12 familiarization and 30 S.E.T. problems, with numbers 10, 14, 18, 22, 26, and 30 as pass/fail evaluations.
- (c) It is necessary to complete scenarios at the lowest complexity level first and progressively work up to the highest. Scenarios at a given complexity level may be administered in any order to provide variation.
- (d) The results of the individual's performance during each scenario shall be recorded on the OJT Instruction/Evaluation Report, FAA Form 3120-25 and discussed with the individual (see Appendix B of this order for instructions). Forms used during the evaluation scenario shall be retained and filed in the individual's training folder.

**7. Laboratory Evaluation (Radar-Associated).**

- (a) All radar-associated S.E.T control scenarios shall be conducted in a two-position sector configuration with the individual working the radar-associated position. The radar position may be worked by a certified radar controller, a training specialist, or an individual who has completed Stage IV of training.

(b) Evaluation control scenarios shall be administered at regular intervals during the radar-associated laboratory segment of training. The evaluations shall be pass/fail. If the individual does not meet the requirements for successful completion of the scenario, the training team and assistant manager for training (AMT) or TA may determine that additional training is warranted. This training may include:

- (1) Additional classroom instruction, and/or
- (2) Additional instructional scenarios followed by an evaluation scenario.

(c) If the individual does not meet the requirements for successful completion after additional training, the provisions of Order 3330.30 shall be followed.

(d) Following the completion of the simulation training, additional familiarization problems may be administered on additional sector(s), with the number and duration to be determined based on the needs of the individual.

8. Nonradar and Radar-Associated Problem Development Guidelines. In order to achieve standardization in the National En Route Air Traffic Training Program, a complexity workload factor has been established. The following guidelines are designed to assist in the development of control problems with a uniform level of content and consistent complexity count. All personnel involved in the development of control problems for use in the National En Route Air Traffic Training Program shall follow these guidelines.

(a) Complexity Workload Factor. The complexity formula shall allow inclusion of the particular characteristics encountered in each sector being developed. This complexity formula is used in development of all laboratory problems. When developing control problems using the complexity formula and the problem objectives, the problem developer shall combine the functions listed below. After establishing the required complexity level for a given problem, use the worksheet to arrive at the numerical total specified plus or minus three points for each problem, and include specific separation rules to be applied by the developmental. Local reproduction of this worksheet is approved. (See Figure D4-1 on pages D-23 and D-24 later in this section of this appendix for an example.)

(b) Complexity Workload Formula. Functions are as follow:

	<u>Points</u>
(1) Departures	5
(2) Arrivals	4
(3) En route requiring control functions	4
(4) Emergency and aircraft radio failure	4
(5) Special flights	3
(6) En route (No control function)	2
(7) Coordination (additional point(s) when above function(s) require coordination)	

(c) Complexity Definitions.

- (1) An en route aircraft is classified as an aircraft that originated outside and passes through the sector without landing.
- (2) An en route aircraft operating at an altitude under approach control jurisdiction is counted as an en route and a coordination factor.
- (3) A "pop-up" (airfile) en route is counted as departure.
- (4) A "pop-up" or special VFR arrival is counted as arrival.
- (5) Emergency: When an emergency or aircraft radio failure is planned into a problem, use an en route aircraft as the emergency.



# **Control Problem Complexity Workload Worksheet**

Center: \_\_\_\_\_  
 Problem Number: \_\_\_\_\_  
 Sector Number: \_\_\_\_\_  
 Point Factor: \_\_\_\_\_ points

I. FUNCTIONS	NUMBER OF FUNCTIONS	POINT VALUE	TOTAL POINTS
A. Departures			
B. Arrivals			
C. En Route (requiring control function)			
D. En Route (no control function)			
E. Emergency or RDOF (Problems _____)			
F. Special Flights (7110.65, Chapter 7)			
G. Coordination (additional points when above functions require coordination)			
			<b>Totals</b>

Figure D4-1. CONTROL PROBLEM COMPLEXITY WORKLOAD WORKSHEET

**II. PROBLEM CONTENT**

A. High Altitude Instrument Approach VOR/TACON	
B. Sector Radio Equipment Failure (Problems _____)	
C. SAFI Flights	
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.	
U.	
V.	
W.	
X.	
Y.	
Z.	

**Figure D4-1. CONTROL PROBLEM COMPLEXITY WORKLOAD WORKSHEET**  
(Continued)

(d) **Instructor Guide.** The Instructor Guide is an essential element in problem development. It is designed to relay instructional intent from the problem developer to the lab instructor. An Instructor Guide is developed for each control problem and is divided into three sections:

(1) **Information for Instructor.** This section informs the instructor of the problem content as it relates to:

- a Types of separation that should be stressed.
- b The problem's primary objective, such as volume of departures or arrivals.
- c Increased coordination.
- d Any other difficult areas that may be encountered.

(2) **Instructor Action.** This section requires the instructor to take the necessary action to accomplish the problem objective and to stress to the developmental, during the problem, the areas that will guide him or her to meet the problem objectives.

(3) **Developmental Application and Technique.** This section is the basis for laboratory preparation and is used in the classroom prior to working the problem. It details the separation standards and procedure to be used in the laboratory.

(e) **Remote Instructions.** Remote Instructions are designed to provide the remote controller with instructions essential to the problem. On the problem's remote strips, enter plus time, next-fix estimates, and Initial Contact Times (IC). Any pertinent remarks, such as when to declare the emergency, the type of emergency and pilot's intentions, altitude requests, destination changes, fuel problems, etc., should be entered on the remote strips as well as the Instructor Guide.

(f) **Nonradar Control Problems.**

(1) **General Objectives.**

a All problems shall be conducted in a one-position sector configuration with the developmental working the interphone and radio positions combined.

b Problems will be customized to the developmental's home facility.

c Position relief briefings shall be received and given on all S.E.T. problems.

d When weather is a factor in the problem, such as special VFR, missed approach, etc., indicate this on the Instructor Guide sheet to ensure that the remote position will have the necessary information.

e Other items listed under Section 2 of the Complexity Workload Worksheet should be entered in the problems as deemed necessary by the problem developer.

f Administer a preparatory evaluation problem prior to the first evaluation problem.

g Developmentals cannot be evaluated on any procedures or situation that they have not had experience with in previous problems.

h The instructor shall assist, as necessary, to keep problem continuity, except during pass/fail evaluation problems.

i Each problem shall be 60 minutes in duration.

(2) S.E.T. Problem Objectives. The developmental shall independently perform all the duties of the simulated nonradar sector, including radio. This simulated environmental training is designed utilizing the complexity workload factor and introduces developmentals to the peculiarities of their specialized area.

a A failure of a facility NAVAID must occur in two separate problems. Substitute routing will be used.

b A failure of the center radio channel must occur in two separate problems.

c A two-way radio communications failure must occur.

d An emergency must occur.

e Two separate problems must include posted weather information and NOTAMS for traffic control purposes.

(3) Individual Training Problem Example. The example in Figure D4-2 shows how a training program may be designed to fulfill the requirements of this stage of development.

**FIGURE D4-2. FAMILIARIZATION/S.E.T. NONRADAR PROBLEMS**

<b>Problem</b>	<b>Percent</b>	<b>Minutes</b>	<b>Type</b>
A	70	60	Familiarization
B	75	60	Familiarization
C	80	60	Familiarization
D	80	60	Familiarization
E	85	60	Familiarization
F	85	60	Familiarization
G	85	60	Familiarization
H	90	60	Familiarization
I	90	60	Familiarization
J	90	60	Familiarization
1	70	60	Instructional
2	75	60	Instructional
3	80	60	Instructional
4	80	60	Instructional
5	85	60	Instructional
6	85	60	Instructional
7	85	60	Evaluation-Preparatory
8	90	60	Pass/Fail
9	90	60	Instructional
10	90	60	Instructional
11	95	60	Pass/Fail

(g) **Radar-Associated Control Problems.** This section covers the administration of the field portions of the National En Route Air Traffic Training Program in the development of Radar-Associated Control problems. A radar-associate controller must handle varying volumes of traffic and must be able to cope with situations of varying complexity. These two elements—volume level and complexity factors—have been established as the basic criteria for problem development. By varying the level of these two elements, a wide range of knowledge and skill situations can be created. The radar-associated problems developed for Stage III training will simulate the combined radar/nonradar environment in which the manual controller works.

(1) **Complexity Factor.** Use the formula provided in paragraph c(8) of this section.

(2) **Volume Level Criteria.** This element consists of two parts. The first part refers to the hourly operations rate. The second part refers to the number of aircraft under the control of the radar controller at any given time (instant count). Determine these numbers by using the following method.

a The hourly operations rate shall be established as follows:

- Take a sector traffic sample of the busiest 8-hour period on a facility "busy" day, a facility "peak" day, and a day picked at random.
- Add the number of aircraft handled during each of the 8-hour periods and find the average.
- Find the average number of aircraft handled per hour.

b Instant count may be established by simply determining the average number of aircraft handled at a given time during the busy periods of a "busy" day.

c When the hourly operations rate and the instant count are determined in accordance with the above, the 100 percent volume level is established and other volume levels can easily be calculated accordingly. The hourly operations rate and instant count at the 100 percent level shall be a minimum of 25 and 10 respectively, regardless of actual sector values.

**EXAMPLE:**

<u>DAY</u>	<u>#ACFT</u>
Busy	240
Peak	320
<u>Random</u>	<u>208</u>
Total	768 divided by 24 = Average of 32 per hour
	32 is the 100 percent volume level for this sector.
	16 was determined as the instant count.

**NOTE:** In some sector configurations an instant count of 10 may be so unrealistic as to be difficult to manage. In those rare instances, regional waivers to this minimum are authorized. ATZ-100 shall be notified of all such waivers.

(3) Problem Development General Objectives.

a Radar-associated problems are 60 minutes in duration.

b Conflict alert is an aid to the developmental during the course of the problem. Therefore, it shall be deactivated during every other problem, and during all S.E.T. evaluation problems.

c Problems shall include unusual situations and seldom-used procedures.

- d Problems will be customized to the developmental's home facility.
- e Position relief briefings shall be received and given on all S.E.T. problems.
- f When weather is a factor in the problem, such as special VFR, missed approach, etc., indicate this on the Instructor Guide sheet to ensure that the remote position will have the necessary information.
- g Other items listed under Section 2 of the Complexity Workload Worksheet should be entered in the problems as deemed necessary by the problem developer.
- h Administer a preparatory evaluation problem prior to the first evaluation problem.
- i Developmentals cannot be evaluated on any procedures or situation that they have not had experience with in previous problems.
- j The instructor shall assist, as necessary, to keep problem continuity, except during pass/fail evaluation problems.
- k Include such items as refusal, noncompliance, and/or nonreceipt of clearance, unexpected aircraft performances, etc.

(4) S.E.T. Problem Objectives. The following are minimum situations and procedural items that should be included in the problems, as deemed appropriate by the TA, based on their applicability in the individual sectors:

- a Departure and arrivals simultaneously in sector.
- b Separation from: adjacent airspace, obstructions, restricted or prohibited airspace (reroutes or altitude changes); crossing, converging, and opposite passing traffic; radar and nonradar.
- c Request to VFR/OTP.
- d Traffic in sector under control of another sector.
- e VFR traffic encountering IFR.
- f Inflight emergency.
- g Special flight operations affecting normal operations.
- h ALTRV affecting regular arrival and departure operations.
- i Aircraft with minimum fuel, fuel dumping, and ariel refueling.
- j Communications, NAVAID, Mode C, and/or transponder failure.
- k Request for altitude change at assigned altitude.

- l Successive arrivals and departures.
- m Handoffs in relation to preceding flights.
- n Approach control saturation.
- o Chaff Drop/ECM activity.
- p Fast departure following slower aircraft.
- q Arrivals with altitudes inverted.
- r Route change in flight, change in departure or arrival route due to weather.
- s Traffic with no center frequencies-working FSS/AFSS.
- t Marginal radar coverage.
- u Loss of narrowband radar and the use of the primary backup system.
- v Loss of radar requiring the use of nonradar procedures.
- w Other control equipment failures that have an impact on the safe, orderly, and expeditious flow of traffic.
- x Handoffs; initiate and receive point outs, sector to sector, facility to facility, etc.
- y Holding; including loss of communications, alternate airport, low fuel.
- z PIREP.
- aa Provide approach control procedures; arrival and departure, high-altitude penetration, simultaneous and successive.
- bb Hijacking.
- cc Airfiles.
- dd Priority Air Evac or Air Ambulance (Lifeguard).
- ee Overdue Aircraft.

**NOTE:** Care shall be taken to ensure that the above situations and procedural items are included in sufficient amount during the instructional problems to ensure adequate practice time. In turn, these items shall be included in one or more of the pass/fail evaluation problems as dictated by the nature of the sector or specifically planned by the TA.



(5) Radar-Associated Control Problems. The example in Figure D4-3 shows how a training program may be designed to fulfill the requirements listed above.

**FIGURE D4-3. RADAR-ASSOCIATED S.E.T. CONTROL PROBLEMS**

Problem	Complexity (%)	Volume (%)	Duration (Minutes)	Type
1	70	70	60	Instructional
2	70	70	60	Instructional
3	75	75	60	Instructional
4	75	75	60	Instructional
5	75	75	60	Instructional
6	80	80	60	Instructional
7	80	80	60	Instructional
8	80	80	60	Evaluation-Preparatory
9	85	80	60	Instructional
10	85	85	60	Instructional
11	85	85	60	Pass/Fail
12	90	85	60	Instructional
13	90	90	60	Instructional
14	90	90	60	Pass/Fail
15	95	90	60	Instructional
16	95	95	60	Instructional
17	95	95	60	Pass/Fail
18	100	95	60	Instructional
19	100	100	60	Instructional
20	100	100	60	Pass/Fail

**d. ON-THE-JOB TRAINING.**

**1. Nonradar/Radar-Associated Position Operation.**

(a) Through OJT, the individual shall correctly demonstrate the abilities to:

- (1) Initiate and accept radar handoffs and pointouts.
- (2) Perform appropriate changeover procedures to transition to and from the primary backup system.
- (3) Maintain separation using prescribed standards.
- (4) Issue departure clearances.
- (5) Provide beacon code assignments to IFR aircraft.
- (6) Provide assistance to aircraft experiencing in-flight emergencies.

- (7) Provide control to aircraft experiencing radio communications failure.
- (8) Employ holding procedures.
- (9) Recognize sector saturation and employ procedures to prevent or alleviate this control problem.
- (10) Provide weather advisories.
- (11) Maintain board management.
- (12) Enter flight data into computer as required.
- (13) Communicate effectively over interphone or radio.
- (14) Apply hijacked aircraft control procedures.

(b) Developmentals shall receive a minimum of 1 hour of instruction on the primary backup system prior to certification on the first nonradar/radar-associated sector.

## 2. Evaluation.

(a) As specified in Chapter 3 of this order, the individual shall be assigned target hours for radar control position qualification and certification, and the individual's supervisor shall conduct and document performance and certification skill checks.

(b) An OJT Instruction/Evaluation Report, FAA Form 3120-25, shall be completed by the OJT Instructor for each session of training conducted (see Appendix B of this order for instructions). The completed profile form shall be discussed with the individual following the daily OJT period. Additional discussions between the individual and the training team shall be conducted at timely intervals to review the individual's overall progress in training.

(c) If the individual does not meet the requirements for position qualification and certification, follow the process specified in Chapter 3 of this order.

3. Optional Training Path. An optional administration of this stage of development allows for the individual to attain certification on two nonradar/radar-associated control positions of operation in an area of specialization. These sectors are selected for OJT and evaluation based on their potential to provide the individual with a realistic but fair standard in demonstrating an ability to handle all control situations anticipated in the assigned area of specialization. After successfully obtaining certification on these two sectors, the individual may proceed to the next stage of training: radar control. (Log as course 55056.)

## Section 5. RADAR CONTROLLER TRAINING (Courses 55055 and 55057)

**GENERAL:** The purpose of this development stage is to qualify the individual to perform the full range of duties and attain certification on all radar positions of operation in an area of specialization.

This stage is subdivided into two types of training: classroom/simulation training and OJT. Portions of this stage of training may be used for specialists who have lost their "operationally current" status or specialists who have transferred from another facility or area of specialization. The Training Administrator (TA) shall ascertain which portions of this stage will be administered based on the needs of the specialist. Pass/fail criteria shall also apply to FPLs in this stage of training.

**PREREQUISITE:**

Successful completion of Assistant Controller and Nonradar/Radar-Associated Control

**CLASSROOM/  
SIMULATION  
TRAINING:**

This training is administered using Academy-developed and facility-developed course materials for instruction of ATC procedures.

Radar controller training consists of classroom instruction and adequate DYSIM laboratory time to administer the necessary familiarization and S.E.T. control scenarios on two sectors.

**ON-THE-JOB  
FAMILIARIZATION:**

OJT shall be assigned at the discretion of the training team in accordance with Chapter 3 of this order.

**ON-THE-JOB TRAINING:**

OJT shall be administered in an operational environment as specified by Chapter 3 of this order.

**a. CLASSROOM/SIMULATION TRAINING.**

1. Radar Academic Procedures. Given traffic situations, and in accordance with Order 7110.65, the individual will perform the following.

(a) Radar Basics:

- (1) Explain the differences between narrowband, DARC, and broadband radar.
- (2) Locate and identify each radar system serving the assigned area of specialization.
- (3) Describe the radar coverage and any limitation pertaining to the area of specialization and adjacent areas.
- (4) List the components of the ATC radar beacon system and describe the function of each component.
- (5) Explain what action to take when an aircraft's transponder fails in positive control airspace.
- (6) Describe the procedure for identifying aircraft, using both primary and secondary radar.

- (7) Describe automatic acquisition and explain the action required.
- (8) State the radar separation minima for narrowband, DARC, and broadband modes.
- (9) List the conditions under which radar separation may be applied.
- (10) Explain how to apply radar separation between aircraft targets.

(b) Position Equipment:

- (1) Describe the PVD (plan view display) controls and their functions.
- (2) Describe the procedures for turning on and adjusting a PVD.
- (3) Prepare RDP messages for entry into the computer.
- (4) Explain the conditions that may make it necessary to adjust the PVD display prior to assuming responsibility for a radar position.
- (5) Identify the radio equipment and land lines associated with the radar positions.

(c) Vectoring and Speed Control:

- (1) State the conditions under which vectoring may be applied.
- (2) Formulate vector clearances.
- (3) Explain the application of radar separation and vectoring techniques as applied to departing and arriving aircraft.
- (4) Describe speed adjustment procedures.
- (5) Specify minimum speeds to be used when applying speed adjustment procedures.

(d) Weather and Associated Information:

- (1) Explain the effects of weather on the PVD for the narrowband, DARC, and broadband modes.
- (2) Explain the purpose of ECM and chaff and how they affect the radar display.

(e) Beacon Codes:

- (1) Describe procedures for selecting and monitoring assigned beacon codes.
- (2) Identify the beacon codes assigned to departures, en route, arrivals, terminal coordination, VFR-on-top, IFR cancellation, emergency, radio failure, and hijacking.

(3) State the correct phraseology for code assignments changing transponder to low or standby, beacon termination, and inoperative or malfunctioning interrogator/transponder.

(4) State the beacon code assignment for VFR advisory service.

(f) Handoffs:

(1) Describe how, when, and where to effect a handoff.

(2) Identify the parameters established for initiating and receiving handoffs.

(3) Effect a transfer of control and communications.

(4) State the procedures for confirming a handoff.

(g) Special Circumstances:

(1) Describe how to provide radar assistance for aircraft with a communications failure.

(2) Recognize target indications of emergencies, lost communications, and hijacking.

(3) Describe the procedures for issuing traffic information, vectors because of traffic, weather information, chaff information, surveillance of holding patterns, and merging target procedures.

(4) Explain in detail applicable letters of agreement and any special radar procedures.

## 2. Radar Qualification Examination.

(a) Prior to entering a simulated radar environment, the individual shall pass the radar qualification examination obtained from the FAA Academy. If the individual does not meet the requirements for successful completion of the examination, the training team and assistant manager for training (AMT) or TA may determine that additional training is warranted.

(b) This training may include:

(1) Additional classroom instruction, and/or

(2) CATTS training.

(c) If the individual does not meet the requirements for successful completion after additional training, the provisions of Order 3330.30 shall be followed.

## 3. Radar Sector Operation.

(a) Given a simulated radar sector in the assigned area of specialization, the individual will apply ATC procedures, in accordance with Order 7110.65, during the administration of radar control scenarios of increasing volume level.

(b) The TA shall determine the number of radar S.E.T. scenarios that the individual will complete. Periodic evaluation scenarios shall be conducted to determine the individual's progress through the completion of the scenarios.

Example: The TA may require the administration of 5 familiarization and 15 S.E.T. radar problems, with numbers 5, 10, and 15 as pass/fail evaluation.

(c) It is necessary to complete scenarios at the lowest complexity level first and progressively work up to the highest. Scenarios at a given complexity level may be administered in any order to provide variation.

(d) The results of the individual's performance during each scenario shall be recorded on the OJT Instruction/Evaluation Report, FAA Form 3120-25, and discussed with the individual (see Appendix B of this order). Forms used during the evaluation scenario shall be retained and filed in the individual's training folder.

#### 4. Laboratory Evaluation (Radar).

(a) All radar S.E.T control scenarios shall be conducted in a two-position sector configuration with the individual working the radar position. The radar-associated position may be worked by a certified radar controller, a training specialist, or an individual who has completed Stage III of training.

(b) Evaluation control scenarios shall be administered at regular intervals during the radar laboratory segment of training. The evaluations shall be pass/fail. If the individual does not meet the requirements for successful completion of the scenario, the training team and TA may determine that additional training is warranted. This training may include:

(1) Additional classroom instruction, and/or

(2) Additional instructional scenarios followed by an evaluation scenario.

(c) If the individual does not meet the requirements for successful completion after additional training, the provisions of Order 3330.30 shall be followed.

(d) Following the completion of the simulation training, additional familiarization problems may be administered on additional sector(s), with the number and duration to be determined based on the individual's needs.

#### 5. Radar Problem Development Guidelines.

(a) In order to achieve standardization in the National En Route Air Traffic Training Program, a complexity workload factor and volume level criteria have been established. These guidelines are designed to assist in the development of control problems with a uniform level of content and consistent complexity count. All personnel involved in the development of control problems for use in the National En Route Air Traffic Training Program shall follow these guidelines.

(1) Complexity Workload Factor. See Section 4, paragraphs 8(a), (b), and (c) for detailed instructions.

(2) Volume Level Criteria. See Section 4, paragraph 8(g)(2) for detailed instructions.

(3) Instructor Guide and Remote Instruction. See Section 4, paragraphs 8(d) and (e) for instructions.

6. Radar Problem Development General Objectives.

(a) Radar problems are 60 minutes in duration.

(b) Conflict alert is an aid to the developmental during the course of the problem. Therefore, it shall be deactivated during every other problem, and during all S.E.T. evaluation problems.

(c) Problems shall include unusual situations and seldom-used procedures.

(d) Problems will be customized to the developmental's home facility.

(e) Position relief briefings shall be received and given on all S.E.T. problems.

(f) When weather is a factor in the problem, such as special VFR, missed approach, etc., indicate this on the Instructor Guide sheet to ensure that the remote position will have the necessary information.

(g) Other items listed under Part II (Problem Content) of the Complexity Workload Worksheet should be entered in the problems as deemed necessary by the problem developer.

(h) Administer a preparatory evaluation problem prior to the first evaluation problem.

(i) Developmentals cannot be evaluated on any procedures or situation that they have not had experience with in previous problems.

(j) The instructor shall assist, as necessary, to keep problem continuity, except during pass/fail evaluation problems.

(k) Include such items as refusal, noncompliance, and/or nonreceipt of clearance, unexpected aircraft performances, etc.

7. Radar S.E.T. Problem Objectives. The following are minimum situations and procedural items that should be included in the problems, as deemed appropriate by the TA, based on their applicability in the individual sectors:

(a) Radar identification, five methods, and reidentification.

(b) Vectoring; to geographical point, to final approach course, for normal separation, departures, off route, around weather, no-gyro, flight breakup.

(c) Departure and arrivals simultaneously in sector.

(d) Separation from: adjacent airspace, obstructions, restricted or prohibited airspace (reroutes or altitude changes); crossing, converging, and opposite passing traffic; primary to primary, beacon to beacon, beacon to primary; radar and nonradar.

(e) Request to VFR/OTP.

(f) Traffic in sector under control of another sector.

(g) VFR traffic encountering IFR, canceling IFR, and providing advisories.

(h) Inflight emergency, equipment malfunctions.

(i) Special flight operations affecting normal operations.

(j) ALTRV affecting regular arrival and departure operations.

(k) Aircraft with minimum fuel, fuel dumping, and ariel refueling.

(l) Communications, NAVAID, Mode C, and/or transponder failure.

(m) Request for altitude change at assigned altitude.

(n) Successive arrivals and departures.

(o) Approach control saturation.

(p) Chaff Drop/ECM activity.

(q) Fast departure following slower aircraft.

(r) Arrivals with altitudes inverted.

(s) Route change in flight, change in departure or arrival route due to weather.

(t) Traffic with no center frequencies-working FSS/AFSS.

(u) Marginal radar coverage.

(v) Loss of narrowband radar and the use of the primary backup system.

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

(x) Other control equipment failures that have an impact on the safe, orderly, and expeditious flow of traffic.

(y) Handoffs; initiate and receive point outs, sector to sector, facility to facility, in relation to preceding flights, etc.



(z) Holding; including loss of communications, alternate airport, low fuel, reidentify aircraft, entrail spacing.

(aa) Clearance; IFR, to alternate airport, etc.

(bb) PIREP.

(cc) Provide approach control procedures; arrival and departure, high-altitude penetration, simultaneous and successive.

(dd) Hijacking.

(ee) Airfiles.

(ff) Priority Air Evac or Air Ambulance (Lifeguard).

(gg) Overdue Aircraft.

**NOTE:** Care shall be taken to ensure that the above situations and procedural items are included in sufficient amount during the instructional problems to ensure adequate practice time. In turn, these items shall be included in one or more of the pass/fail evaluation problems as dictated by the nature of the sector or specifically planned by the AMT.

8. Radar Control Problems. Figure D5-1 shows an example of how a training program may be designed to fulfill the requirements listed above.

**FIGURE D5-1. RADAR S.E.T. CONTROL PROBLEMS**

Problem	Complexity (%)	Volume (%)	Duration (Minutes)	Type
1	70	70	60	Instructional
2	70	70	60	Instructional
3	75	75	60	Instructional
4	75	75	60	Instructional
5	75	75	60	Instructional
6	80	80	60	Instructional
7	80	80	60	Instructional
8	80	80	60	Evaluation
				Preparatory
9	85	80	60	Instructional
10	85	85	60	Instructional
11	85	85	60	Pass/Fail
12	90	85	60	Instructional
13	90	90	60	Instructional
14	90	90	60	Pass/Fail
15	95	90	60	Instructional
16	95	95	60	Instructional
17	95	95	60	Pass/Fail
18	100	95	60	Instructional
19	100	100	60	Instructional
20	100	100	60	Pass/Fail

**b. ON-THE-JOB TRAINING.**

1. Through OJT, the individual will demonstrate the ability to:

- (a) Establish and maintain positive aircraft identity.
- (b) Provide radar separation to aircraft.
- (c) Maintain separation using nonradar procedures.
- (d) Employ holding procedures.
- (e) Provide beacon code assignments to IFR aircraft.
- (f) Use radio and interphone communications procedures correctly.
- (g) Record control information on strips.
- (h) Sequence aircraft.
- (i) Receive handoffs from adjacent controller/facilities.
- (j) Initiate handoffs to adjacent controller/facilities.
- (k) Demonstrate proper radar procedures contained in applicable directives.
- (l) Recognize sector saturation and employ procedures to prevent or alleviate it.
- (m) Provide navigational assistance.
- (n) Provide traffic advisories.
- (o) Provide in-flight weather advisories.
- (p) Apply emergency, radio failure, and hijack procedures.
- (q) Detect and report equipment malfunctions.
- (r) Perform appropriate changeover procedures to transition to and from the primary backup system.
- (s) Maintain awareness of equipment status and use the equipment to full advantage.
- (t) Perform position relief briefing.

2. Developmentals shall receive a minimum of 2 hours of instruction on the primary backup system prior to certification on the first radar sector.

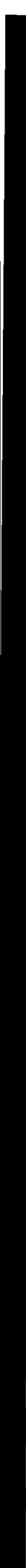
### 3. Evaluation.

(a) As specified in Chapter 3 of this order, the individual shall be assigned target hours for radar control position qualification and certification, and the individual's supervisor shall conduct and document performance and certification skill checks.

(b) An OJT Instruction/Evaluation Report, FAA Form 3120-25, shall be completed by the OJT Instructor for each session of training conducted (see Appendix B of this order). The completed profile form shall be discussed with the individual following the daily OJT period. Additional discussions between the individual and the training team shall be conducted at timely intervals to review the individual's overall progress in training.

(c) If the individual does not meet the requirements for position qualification and certification, follow the process specified in Chapter 3 of this order.

4. Optional Training Path. An optional administration of this stage of development allows for the individual to attain certification on two radar positions of operation in an area of specialization. After successfully obtaining certification on these two sectors, the individual shall be required to qualify on all remaining radar-associated/radar sectors within the assigned area of specialization. The developmental shall be required to certify on a radar-associated position before proceeding to the associated radar position. If the individual is unable to receive OJT on the next available radar position, he/she should be given OJT on the next available radar-associated position. The certification process should be, if possible, radar associate-radar, radar associate-radar, etc. Certification on the radar-associated position will precede certification on the radar position. (Log as course 55057.)



## Section 6. FACILITY PROFILE FORMS

a. **PURPOSE.** Every individual involved in the training of developmental specialists shall become thoroughly familiar with this section. This section presents instructions for completing the OJT Instruction/Evaluation Report (FAA Form 3120-25) and the Assistant Controller Profile Form (FAA Form 3120-17). These forms are used for evaluating the developmental's performance. These forms depict specific factors for evaluating the performance of the developmental. The evaluation factors are discussed in this section. Directions for administrative completion of entries are contained in this section.

b. **GENERAL INSTRUCTIONS.** The individual administering the control problem is responsible for completing the appropriate form as indicated below.

**NOTE:** Proper completion of these forms is essential, because they will provide valuable feedback to the developmental. They will also be particularly important in the event of a training failure.

1. Complete the following items on the top section of each form:

- (a) Developmental's name.
- (b) Date of control problem.
- (c) Problem identification, if available.
- (d) Sector number and/or position of operation.
- (e) Check the appropriate level for weather and workload (nonradar and radar).
- (f) Check the appropriate level for traffic complexity.
- (g) Number of training hours this session.
- (h) Total training hours to date.
- (i) Indicate purpose of report (nonradar and radar).

2. Complete the evaluation factors section according to the following:

(a) The instructor shall review descriptions of possible deficiencies within each evaluation factor listed in this section. Descriptions for the evaluation factors for nonradar and radar are located in Appendix B of this order. These descriptions are guidelines to be used in evaluating the developmental's performance. These descriptions are not all-encompassing nor are they meant to establish limits to the duties to be reviewed. Instructors/evaluators may consider other factors as part of the observed deficiencies.

(b) During the control problem, instructors shall evaluate the developmental's performance in each of the areas shown on the form, as well as any area the instructor may deem appropriate. If the developmental is observed performing certain duties in a consistently excellent manner, a plus sign shall be placed in one of the appropriate boxes. If the developmental is observed making a control error, a dot shall be placed in the appropriate box. If performance of duties of an evaluation factor is not observed because of a lack of traffic situations, etc., a large X shall be placed through all of the boxes for that particular evaluation factor. When dots or pluses are marked, explanatory remarks must be included on the form.

(c) The maximum number of allowable errors for each evaluation factor in nonradar and radar laboratory situations is shown in Figure D6-1. The number of errors for each evaluation factor is equal to the total number of dots in the boxes in each evaluation vector block. This number should be included in the explanatory remarks on the back of the form.

(d) The developmental and the instructor shall sign each form after each laboratory control problem. The signatures will indicate that the two have discussed the training period involved.

**FIGURE D6-1. MAXIMUM ERRORS ALLOWED BY  
CATEGORY OF EVALUATION FACTOR**

Evaluation Factor	Nonradar Lab	Radar Lab
Separation	0	0
Coordination and Communication	2	2
Traffic Management and Control	4	5
Judgment		
Operating Methods and Procedures	4	5
Equipment, Phraseology, and Other	4	5

**c. ASSISTANT CONTROLLER PROFILE FACTORS.** (See FAA Form 3120-17 on pages D-47 and D-48 of this appendix.)

1. **Flight Strip Printer/Flight Plans.** The developmental does not properly receive, process, or deliver flight strips from printer.

- (a) Flight progress strips are misplaced.
- (b) Flight progress strips are not delivered to the sector.
- (c) Flight progress strip delivery is delayed unnecessarily.

2. **Manual Flight Plans.**

(a) The developmental manually copies flight plans incorrectly, making the following types of errors: omissions, erasures, unreadable printing, and written-over data on the flight progress strip. Other errors include data not in correct boxes; incorrect aircraft identification or type, fix posting, time element, speed, altitude, route of flight, etc.

(b) Flight plans are not accurately processed.

- (1) Estimates contain time errors.
- (2) Date on the strip is incorrect or in the wrong box.
- (3) Strips contain omissions, erasures, are written over, or are unreadable.

(c) Flight data are not correctly or promptly forwarded to adjacent facilities.

- (1) Flight data are delayed in arriving at adjacent facilities.
- (2) The developmental does not adhere to correct sequence for transmission of flight data.
- (3) The developmental does not correctly indicate that information has been forwarded.
- (4) The developmental forwards information to wrong facility.

3. Interphone/Communication.

(a) Standard phraseology is not adhered to.

- (1) Approved phraseology is not used.
- (2) The developmental does not speak clearly and distinctly.

(b) The developmental does not operate the communication system in accordance with interphone operating practices and procedures.

(1) The developmental uses incorrect interphone operating procedures when placing outgoing and override calls.

(2) The developmental does not promptly respond to incoming calls from other facilities and sectors.

(3) The developmental does not know agencies on the interphone system in his/her area of specialization.

(c) The developmental does not use clear and concise communications.

- (1) Other individuals have difficulty understanding the transmission.
- (2) The developmental makes unnecessary transmissions.
- (3) Voice quality is poor, or others have difficulty understanding the transmission.
- (4) The developmental does not make intentions known.

(5) The developmental has to repeatedly explain intentions.

(6) The developmental does not ensure that information is understood.

4. Computer Operations. Computer operations are incorrect.

(a) Computer messages are not constructed in the proper format or do not contain all the required fields.

(b) The developmental does not respond correctly, and without delay, to computer-generated error messages.

(c) The developmental does not readily correct errors involving format and data content.

(d) The developmental does not enter flight plans containing coordinates.

(e) The developmental is not familiar with identifiers of airports, airways, NAVAIDs, and fixes.

(f) The developmental does not use proper procedures to recall or have a strip printed.



6/1/95

3120.4H

ASSISTANT CONTROLLER PROFILE							
1. Name (Last, First, MI)			2. Date		3. Problem		4. Sector
5. Sector Certification <input type="checkbox"/> YES			6. Training Phase		7. Training Hours This Session		8. Total Hours To Date
9. Traffic Complexity ("X" one) <input type="checkbox"/> Routine Not Difficult <input type="checkbox"/> Occasionally Difficult <input type="checkbox"/> Mostly Difficult <input type="checkbox"/> Very Difficult							
EVALUATION FACTORS			PERFORMANCE		REMARKS		
FLIGHT STRIP PRINTER/ FLIGHT PLANS	1. Does not properly receive, process and deliver from flight strip printer.		<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
	Total						
MANUAL FLIGHT PLANS	1. Flight plan not correctly copied.		<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
	Total						
INTERPHONE/COMMUNICATION	1. Standard phraseology is not adhered to.		<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
	Total						
COMPUTER OPERATION	1. Computer operations are incorrect.		<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
			<input type="checkbox"/>	<input type="checkbox"/>			
	Total						
Developmental's Signature			Instructor or Evaluator's Signature			Supervisor's Signature	
Date			Date			Date	

FAA Form 3120 - 17(4-76)

DISCUSSION. THIS FORM IS TO BE COMPLETED FOR OJT/EVALUATION PERIODS IN PHASE VI. THE INSTRUCTIONS FOR COMPLETING THIS FORM, LOCATED IN APPENDIX I, SECTION I, OF THE INSTRUCTIONAL PROGRAM GUIDE (EP 12-0-1) CONTAIN SPECIFIC GUIDANCE ON HOW THIS FORM WILL BE MARKED AND GRADED.

EVALUATION CRITERIA.

MAXIMUM ERRORS ALLOWED  
BY CATEGORY OF EVALUATION FACTOR

<u>EVALUATION FACTOR</u>	<u>TYPE SESSION</u>
	<u>OJT</u>
FLIGHT STRIP PRINTER/FLIGHT PLAN	1
MANUAL FLIGHT PLANS	2
INTERPHONE/COMMUNICATION	3
COMPUTER OPERATION	3

ERRORS OR EXAMPLES OF EXCELLENT PERFORMANCE SHALL BE SPECIFICALLY DOCUMENTED IN THE "REMARKS" SECTION ON THE REVERSE SIDE OF THIS FORM. IF ADDITIONAL ROOM IS NEEDED, USE THE SPACE BELOW.

ADDITIONAL COMMENTS.

## **APPENDIX E**

# **FLIGHT SERVICE STATION INSTRUCTIONAL PROGRAM GUIDE**

### **Section 1. INTRODUCTION**

**This Instructional Program Guide (IPG) includes information about the following four components of Flight Service Station qualification and certification training:**

- I. Academy Training.**
- II. Automated Flight Service Station Training.**
- III. Flight Service Station Training.**
- IV. Promotional Requirements.**

Target hours for the completion of each operating position shall be assigned according to the facility training directive. On-the-job familiarization hours (OJF) may be assigned at the discretion of the training team as specified in Chapter 3 of this order. Additional OJT (on-the-job-training), 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 shall be performed and documented as specified in Chapter 3 of this order. Instructions for completion and submission of tracking reports are contained in Order 3120.22, National Air Traffic Tracking System.



## **Section 2. ACADEMY TRAINING**

### **Section 2A. National FSS Initial Qualification Training Program (Course 50240)**

**GENERAL:** The Initial Qualification Training Program Course 50240 has been restructured and includes Model 1 Full Capacity training in the basic curriculum. The course provides developmental specialists with an orientation to the FAA, Air Traffic Service, and the Academy. It continues with instruction on job-related subjects and procedures contained in Order 7110.10, Flight Services, with application of these procedures conducted in a simulated environment.

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

**LOCATION:** FAA Academy.

**TRAINING LENGTH:** 80 days/640 hours.

**ADMINISTRATION:** Academy training is conducted utilizing the "Train to Succeed" philosophy. Training is administered in a classroom/laboratory environment utilizing Academy-prepared instructional materials and includes general academics, integrated communications switching, Model 1 Full Capacity, flight data, search and rescue, weather observations, weather analysis, weather radar and GOES satellite data interpretation, broadcast, aircraft orientation, inflight, and preflight. Training is focused on performance through job-simulation exercises during laboratory sessions. The student is evaluated using block tests, graded laboratory problems, and skills tests. After completion of Academy training the developmental is qualified to begin OJT.

**TRAINING CONTENTS:** The course contains 15 blocks of instruction.

**a. BLOCK 1: INDOCTRINATION (16 hours).**

1. The purpose of this block is to provide developmental specialists with an orientation to the FAA organization, Air Traffic Service, and the Academy.
2. Topics presented include human relations, Academy rules and procedures, the flight service mission and training requirements, and career progression.

**b. BLOCK 2: GENERAL ACADEMICS (22 hours).** This block contains 9 lessons that pertain to general aviation.

1. Lesson 1: Communications covers the Air Traffic Communication process, including phraseology, authorized communications, methods, procedures, and techniques.
2. Lesson 2: Principles of Aerodynamics includes the fundamental principles of flight, including the composition of the atmosphere, theories of flight, airfoils, relative wind, the four forces acting on aircraft in flight, the interrelationships of those forces, and lift factors.
3. Lesson 3: Flight Controls covers the rotational axis of aircraft and the primary and secondary control surfaces and their functions.
4. Lesson 4: Aircraft Instruments covers aircraft instruments and the information they convey to the pilot.
5. Lesson 5: Aircraft Types and Characteristics contains information on aircraft categories, weight classes, and recognition features, and presents operating characteristics of selected aircraft.
6. Lesson 6: Aviation Hazards covers selected hazards to aircraft pilots.
7. Lesson 7: Fundamentals of Navigation (1) covers the reference lines of earth; circular, distance, and direction measurement time as used in aviation; and the earth's magnetic fields and their effect on navigation.
8. Lesson 8: Fundamentals of Navigation (2) includes speed measurement, methods of navigation (including radio aids to navigation), the Federal airways systems, and airport configuration and selected landing systems. This lesson also provides procedures for and practice in solving problems concerning aircraft time, speed and distance, and the effects of wind on course and heading.
9. Lesson 9: Federal Aviation Regulations (FAR) covers selected words and phrases from the FAR; identifies types, dimensions, and purposes of airspace and airways; and presents selected operating rules for VFR and IFR flight.

**c. BLOCK 3: WEATHER OBSERVATION (65 hours).**

1. This block of instruction is designed to provide the skills and knowledge necessary to take and disseminate weather observations, and to report any significant changes. Training is given on completing forms, taking observations, and in the areas of sky conditions and ceiling, visibility, atmospheric phenomena, pressure, temperature and humidity, and wind.

2. Upon completion of this block, students are given the Weather Observation Certification Examination.

**d. BLOCK 4: ICSS (3 hours).**

1. This block of instruction demonstrates the generic features of the Integrated Communication Switching System (ICSS) to the student. The student is introduced to the various components of the switching system and operating procedures of the Direct Access and Indirect Access key pads.

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

**e. BLOCK 5: MODEL 1 FULL CAPACITY INTRODUCTION (7 hours).** This block furnishes the fundamental knowledge of system components and their operation.

**f. BLOCK 6: FLIGHT DATA (63 hours).**

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

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

**g. BLOCK 7: WEATHER ANALYSIS (98 hours).**

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

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

**h. BLOCK 8: SERVICE A/B FUNCTIONS (22 hours).**

1. This block of instruction furnishes the training to retrieve weather information necessary for pilot weather briefings, including encoding and decoding of location identifiers, processing of Notice to Airmen (NOTAM) information, and surface weather observations.

2. Hands-on training is given through practice and laboratory exercises.

**i. BLOCK 9: BROADCAST (12 hours).**

1. This block covers data analysis, format, and the recording procedures used for making Unscheduled Broadcasts, Transcribed Weather Broadcasts (TWEB), and Hazardous Inflight Weather Advisory Service (HIWAS) Broadcasts.

2. Hands-on training is provided through practice and laboratory exercises.

**j. BLOCK 10: SEARCH AND RESCUE (16 hours).**

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

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

**k. BLOCK 11: AIRCRAFT ORIENTATION (28 hours).**

1. This block of instruction contains background information on orientation procedures. The student is introduced to operating principles of the Non-Directional Beacon (NDB), Very High Frequency Omni-Directional Range (VOR), Direction Finding equipment, and any new technology developed for navigation. The student is taught phraseology used during an orientation.

2. Hands-on training is provided through practice and laboratory exercises.

**l. BLOCK 12: WEATHER RADAR (12 hours).**

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

2. Topics include the NWS radar network, types of radars, components of the radar, characteristics of the radar beam, and interpretation of the radar reports, charts, and the remote weather display.

**m. BLOCK 13: PREFLIGHT (22 hours).**

1. Students are trained in the fundamentals of the three types of pilot weather briefings, logging the briefings, and providing Telephone Information Briefing Service (TIBS).

2. Hands-on training is provided through the use of practice and laboratory exercises.

**n. BLOCK 14: INFLIGHT (38 hours).**

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

2. Hands-on training will include practice and laboratory exercises.



**o. BLOCK 15: GOES (24 hours).**

1. 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.

2. Upon completion of this training, students are given the GOES Certification Examination.

**p. EVALUATION.**

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

(a) Block Test I—Blocks 2, 4, 5, 6.

(b) Block Test II—Blocks 8, 9, 10.

(c) Block Test III—Blocks 11, 13, 14.

2. Laboratory exercises to evaluate performance skills are scheduled at the end of Blocks 3, 6, 7, 9, 10, 11, 13, and 14. Five days of integrated laboratory exercises, beginning on training day 76, cover skills that the students will need when they report to their respective facilities.



## **Section 2B. National Terminal to Flight Service Initial Qualification Training Program (Course 50241)**

**GENERAL:** This course is designed for air traffic control specialists transitioning from level I air traffic control towers to the flight service option. They must have been certified in local control and hold a tower observation certificate and must be approved by Air Traffic Training Requirements (ATZ-100) for admission. Training is specific and fast-paced, and includes general academics, integrated communications switching, Model 1 Full Capacity, flight data, search and rescue, weather observations, analysis, radar and satellite, broadcast, aircraft orientation, inflight, and preflight. Training is focused on performance through job-simulated exercises during laboratory sessions.

**PREREQUISITE:** Successful completion of Course 55029, Terminal Phase IX—Facility Qualification—Local Control; a tower observation certificate; and approval by Air Traffic Training Requirement, ATZ-100.

**LOCATION:** FAA Academy.

**TRAINING LENGTH:** 68 days/544 hours.

**ADMINISTRATION:** Academy training is conducted utilizing the "Train to Succeed" philosophy. Training is administered in a classroom/laboratory environment utilizing Academy-prepared instructional materials. Training is specific and fast-paced, and includes general academics, integrated communications switching, Model 1 Full Capacity, flight data, search and rescue, weather observations, weather analysis, weather radar and GOES satellite data interpretation, broadcast, aircraft orientation, inflight, and preflight. Training is focused on performance through job-simulation exercises during laboratory sessions. After completion of Academy training, the developmental is qualified to begin OJT.

**TRAINING CONTENTS:** This course contains 15 blocks of instruction.

**a. BLOCK 1: INDOCTRINATION (4 hours).**

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

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

**b. BLOCK 2: GENERAL ACADEMICS (8 hours).** This block contains 4 lessons that pertain to general aviation.

1. Lesson 1: Aircraft Instruments covers aircraft instruments and the information they convey to the pilot.

2. Lesson 2: Aviation Hazards covers selected hazards to aircraft pilots.

3. Lesson 3: Fundamentals of Navigation (1) covers the reference lines of the earth; circular, distance, and direction measurement; time as used in aviation; and the earth's magnetic fields and their effect on navigation.

4. Lesson 4: Fundamentals of Navigation (2) includes speed measurement, methods of navigation (including radio aids to navigation), the Federal airways systems, and airport configuration and selected landing systems. This lesson also provides procedures for and practice in solving problems concerning aircraft time, speed, and distance, and the effects of wind on course and heading.

**c. BLOCK 3: WEATHER OBSERVATION (44 hours).** This block of instruction is designed to provide the skills and knowledge necessary to take and disseminate weather observations, and in the areas of sky conditions and ceiling, visibility, atmospheric phenomena, pressure, temperature and humidity, and wind.

**d. BLOCK 4: ICSS (3.5 hours).**

1. This block of instruction demonstrates the generic features of the Integrated Communication Switching System (ICSS) and operating procedures of the Direct Access and Indirect Access key pads.

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

**e. BLOCK 5: MODEL 1 FULL CAPACITY INTRODUCTION (7.5 hours).** This block furnishes the fundamental knowledge of system components and their operation.

**f. BLOCK 6: FLIGHT DATA (35 hours).**

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

**g. BLOCK 7: WEATHER ANALYSIS (98 hours).**

1. In this block of instruction, students are taught the fundamentals of weather needed to provide effective pilot weather briefings.
2. Instruction is given in weather basics, weather products, and the hazardous effects on flight of certain weather phenomena.

**h. BLOCK 8: SERVICE A/B FUNCTIONS (22 hours).**

1. This block of instruction furnishes the training to retrieve weather information necessary for pilot weather briefings, including encoding and decoding of location identifiers, processing of Notice to Airmen (NOTAM) information, and surface weather observations.
2. Hands-on training is given through practice and laboratory exercises.

**i. BLOCK 9: BROADCAST (12 hours).**

1. This block covers data analysis, format, and the recording procedures used for making Unscheduled Broadcasts, Transcribed Weather Broadcasts (TWEB), and Hazardous Inflight Weather Advisory Service (HIWAS) Broadcasts.
2. Hands-on training is provided through practice and laboratory exercises.

**j. BLOCK 10: SEARCH AND RESCUE (16 hours).**

1. 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.
2. Hands-on training is provided through practice and laboratory exercises involving simulated missing/overdue aircraft scenarios.

**k. BLOCK 11: AIRCRAFT ORIENTATION (28 hours).**

1. This block of instruction contains background information on orientation procedures. The student is introduced to operating principles of the Non-Directional Beacon (NDB), Very High Frequency Omni-Directional Range (VOR), and Direction Finding equipment. The student is taught phraseology used during an orientation.
2. Hands-on training is provided through practice and laboratory exercises.

**l. BLOCK 12: WEATHER RADAR (10.5 hours).**

1. This block introduces students to the fundamentals of weather radar.
2. Topics include the NWS radar network, types of radars, components of the radar, characteristics of the radar beam, and interpretation of the radar reports, charts, and the remote weather display.

**m. BLOCK 13: PREFLIGHT (22 hours).**

1. Students are trained in the fundamentals of the three types of pilot weather briefings, logging the briefings, and providing Telephone Information Briefing Service (TIBS).
2. Hands-on training is provided through the use of practice and laboratory exercises.

**n. BLOCK 14: INFLIGHT (24 hours).**

1. This block provides procedures for soliciting and disseminating PIREPs, requesting and relaying ATC instructions, handling emergency inflight operations, and providing inflight services.
2. Hands-on training is provided through practice and laboratory exercises.

**o. BLOCK 15: GOES CERTIFICATION EXAMINATION (22 hours).**

1. 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.
2. Upon completion of this training, students are given the Weather Satellite Certification Examination.

**p. EVALUATION.**

1. 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 tests and three academic block tests covering the following areas:
  - (a) Block Test I—Blocks 2, 4, 5, 6.
  - (b) Block Test II—Blocks 8, 9, 10.
  - (c) Block Test III—Blocks 11, 13, 14.
2. Laboratory exercises to evaluate performance skills are scheduled at the end of Blocks 3, 6, 7, 9, 10, 11, 13, and 14.

### Section 3. AUTOMATED FLIGHT SERVICE 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.

**AFSS AREA KNOWLEDGE (Course 55239):** Provides the developmental with knowledge specific to the assigned facility necessary to begin position qualification training in an AFSS.

**AFSS WEATHER OBSERVER (Course 55240):** Provides on-the-job training for position qualification and certification to perform Weather Observer duties.

**AFSS FLIGHT DATA/EDIT (Course 55242):** Provides on-the-job training for position qualification and certification to perform Flight Data duties.

**AFSS NOTAM (Course 55243):** Provides on-the-job training for position qualification and certification to perform NOTAM duties.

**AFSS PREFLIGHT (Course 55244):** Provides on-the-job training for position qualification and certification to perform Preflight duties.

**AFSS BROADCAST (Course 55241):** Provides on-the-job training for position qualification and certification to perform Broadcast duties.

**AFSS INFLIGHT (Course 55245):** Provides on-the-job training for position qualification and certification to perform Inflight duties.

**AFSS COORDINATOR (Course 55246):** Provides on-the-job training for position qualification and certification to perform Coordinator duties.

**NOTES:** Some courses may not apply to all AFSSs. Model 1 equipped facilities using Leased Service A/B (LABS) for backup equipment shall include LABS equipment training.

The following courses are available but not required for facility certification:

**AFSS EN ROUTE FLIGHT ADVISORY SERVICE (EFAS) (Course 55247):** Provides on-the-job training for position qualification and certification to perform En Route Flight Advisory Service (EFAS) duties.

**SUPERVISOR/CONTROLLER-IN-CHARGE (CIC) (Course 55025):** Provides on-the-job training for position qualification and certification to perform CIC duties.

**NOTE:** The following course is for automation specialists (AUS) responsible for the operational and diagnostic software for the Flight Service Automation System (FSAS) Model 1 Full Capacity (M1FC) FSDPS.

MODEL 1 FULL CAPACITY (M1FC) FLIGHT SERVICE DATA PROCESSING SYSTEM  
AUTOMATION SPECIALIST (AUS) (Course 53203)

**NOTE:** Facility training hours for each position shall be indicated in the local facility training directive. The time allocated to each position is for that position only and shall not be transferred.



## Section 3A. AFSS AREA KNOWLEDGE

**GENERAL:** The purpose of this development stage of training is to provide the developmental with knowledge necessary to begin position qualification training. This section provides knowledge unique to each Flight Service Station.

**PREREQUISITE:** Satisfactory completion of Section 2. Academy Training or previous FSS certification. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the end of this section of training and any required equipment training, the developmental shall be qualified to begin position qualification training.

**TRAINING LENGTH:** The Area Knowledge section shall be completed within the following limitations: developmentals assigned to an AFSS from outside the proposed consolidated Flight Plan Area (FPA) and developmentals assigned to an AFSS from within the FPA shall be allotted hours contained in the facility training directive.

Discontinuation of training will be a result of a training review that recommends no further training be conducted. If this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training shall be administered in a classroom environment, using facility-developed training materials. The training shall be administered by the ATM or his/her designee.

This section of training is administered on a pass/fail basis. The developmental shall complete the:

1. Open-book examination, using all available references, with a minimum score of 90 percent.
2. Closed-book examination, without references, with a minimum score of 70 percent.

The facility shall develop a standard Area Knowledge package for their respective FPA. The Area Knowledge package will be divided into two sections, an "open-book" and a "closed-book" portion, and at the discretion of the ATM may consist of drawing maps, written tests, or both.

**a. EXAMINATIONS.**

1. 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.

- (a) Public use (nonmajor) airports in the Flight Plan Area (FPA).
- (b) Airways in the FPA.
- (c) ARTCC/approach control sector boundaries in the FPA.
- (d) General knowledge of adjacent FPAs.
- (e) Use of aeronautical charts and publications.
- (f) Interphone line structure in the FPA.
- (g) Knowledge unique to the FPA.
- (h) MTR/MOA structure in the FPA.

2. 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.

- (a) Major airports (as determined by ATM).
- (b) VOR/VORTAC locations and ident (not frequencies) in the FPA.
- (c) ARTCC boundaries in the FPA (not sectors).
- (d) FSS RCO locations in and adjacent to RCOs in the adjoining FPA.
- (e) DF locations in and adjacent to the FPA.
- (f) Weather radar locations in and adjacent to the FPA.
- (g) Restricted areas in the FPA.
- (h) Prominent terrain features in the FPA (as determined by ATM).
- (i) Weather patterns applicable or unique to the FPA (as determined by ATM).
- (j) Airports with an instrument approach in the FPA.
- (k) EFAS outlets controlled by the AFSS FWCS and those outlets in the FPA controlled by other FWCSs.
- (l) Facility directives and Letters of Agreement.

- (m) AFSS RCO and DF locations adjacent to the FPA.
- (n) Knowledge of ATC radar coverage in the FPA.
- (o) Control tower and/or Class B, C, or D information.

**b. GUIDELINE 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.

**1. Landing Areas.**

- (a) City and airport name.
- (b) Location (mileage and direction).
- (c) Airport Identifier.
- (d) Longest runway, facilities, and fuel.
- (e) Airports restricted to light aircraft due to length of runways, conditions, etc.
- (f) Elevation and remarks.
- (g) Jet arresting barriers.
  - (1) Type.
  - (2) Runway.
- (h) Designated jet instrument runway.
- (i) Runway restrictions (weight, etc.).
- (j) Civilian open to transient military aircraft.
- (k) Military open to civil aircraft.
  - (1) Method of obtaining approval.
  - (2) Method of obtaining arrival/departure information.
- (l) Visual Approach Slope Indicator (VASI).
- (m) UNICOM.
  - (1) Airports.
  - (2) Frequency.
- (n) Two-way radio requirement.

- (o) Check for overdue aircraft.
  - (1) Whom to contact.
  - (2) Method of contacting.
- 2. Navigational Aides (NAVAIDS).
  - (a) VOR/VORTAC/DME.
    - (1) Location.
    - (2) Class.
    - (3) Ident.
    - (4) Frequency.
    - (5) Unusable radials.
    - (6) Usable distance.
      - a L-VOR.
      - b M-VOR.
      - c H-VOR.
    - (7) Monitoring responsibilities.
    - (8) Issuing NOTAMs.
  - (b) Non-directional beacons.
    - (1) Location.
    - (2) Class.
    - (3) Ident.
    - (4) Frequency.
    - (5) Usable distance.
    - (6) Monitoring responsibilities.
    - (7) Issuing NOTAMs.

## (c) RADAR.

- (1) FAA Facilities.
- (2) Air Force RADAR Approach Control (RAPCON).
- (3) Navy RADAR Air Traffic Control Center (RATCC).
- (4) IFR arrival/departure.
  - a Location.
  - b Primary frequency.
- (5) Available services.
  - a Basic radar.
  - b TRSA.
  - c Class C.
  - d Class B.
  - e Surveillance approach/precision procedures.

## (d) Instrument landing systems.

## (e) Direction Finding, Location, and Controlling Facility.

## 3. Airways and airspace data.

- (a) Airway identification.
- (b) Radials.
- (c) Minimum altitudes.
  - (1) MEA.
  - (2) MCA.
  - (3) MRA.
- (d) Mileages.

(e) Classification of airspace within the FPA.

(f) Preferred routes.

4. Topography and weather.

(a) Topography (used legend on sectional charts).

(1) Cities and towns.

(2) Highways and roads.

(3) Relief (terrain).

(4) Hydrographic features.

(5) Miscellaneous.

(b) Weather.

(1) Types of observations.

a Radiosonde.

b Hourly.

c Supplemental.

(2) Terrain affecting local weather.

a Mountains and mountain passes.

b Rivers.

c Valleys.

(3) Area factors contributing to formation of:

a Fog.

b Frontal weather.

c Thunderstorms.

d Turbulence.

e Winds.

(4) Forecast availability.

a Area.

- 1 Forecast Center.
- 2 Times of issuance.

b Terminal.

- 1 Forecast Center.
- 2 Terminal locations.
- 3 Times of issuance.

c Winds aloft.

- 1 Forecast Center.
- 2 Terminal locations.
- 3 Times of issuance.

d Inflight weather advisories.

5. Frequencies and services.

(a) Flight Service Stations (Specific to Flight Plan Area).

- (1) Standard transmitting and receiving frequencies.
- (2) Recorded weather information.
- (3) Remote Communications Outlets (RCO).

a Locations.

- 1 High Altitude Outlets.
- 2 Low Altitude Outlets.

b Frequencies.

(4) En Route Flight Advisory Service (EFAS).

a Locations.

1 High Altitude Outlets.

2 Low Altitude Outlets.

b Frequencies.

(5) Local Airport Advisory Service.

a Location.

b Established frequencies.

(b) FAA Towers, Air Force RAPCONS, and Navy RATCC.

(1) Primary VHF local control frequency.

(2) Primary military VHF frequency.

(3) Primary military UHF frequency.

(4) Nonstandard guarding frequency.

(c) Air Route Traffic Control Centers.

(d) Pilot-to-Forecaster Service—Military.

(1) Location.

(2) Method of obtaining.

(3) Frequencies used.

6. Air traffic control procedures.

(a) Air Traffic Clearances.

(1) ARTCC.

a Method of obtaining.

b Method of delivering.



- (2) Tower and/or Approach Control.
    - a When required.
    - b Relay to pilot.
  - (b) Instrument Approach Procedures.
    - (1) ILS.
    - (2) ADF.
    - (3) VOR.
    - (4) Others.
  - (c) Standard Instrument Departures (SID)/Standard Terminal Arrival Routes (STAR).
7. Airspace restrictions and special military operations.
- (a) Restricted, prohibited, warning, and caution areas.
    - (1) Number.
    - (2) Name.
    - (3) Altitude.
    - (4) Time.
    - (5) Appropriate authority.
  - (b) Parachute jumping areas.
    - (1) Location.
    - (2) Altitudes
  - (c) Military Operations Areas (MOAs).
    - (1) Name or number.
    - (2) Altitudes.
    - (3) Hours of operation.

- (d) Military Aerial Refueling Tracks.
    - (1) Nickname.
    - (2) Flight levels.
  - (e) Controlled firing areas.
    - (1) Location.
    - (2) Altitudes affected.
  - (f) Military training routes.
    - (1) Identification.
    - (2) Altitudes affected.
    - (3) Airway crossing location.
  - (g) Joint use/military climb corridor restricted areas.
    - (1) Location.
    - (2) Controlling agency.
  - (h) VFR traffic advisories by USAF. (Locations where available.)
8. Local procedures.
- (a) Government offices.
    - (1) FAA.
    - (2) Military.
    - (3) Weather Bureau.
    - (4) Forest Service.
    - (5) Others (specify).
  - (b) Airports.

- (1) Manager.
    - (2) Method of contacting.
  - (c) Airlines.
    - (1) Name(s).
    - (2) Method of contacting.
  - (d) Communication Service.
  - (e) Radio equipment.
    - (1) Main receivers.
    - (2) Standby receivers.
    - (3) Main transmitters.
    - (4) Standby transmitters.
  - (f) VOR Receiver Checkpoint (VOT).
    - (1) Location.
    - (2) Frequency.
    - (3) Identification.
    - (4) Location of check point.
    - (5) Altitude (if pertinent).
  - (g) Rescue Coordination Center (RCC).
    - (1) Location.
    - (2) Method of contacting.
9. Emergency Service/Search and Rescue Resources.
- (a) Participating Agencies/Facilities/Offices.
    - (1) FAA (Location; when and how to contact).

- a Flight Service Stations.
  - b Air Route Traffic Control Centers.
  - c Air Traffic Control Towers.
  - d Others (specify).
- (2) Military agencies (location; when and how to contact).
  - a Air Force.
  - b Army.
  - c Navy.
  - d Marines.
  - e Coast Guard.
  - f National Guard.
- (3) Civilian government, other than FAA (location; when and how to contact).
  - a Federal.
    - 1 Forest Service.
    - 2 Federal Communications Commission.
    - 3 Federal Bureau of Investigation.
    - 4 Border Patrol.
    - 5 Customs.
    - 6 Others (specify).
  - b State.
    - 1 Police.
    - 2 Aeronautical agencies.
    - 3 Others (specify).
  - c City.

- 1 Police.
- 2 Fire Departments.
- 3 Others (specify).

d County.

- 1 Sheriff.
- 2 Others (specify).

(4) Others.

- a Civil Air Patrol.
- b Pilots and Fixed Place Operators (FPOs).
- c Airlines.
- d Airport management.
- e Telephone operators.
- f Ambulance service.
- g Others (specify).

(b) Aids used for aircraft orientation.

(1) VOR.

- a Location.
- b Frequency.
- c Restrictions on use (hours of operation, unusable radials, etc.).

(2) RADAR (Location; when and how to request service).

- a Precision approach.
- b Terminal airport surveillance.
- c Air route surveillance.

- (3) VHF/Direction Finding (DF).
    - a Location.
    - b Frequency.
    - c Restrictions on use.
    - d Recommended orientation method.
  - (4) Non-directional beacons.
    - a Location.
    - b Frequency.
    - c Restrictions on use.
    - d Recommended orientation method.
  - (5) Others (specify).
- (c) Additional assistance available.
- (1) Search and Rescue Control Center.
    - a Ground/water rescue.
    - b Leading aircraft service.
  - (2) Escort service.
  - (3) Fire fighting.
  - (4) Law enforcement.
  - (5) Medical.
  - (6) Others (specify).

## **Section 3B. AFSS WEATHER OBSERVER**

**GENERAL:** The purpose of this developmental stage of training is to qualify and certify the developmental for Weather Observer position duties at the assigned facility.

Academy training provided the basic knowledge and skills required for operation of a Weather Observer position under simulated conditions.

The developmental has been given the National Weather Service, Weather Observer Examination. A score below 80 percent will require retesting at the facility within the allotted training hours. The developmental may start OJT prior to passing the National Weather Service Observer Examination.

The developmental is now ready for OJT on the facility Weather Observer position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 3A. AFSS Area Knowledge and Model 1 AFSS Specialist Training (Course 55034 or Academy equivalent). Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Weather Observer position duties at the facility.

**TRAINING LENGTH:** Weather Observer position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

Satisfactory completion of the Weather Observer position training is accomplished when the developmental has been certified by both the National Weather Service and the ATM (or his/her designee).

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





### **Section 3C. AFSS FLIGHT DATA/EDIT**

**GENERAL:** The purpose of this development stage of training is to qualify and certify the developmental for Flight Data position duties at the assigned facility.

Academy training provided the basic knowledge and skills required for operation of a Flight Data position under simulated conditions.

The developmental is now ready for OJT on the facility Flight Data position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 3A. AFSS Area Knowledge and Model 1 AFSS Specialist Training (Course 55034 or Academy equivalent). Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Flight Data position duties at the assigned facility.

**TRAINING LENGTH:** Flight Data position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

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



## Section 3D. AFSS NOTAM

**GENERAL:** The purpose of this development stage of training is to qualify and certify the developmental for the NOTAM position duties at the assigned facility.

Academy training provided the developmental with a basic knowledge of NOTAM responsibilities under simulated conditions.

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

**PREREQUISITE:** Satisfactory completion of Section 3A. AFSS Area Knowledge and Model 1 AFSS Specialist Training (Course 55034 or Academy equivalent). Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training the developmental shall be certified to perform NOTAM position duties.

**TRAINING LENGTH:** NOTAM position qualification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

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



## Section 3E. AFSS PREFLIGHT

**GENERAL:** The purpose of this development stage of training is to qualify and certify the developmental for preflight position duties at the assigned facility.

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

The developmental has been given the National Weather Service, Pilot Weather Briefing Examination. A score below 70 percent will require retesting at the facility, within the allotted training hours. The developmental may start OJT prior to passing the National Weather Service, Pilot Weather Briefing Examination.

The developmental is now ready for OJT on the facility Preflight position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 3A. AFSS Area Knowledge and Model 1 AFSS Specialist Training (Course 55034 or Academy equivalent). Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Preflight position duties at the assigned facility.

**TRAINING LENGTH:** Preflight position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

Satisfactory completion of the Preflight training is accomplished when the developmental has been certified by both the Weather Service Evaluation Officer (WSEO) and the ATM (or his/her designee). The WSEO evaluation shall be completed prior to the facility qualification/certification.

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



## **Section 3F. AFSS BROADCAST**

**GENERAL:** The purpose of this development stage of training is to qualify and certify the developmental for Broadcast position duties at the assigned facility.

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

The developmental is now ready for OJT on the facility Broadcast position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 3A. AFSS Area Knowledge and Model 1 AFSS Specialist Training (Course 55034 or Academy equivalent). Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Broadcast position duties at the assigned facility.

**TRAINING LENGTH:** Broadcast position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

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





## Section 3G. AFSS INFLIGHT

**GENERAL:** The purpose of this developmental stage of training is to qualify and certify the developmental for Inflight position duties at the assigned facility.

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

The developmental is now ready for OJT on the facility Inflight position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 3A. AFSS Area Knowledge and Model 1 AFSS Specialist Training (Course 55034 or Academy equivalent). Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Inflight position duties at the assigned facility.

**TRAINING LENGTH:** Inflight position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

The developmental shall demonstrate lost aircraft orientation procedures before being certified on the Inflight position. A minimum of one satisfactory orientation for each available resource—VOR, DF, and ADF—is required.

Certification cannot be completed in this section prior to certification in Section 3E (Preflight).

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



## Section 3H. AFSS COORDINATOR

**GENERAL:** Though not part of Course Number 50240, the Coordinator field training and evaluation guidelines have been incorporated in Order 3120.4 for FSS evaluation standardization.

The facility training directive at each facility should include the Coordinator position where applicable.

Facilities that have identified the need for the Coordinator position shall 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. AFSS Area Knowledge and certification on all operating positions except EFAS, at the assigned facility. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the specialist shall be certified to perform all Coordinator position duties at the assigned facility.

**TRAINING LENGTH:** Coordinator position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The specialist shall be assigned to training by the ATM or his/her designee.

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



## **Section 3I. AFSS EN ROUTE FLIGHT ADVISORY SERVICE (EFAS)**

**GENERAL:** Though not part of Course Number 50240, the EFAS field training and evaluation guidelines have been incorporated in Order 3120.4 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.

Academy training 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:** Successful completion of Section 3A. AFSS Area Knowledge, Courses 50201 and Model 1 Specialist Training (Course 55034 or Academy equivalent). Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the specialist shall be certified to perform all EFAS position duties at the assigned facility.

**TRAINING LENGTH:** EFAS position qualification/certification shall 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.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The specialist shall be assigned to training by the ATM or his/her designee.

Specific Flight Service Stations have been designed as Flight Watch Control Stations.

These En Route Flight Advisory Service (EFAS) duties and requirements are outlined in Orders 7110.51, 7110.10, and 7210.3.

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



## **Section 3J. SUPERVISOR/CONTROLLER-IN-CHARGE (CIC)**

**GENERAL:** This course is for Full Performance Level controllers who have temporarily assumed supervisory responsibilities at an Automated Flight Service Station or Flight Service Data Processing System. This course provides comprehensive training in the operation of this position. Classroom subjects include facility administration, facility operations, aircraft incident and accident reports, and equipment outages.

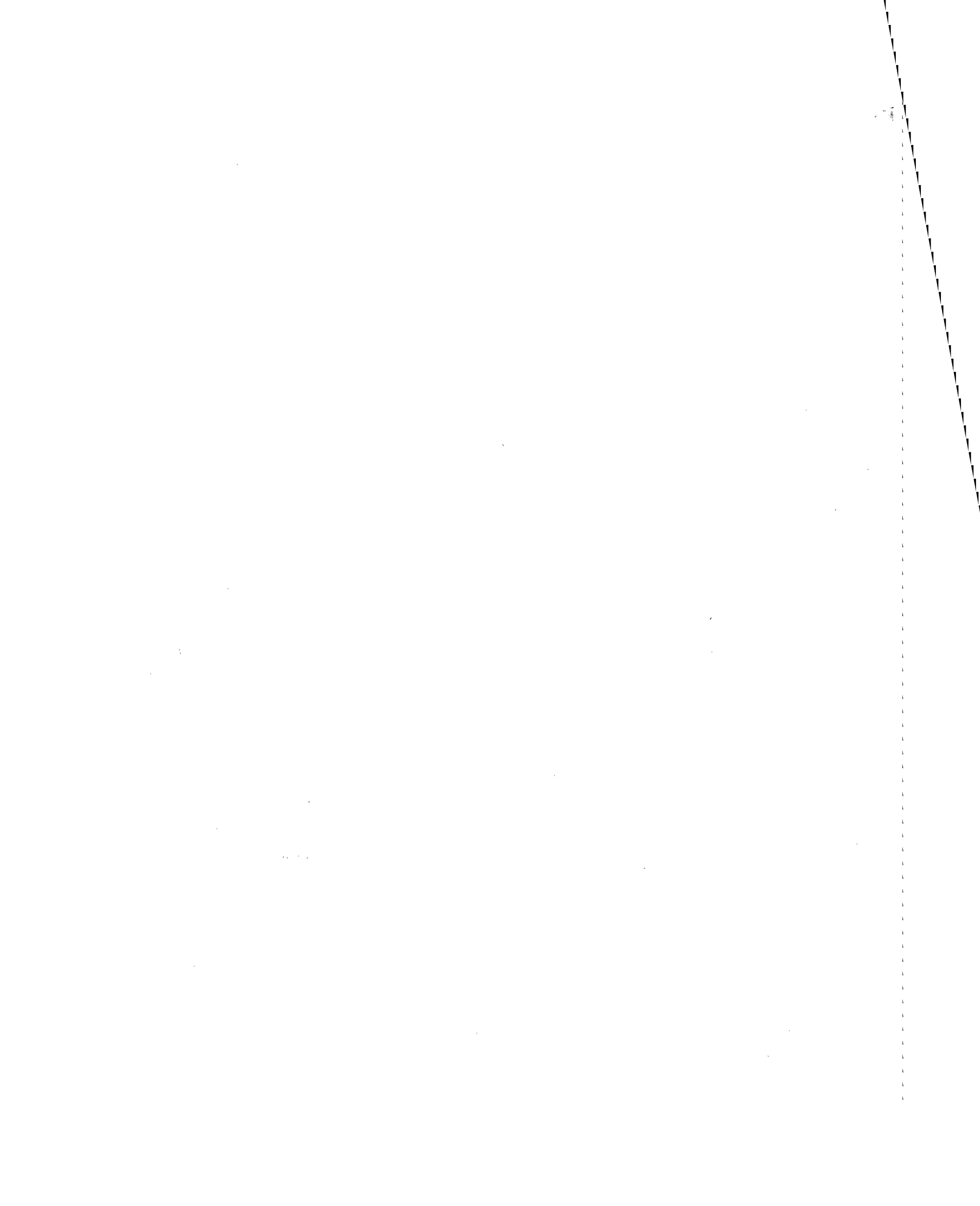
**PREREQUISITE:** Successful completion of Course 50240 and a Full Performance Level Controller. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the specialist shall be certified to perform all CIC duties at the assigned facility.

**TRAINING LENGTH:** CIC position qualification/certification shall 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.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The specialist shall be assigned to training by the ATM or his/her designee.

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





### **Section 3K. MODEL 1 FULL CAPACITY (M1FC) FLIGHT SERVICE DATA PROCESSING SYSTEM AUTOMATION SPECIALIST (AUS)**

**GENERAL:** This course is for automation specialists (AUS) responsible for the operational and diagnostic software for the Flight Service Automation System (FSAS) Model 1 Full Capacity (M1FC) FSDPS.

**PREREQUISITE:** Successful completion of Courses 53203, 55034, and 55036 and a Full Performance Level Controller at a Flight Service Station. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the specialist shall be certified to perform the duties of automation specialist (AUS) for the Flight Service Data Processing System.

**TRAINING LENGTH:** The Automation Specialist position qualification/certification shall 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.

**ADMINISTRATION:** This section is normally administered in an operational environment using OJT and the actual facility equipment. The specialist shall be assigned to training by the ATM or his/her designee.

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

**TRAINING CONTENTS:** The course consists of classroom instruction, laboratory sessions, and examinations. Classroom subjects include Tandem utility programs, system configuration, startup/diagnostic procedures, data base installation/monitoring, exec programming, application software, archiving, event reconstruction, disc drive management, system operation/analysis, and documentation/administration procedures.



## **Section 4. FLIGHT SERVICE FACILITY QUALIFICATION/CERTIFICATION TRAINING**

**OVERVIEW:** 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.

**AREA KNOWLEDGE (Course 55225):** Provides the developmental with knowledge necessary to begin position qualification training.

**WEATHER OBSERVER (Course 55226):** Provides on-the-job training for position qualification and certification to perform Weather Observation duties.

**BROADCAST (Course 55228):** Provides on-the-job training for position qualification and certification to perform Broadcast duties.

**FLIGHT DATA (Course 55229):** Provides on-the-job training for position qualification and certification to perform Flight Data and NOTAM duties.

**PREFLIGHT (Course 55230):** Provides on-the-job training for position qualification and certification to perform Preflight duties.

**INFLIGHT (Course 55231):** Provides on-the-job training for position qualification and certification to perform Inflight duties.

**NOTE:** Some courses may not apply to all FSSs.

The following course is available but not required for facility certification:

**CONTROLLER-IN-CHARGE (CIC) (Course 55025):** Provides on-the-job training for position qualification and certification to perform CIC duties.

**NOTE:** Facility training hours for each position shall be indicated in the local facility training directive. The time allocated to each position is for that position only and shall not be transferred.



## Section 4A. AREA KNOWLEDGE

**GENERAL:** The purpose of this development stage of training is to provide the developmental with knowledge necessary to begin position qualification training. This course provides knowledge unique to each Flight Service Station.

**PREREQUISITE:** Satisfactory completion of Academy Training or previous FSS certification. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the end of this section of training and required equipment training, the developmental shall be qualified to begin position qualification training.

**TRAINING LENGTH:** The Area Knowledge course shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training shall be administered in a classroom environment, using facility-developed training materials. The training shall be administered by the Air Traffic Manager (ATM) or his/her designee.

This section of training is administered on a pass/fail basis. The developmental shall complete the:

1. Open-book examination, using all available references, with a minimum score of 90 percent.
2. Closed-book examination, without references, with a minimum score of 70 percent.

The facility shall develop a standard Area Knowledge package for their respective FPA. The Area Knowledge package will be divided into two phases, an "open-book" and a "closed-book" portion, and at the discretion of the ATM may consist of drawing maps, written tests, or both.

**a. EXAMINATIONS.**

1. 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.

- (a) Public use (nonmajor) airports in the Flight Plan Area (FPA).
- (b) Airways in the FPA.
- (c) ARTCC/approach control sector boundaries in the FPA.
- (d) General knowledge of adjacent FPAs.
- (e) Use of aeronautical charts and publications.
- (f) Interphone line structure in the FPA.
- (g) Knowledge unique to the FPA.
- (h) MTR/MOA structure in the FPA.

2. 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 value assigned.

- (a) Major airports (as determined by ATM).
- (b) VOR/VORTAC locations and idents (not frequencies) in the FPA.
- (c) ARTCC boundaries in the FPA (not sectors).
- (d) FSS RCO locations in and adjacent to RCOs in the adjoining FPA.
- (e) DF locations in and adjacent to the FPA.
- (f) Knowledge of ATC radar coverage in the FPA.
- (g) Control tower and/or Class B, C, or D information.
- (h) Weather radar locations in and adjacent to the FPA.
- (i) Restricted areas.
- (j) Prominent terrain features in the FPA (as determined by the ATM).
- (k) Weather patterns applicable or unique to the FPA (as determined by the ATM).
- (l) Airports with an instrument approach in the FPA.

- (m) EFAS outlets in the FPA.
  - (n) Facility directives and Letters of Agreement.
- b. GUIDELINE 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.
- 1. Landing Areas.
    - (a) City and airport name.
    - (b) Location (mileage and direction).
    - (c) Airport Identifier.
    - (d) Longest runway, facilities, and fuel.
    - (e) Airports restricted to light aircraft due to length of runways, conditions, etc.
    - (f) Elevation and remarks.
    - (g) Jet arresting barriers.
      - (1) Type.
      - (2) Runway.
    - (h) Designated jet instrument runway.
    - (i) Runway restrictions (weight, etc.).
    - (j) Civilian open to transient military aircraft.
    - (k) Military open to civil aircraft.
      - (1) Method of obtaining approval.
      - (2) Method of obtaining arrival/departure information.
    - (l) Visual Approach Slope Indicator (VASI).
    - (m) UNICOM.
      - (1) Airports.
      - (2) Frequency.
    - (n) Two-way radio requirement.

(o) Check for overdue aircraft.

(1) Whom to contact.

(2) Method of contacting.

2. Navigational Aids (NAVAIDs).

(a) VOR/VORTAC/DME.

(1) Location.

(2) Class.

(3) Ident.

(4) Frequency.

(5) Unusable radials.

(6) Usable distance.

a L-VOR.

b M-VOR.

c H-VOR.

(7) Monitoring responsibilities.

(8) Issuing NOTAMs.

(b) Non-directional beacons.

(1) Location.

(2) Class.

(3) Ident.

(4) Frequency.

(5) Usable distance.

(6) Monitoring responsibilities.

(7) Issuing NOTAMs.



(c) **RADAR.**

- (1) **FAA Facilities.**
- (2) **Air Force RADAR Approach Control (RAPCON).**
- (3) **Navy RADAR Air Traffic Control Center (RATCC).**
- (4) **IFR arrival/departure.**
  - a **Location.**
  - b **Primary frequency.**
- (5) **Available services.**
  - a **Basic radar.**
  - b **TRSA.**
  - c **Class C.**
  - d **Class B.**
  - e **Surveillance approach/precision procedures.**

(d) **Instrument landing systems.**

(e) **Direction Finding, Location, and Controlling Facility.**

3. **Airways and airspace data.**

- (a) **Airway identification.**
- (b) **Radials.**
- (c) **Minimum altitudes.**
  - 1 **MEA.**
  - 2 **MCA.**
  - 3 **MRA.**
- (d) **Mileages.**

(e) Classification of airspace within the FPA.

(f) Preferred routes.

4. Topography and weather.

(a) Topography (used legend on sectional charts).

(1) Cities and towns.

(2) Highways and roads.

(3) Relief (terrain).

(4) Hydrographic features.

(5) Miscellaneous.

(b) Weather.

(1) Types of observations.

a Radiosonde.

b Hourly.

c Supplemental.

(2) Terrain affecting local weather.

a Mountains and mountain passes.

b Rivers.

c Valleys.

(3) Area factors contributing to formation of:

a Fog.

b Frontal weather.

c Thunderstorms.

d Turbulence.

e Winds.

(4) Forecast availability.

a Area.

- 1 Forecast Center.
- 2 Times of issuance.

b Terminal.

- 1 Forecast Center.
- 2 Terminal locations.
- 3 Times of issuance.

c Winds aloft.

- 1 Forecast Center.
- 2 Terminal locations.
- 3 Times of issuance.

d Inflight weather advisories.

5. Frequencies and services.

(a) Flight Service Stations (Specific to Flight Plan Area).

- (1) Standard transmitting and receiving frequencies.
- (2) Recorded weather information.
- (3) Remote Communications Outlets (RCOs).

a Locations.

- 1 High Altitude Outlets.
- 2 Low Altitude Outlets.

b Frequencies.

- (4) En Route Flight Advisory Service (EFAS).
    - a Locations.
      - 1 High Altitude Outlets.
      - 2 Low Altitude Outlets.
    - b Frequencies.
  - (5) Local Airport Advisory Service.
    - a Location.
    - b Established frequencies.
  - (b) FAA Towers, Air Force RAPCONS, and Navy RATCC.
    - (1) Primary VHF local control frequency.
    - (2) Primary military VHF frequency.
    - (3) Primary military UHF frequency.
    - (4) Nonstandard guarding frequency.
  - (c) Air Route Traffic Control Centers.
  - (d) Pilot-to-Forecaster Service—Military.
    - (1) Location.
    - (2) Method of obtaining.
    - (3) Frequencies used.
6. Air traffic control procedures.
- (a) Air Traffic Clearances.
    - (1) ARTCC.
      - a Method of obtaining.
      - b Method of delivering.

- (2) Tower and/or Approach Control.
    - a When required.
    - b Relay to pilot.
  - (b) Instrument Approach Procedures.
    - (1) ILS.
    - (2) ADF.
    - (3) VOR.
    - (4) Others.
  - (c) Standard Instrument Departures (SID)/Standard Terminal Arrival Routes (STAR).
7. Airspace restrictions and special military operations.
- (a) Restricted, prohibited, warning, and caution areas.
    - (1) Number.
    - (2) Name.
    - (3) Altitude.
    - (4) Time.
    - (5) Appropriate authority.
  - (b) Parachute jumping areas.
    - (1) Location.
    - (2) Altitudes
  - (c) Military Operations Areas (MOAs).
    - (1) Name or number.
    - (2) Altitudes.
    - (3) Hours of operation.

- (d) Military Aerial Refueling Tracks.
    - (1) Nickname.
    - (2) Flight levels.
  - (e) Controlled firing areas.
    - (1) Location.
    - (2) Altitudes affected.
  - (f) Military training routes.
    - (1) Identification.
    - (2) Altitudes affected.
    - (3) Airway crossing location.
  - (g) Joint use/military climb corridor restricted areas.
    - (1) Location.
    - (2) Controlling agency.
  - (h) VFR traffic advisories by USAF. (Locations where available.)
8. Local procedures.
- (a) Government offices.
    - (1) FAA.
    - (2) Military.
    - (3) Weather Bureau.
    - (4) Forest Service.
    - (5) Others (specify).
  - (b) Airports.

- (1) Manager.
    - (2) Method of contacting.
  - (c) Airlines.
    - (1) Name(s).
    - (2) Method of contacting.
  - (d) Communication Service.
  - (e) Radio equipment.
    - (1) Main receivers.
    - (2) Standby receivers.
    - (3) Main transmitters.
    - (4) Standby transmitters.
  - (f) VOR Receiver Checkpoint (VOT).
    - (1) Location.
    - (2) Frequency.
    - (3) Identification.
    - (4) Location of check point.
    - (5) Altitude (if pertinent).
  - (g) Rescue Coordination Center (RCC).
    - (1) Location.
    - (2) Method of contacting.
9. Emergency Service/Search and Rescue Resources.
- (a) Participating Agencies/Facilities/Offices.
    - (1) FAA (Location; when and how to contact).

- a Flight Service Stations.
  - b Air Route Traffic Control Centers.
  - c Air Traffic Control Towers.
  - d Others (specify).
- (2) Military agencies (location; when and how to contact).
  - a Air Force.
  - b Army.
  - c Navy.
  - d Marines.
  - e Coast Guard.
  - f National Guard.
- (3) Civilian government, other than FAA (location; when and how to contact).
  - a Federal.
    - 1 Forest Service.
    - 2 Federal Communications Commission.
    - 3 Federal Bureau of Investigation.
    - 4 Border Patrol.
    - 5 Customs.
    - 6 Others (specify).
  - b State.
    - 1 Police.
    - 2 Aeronautical agencies.
    - 3 Others (specify).
  - c City.



- 1 Police.
- 2 Fire Departments.
- 3 Others (specify).

d County.

- 1 Sheriff.
- 2 Others (specify).

(4) Others.

- a Civil Air Patrol.
- b Pilots and Fixed Place Operators (FPOs).
- c Airlines.
- d Airport management.
- e Telephone operators.
- f Ambulance service.
- g Others (specify).

(b) Aids used for aircraft orientation.

(1) VOR.

- a Location.
- b Frequency.
- c Restrictions on use (hours of operation, unusable radials, etc.).

(2) RADAR (location; when and how to request service).

- a Precision approach.
- b Terminal airport surveillance.
- c Air route surveillance.

- (3) (VHF)/Direction Finding (DF).
    - a Location.
    - b Frequency.
    - c Restrictions on use.
    - d Recommended orientation method.
  - (4) Non-directional beacons.
    - a Location.
    - b Frequency.
    - c Restrictions on use.
    - d Recommended orientation method.
  - (5) Others (specify).
- (c) Additional assistance available.
- (1) Search and Rescue Control Center.
    - a Ground/water rescue.
    - b Leading aircraft service.
  - (2) Escort service.
  - (3) Fire fighting.
  - (4) Law enforcement.
  - (5) Medical.
  - (6) Others (specify).

## Section 4B. WEATHER OBSERVER

**GENERAL:** The purpose of this development stage of training is to qualify and certify the developmental for Weather Observer position duties at the assigned facility.

Academy training provided the basic knowledge and skills required for operation of a Weather Observer position under simulated conditions.

The developmental has been given the National Weather Service, Weather Observer Examination. A score below 80 percent will require retesting at the facility within the allotted training hours. The developmental may start OJT prior to passing the National Weather Service, Weather Observer Examination.

The developmental is now ready for OJT on the facility Weather Observer position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 4A. Area Knowledge. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Weather Observer position duties at the assigned facility.

**TRAINING LENGTH:** Weather Observer position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

Satisfactory completion of the Weather Observer position training is accomplished when the developmental has been certified by both the National Weather Service and the ATM or his/her designee.

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



## Section 4C. BROADCAST

**GENERAL:** The purpose of this developmental stage of training is to qualify and certify the developmental for Broadcast position duties at the assigned facility.

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

The developmental is now ready for OJT on the facility Broadcast position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 4A. Area Knowledge. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Broadcast position duties at the assigned facility.

**TRAINING LENGTH:** Broadcast position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

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



## **Section 4D. FLIGHT DATA**

**GENERAL:** The purpose of this developmental stage of training is to qualify and certify the developmental for Flight Data position duties at the assigned facility.

Academy training provided the basic knowledge and skills required for operation of a Flight Data position under simulated conditions.

The developmental is now ready for OJT on the facility Flight Data position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 4A. Area Knowledge. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Flight Data position duties at the assigned facility.

**TRAINING LENGTH:** Flight Data position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

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





## Section 4E. PREFLIGHT

**GENERAL:** The purpose of this development stage of training is to qualify and certify the developmental for Preflight position duties at the assigned facility.

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

The developmental has been given the National Weather Service, Pilot Weather Briefing Examination. A score below 70 percent will require retesting at the facility, within the allotted training hours.

The developmental may start OJT prior to passing the National Weather Service, Pilot Weather Briefing Examination.

The developmental is now ready for OJT on the facility Preflight position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 4A. Area Knowledge. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Preflight position duties at the assigned facility.

**TRAINING LENGTH:** Preflight position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in a operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

Satisfactory completion of the Preflight training is accomplished when the developmental has been certified by both the Weather Service Evaluation Officer (WSEO) and the ATM or his/her designee. The WSEO evaluation shall be completed prior to the facility qualification/certification.

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



## Section 4F. INFLIGHT

**GENERAL:** The purpose of this development stage of training is to qualify and certify the developmental for Inflight position duties at the assigned facility.

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

The developmental is now ready for OJT on the facility Inflight position under actual conditions.

**PREREQUISITE:** Satisfactory completion of Section 4A. Area Knowledge. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the developmental shall be certified to perform all Inflight position duties and will have completed the on-the-job training process.

**TRAINING LENGTH:** Inflight position qualification/certification shall 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 this recommendation is adopted by the ATM, the developmental is processed in accordance with the latest edition of Order 3330.30, Employment Program for Developmental Air Traffic Control Specialists, or other appropriate directives.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The developmental shall be assigned to training by the ATM or his/her designee.

The developmental shall demonstrate lost aircraft orientation procedures before being certified on the Inflight position. A minimum of one satisfactory orientation for each available resource—VOR, DF, and ADF—is required.

Certification cannot be completed in this section, prior to certification in Section 4E. Preflight.

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



## **Section 4G. SUPERVISOR/CONTROLLER-IN-CHARGE (CIC)**

**GENERAL:** This course is for Full Performance Level controllers who have temporarily assumed supervisory responsibilities at a Flight Service Station. This course provides comprehensive training in the operation of this position. Classroom subjects include facility administration, facility operations, aircraft incident and accident reports, and equipment outages.

**PREREQUISITE:** Successful completion of Course 50240 and a Full Performance Level Controller. Additional prerequisites may be established by the ATM and shall be identified in the facility training directive.

**OBJECTIVE:** At the successful completion of this section of training, the specialist shall be certified to perform all CIC duties at the assigned facility.

**TRAINING LENGTH:** CIC position qualification/certification shall 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.

**ADMINISTRATION:** This section of training is normally administered in an operational environment, using OJT and the actual facility equipment. The specialist shall be assigned to training by the ATM or his/her designee.

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



## **Section 5. PROMOTIONAL REQUIREMENTS FOR DEVELOPMENTAL SPECIALISTS**

**OVERVIEW:** The following criteria extend to all developmental specialists in automated flight service and flight service facilities and establish consistent promotion requirements. Developmentals shall be promoted based on AFSS REQUIREMENTS if assigned to an AFSS and FSS REQUIREMENTS if assigned to an FSS.

### **a. AFSS REQUIREMENTS.**

1. To be eligible for promotion to the grades listed below, developmental ATCSs whose official positions are in AFSSs shall satisfy the requirements shown for each grade. In addition, developmental ATCSs shall satisfy all legal and regulatory requirements including time-in-grade.

(a) GS-7: Satisfactory completion of a predevelopmental program or the cooperative education program, or meeting civil service qualification entry-grade requirements.

(b) GS-9: Satisfactory completion of training and certification on flight data, weather observer (where applicable), and NOTAM positions.

(c) GS-11: Satisfactory completion of training and certification on the broadcast and preflight positions.

(d) GS-12: Satisfactory completion of training and certification on the inflight and coordinator (where applicable) positions.

### **b. FSS REQUIREMENTS.**

1. To be eligible for promotion to the grades listed below, developmental ATCSs whose official positions are in FSSs shall satisfy the requirements shown for both the grade and the facility level listed. In addition, developmental ATCSs shall satisfy all legal and regulatory requirements including time-in-grade.

(a) GS-7: Facility levels I, II, and III. Satisfactory completion of a predevelopmental program or the cooperative education program, or meeting civil service qualification entry-grade requirements.

(b) GS-9: Facility levels I, II, and III.

1 Facility level I. Satisfactory completion of training and certification on the weather observer (where applicable), broadcast, flight data, preflight, and inflight positions.

2 Facility levels II and III. Satisfactory completion of training and certification on weather observer (where applicable), broadcast, flight data, and preflight positions.

(c) GS-10: Facility level II. Satisfactory completion of training and certification on the inflight position.

(d) GS-11: Facility level III. Satisfactory completion of training and certification on the inflight position.



## **APPENDIX F**

# **TERMINAL INSTRUCTIONAL PROGRAM GUIDE**

### **Section 1. INTRODUCTION**

**This Instructional Program Guide (IPG) includes information about the following seven development stages:**

- I. Academy Training.**
- II. Facility Training—Flight Data.**
- III. Facility Training—Clearance Delivery.**
- IV. Facility Training—Ground Control.**
- V. Facility Training—Local Control/Cab Coordinator.**
- VI. Facility Training—Nonradar Terminal Control.**
- VII. Facility Training—Radar Control.**

Target hours for the completion of each operating position shall be assigned according to the facility training directive. On-the-job familiarization hours (OJF) may be assigned at the discretion of the training team as specified in Chapter 3 of this order. 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.

The instructional process is designed to provide facilities with the flexibility to tailor the training program to the needs of the individuals in training, thus allowing for a more effective and successful training experience. Performance and certification skill checks shall be performed and documented as specified in Chapter 3 of this order. Instructions for completing and submitting tracking reports are contained in Order 3120.22, National Air Traffic Training Tracking System.



## **Section 2. ACADEMY TRAINING**

**OVERVIEW:** This section presents the following academy training:

Initial Qualification Training: This training is designed for new developmental specialists.

Radar Terminal Facility Training: This training is designed to train controllers in Radar Approach Control skills in a simulated environment.



## **Section 2A. INITIAL QUALIFICATION TRAINING**

### **(Course 55058)**

**GENERAL:** The purpose of this developmental stage is to provide new developmental specialists with an orientation and indoctrination of the FAA organization; to provide knowledge of job-related subjects in preparation for subsequent skill-oriented training; and to instruct in specific functions of the tower/cab control positions while evaluating the potential of the developmental early in his/her prospective career.

This stage of training is administered in two parts: classroom instruction and classroom/laboratory environment.

**PREREQUISITE:** Entry qualifications as established by the Office of Personnel Management announcements for ATCS positions.

**CLASSROOM TRAINING:** The classroom portion of training is administered using lesson plans developed by the Academy.

**CLASSROOM/  
LABORATORY  
TRAINING:** This training is administered in a environment, utilizing Academy-prepared instructional materials and a synthetic control area (Aero Center). This training is primarily oriented to procedural studies and demonstration/evaluation control problems.

**a. CLASSROOM TRAINING.****1. FAA Orientation.**

(a) The individual shall be thoroughly briefed on the following subjects:

- (1) Employment.
- (2) Civil rights.
- (3) Student travel.
- (4) Security.
- (5) Human relations:
  - a Value clarification.
  - b Communication with others.
  - c Team building.
  - d Principle responsibilities of an employee.
- (6) Employee handbook.
- (7) Drug Awareness Program.

(b) Evaluation. The primary purpose of this training is to indoctrinate the individual into the workings of the Federal Service. No examination is administered.

**2. Fundamentals of Air Traffic Control.** This training provides a basic knowledge of ATC-related subjects and is administered as a formal program of instruction. It includes three pass/fail examinations based on technical material.

(a) The individual shall successfully complete the following objectives:

- (1) Basic concepts of aviation.
- (2) Aircraft identification and performance.
- (3) Aviation weather.
- (4) Equipment.
- (5) Flight plan services.

- (6) Air traffic control communications and procedures.
  - (7) Separation procedures.
  - (8) Radar.
  - (9) Air Traffic control services.
- (b) Evaluation.

(1) **Knowledge.** Three examinations shall be given at the completion of instruction: Tower Visibility exam, BRITE exam, and Control Tower Operator (CTO) exam. The developmental's score must be 80 percent or higher on the Tower Visibility exam, and 70 percent or higher on the BRITE and CTO exams to satisfactorily complete this academic training. If the individual does not meet the requirements for successful completion of the examinations, the assistant manager for training (AMT) or TA may determine that additional training is warranted.

a This training may include:

- Additional classroom instructions
- and/or
- CATTs training.

b If the individual does not meet the requirements for successful completion after additional training, the provisions of Order 3330.30 shall be followed.

(2) **Counseling.** Instructors are responsible for providing initial counseling. It is important that timely counseling be provided when developmental weaknesses are identified in an attempt to resolve problems impeding the developmental's progress. Formal documentation of each counseling session is required and will become part of the developmental's records.

**b. CLASSROOM/LABORATORY TRAINING.**

1. **Tower Cab.** The individual shall be able to perform the following during the course of laboratory control scenarios:

- (a) **Manage** position and sector resources.
- (b) **Resolve** aircraft conflicts.
- (c) **Manage** air traffic sequences.
- (d) **Route** or plan flights.
- (e) **Assess** weather impact.

(f) Respond to system/equipment failures.

2. Performance Verification.

(a) Evaluation.

(1) At the conclusion of laboratory training, each individual shall be given two assessment scenarios: one on local control and one on ground control. During the control scenarios a PV specialist will evaluate the individual's strengths and weaknesses.

(2) After a debriefing session with the individual's instructor, the PV specialist will debrief the developmental and issue a pass or fail assessment.

(b) Assessment.

(1) Upon successful completion of PV, the individual will return to his/her facility for the next stage of training.

(2) If the individual receives a failing assessment, then targeted training shall be administered followed by a re-assessment scenario conducted by PV.

(3) In the event the individual is still unsuccessful, PV shall issue a recommendation to the individual's Regional Office for action.



## **Section 2B. RADAR TERMINAL FACILITY (RTF) TRAINING (Course 55059)**

**GENERAL:** The purpose of this development stage is to train controllers in Radar Approach Control skills in a simulated environment.

This stage of training is administered in a classroom/laboratory environment.

**PREREQUISITE:** Successful completion of PV.

**CLASSROOM/  
LABORATORY  
TRAINING:** This training is administered utilizing Academy-prepared instructional materials and a dual sector, level 3 environment.

**a. PART-TASK EXERCISE TRAINING.****1. Academy Airspace and Procedures.**

(a) The student will demonstrate knowledge of Academy procedures and airspace as provided in the Facility Directives, and demonstrate the ability to recall the following:

- (1) Airways and intersections.
- (2) ARTCC sectors and adjacent airspace.
- (3) Academy airspace configuration.
- (4) Satellite airports.
- (5) Air traffic facility frequencies.
- (6) Departure and arrival gates.
- (7) Minimum altitudes (MEAs) and minimum vectoring altitudes (MVAs).
- (8) Approach names, fixes, and minimum altitudes.

(b) The student will show the ability to apply the following:

- (1) Radar procedures used between approach controls, and approach control to tower.
- (2) Radar procedures used at airports.
- (3) Procedures as specified in the Academy Facility Orders.
- (4) Position relief briefing procedures.

**2. Radar and ARTS Equipment Functions.**

- (a) Using a radar simulator, the student will demonstrate knowledge of equipment control functions.
- (b) The student will be identify primary and secondary radar terms and definitions.
- (c) The student will demonstrate the ability to perform all ARTS entries.

**3. Radar Identification. The student will radar identify aircraft using procedures in Order 7110.65.**

4. **Separation.** The student will achieve the separation standards contained in Order 7110.65 by demonstrating the ability to:

- (a) Recognize when radar separation is achieved and lost.
- (b) Recognize distances between targets by using video map marking.
- (c) Apply radar vectoring techniques.
- (d) Apply speed control.
- (e) Assign and verify altitudes.

5. **Transfer of Control.** The student will use Order 7110.65 procedures, ARTS and interphone to coordinate use of airspace, transfer control of aircraft, and transfer radar identification.

6. **Departure, Arrival and Approach Procedures.**

- (a) The student will apply Order 7110.65 and Academy ATCT:
  - (1) Departure procedures and separation minima.
  - (2) Arrival and approach procedures.
- (b) The student will practice approach clearance phraseology, missed approach instructions, speed control and vectoring.
- (c) The student will interpret weather conditions as they relate to approaches and will use approach plates to select suitable approaches.
- (d) The student will experience a TCAS event.

7. **Additional Services.** The student will apply merging target procedures and issue weather and bird advisories.

8. **Radar Services to VFR Aircraft.** Demonstrating knowledge of types and operational requirements of terminal airspace structure, the student will provide services to VFR aircraft to include traffic/safety alerts.

9. **Visual Approaches.** The student will demonstrate knowledge of visual approach procedures and phraseology contained in Order 7110.65 by:

- (a) Explaining conditions required to conduct visual approaches.
- (b) Vectoring and clearing aircraft for visual approaches.
- (c) Vectoring VFR aircraft for sequencing.

10. Emergencies, Radio Failures and Hijacks. The student will demonstrate the ability to handle aircraft emergencies, hijacking, radio failures and fuel dumping in compliance with Order 7110.65.

**b. RADAR LABORATORY TRAINING AND EVALUATION.**

1. Radar Academic Procedures. With emphasis on scanning techniques, listening and remembering skills, sector management, team interaction and coordination, and in accordance with Order 7110.65, the student will demonstrate the ability to perform the following:

- (a) Describe how, when, and where to effect/receive a pointout and/or handoff.
- (b) Identify AACN and AACS responsibilities in establishing a sequence.
- (c) Describe procedures for handling arrivals and departures to and from satellite airports, handling VFR aircraft requesting IFR clearances while airborne, and termination procedures.
- (d) Describe tunneling departures as one method of separating arrivals and departures.
- (e) Explain criteria for joining airways.
- (f) Identify Class C airspace boundaries, methods of handling airspace violators, and IFR cancellations in Class C airspace.
- (g) Explain the technique of vectoring arrivals to a downwind.
- (h) State the procedures for completing a position relief briefing.
- (i) Explain how to apply radar separation when heavy jet traffic is involved.
- (j) Describe radar identification and services to VFR pop-ups.
- (k) Describe the procedures for handling reroutes, overflights, overflight cancellations, and approaches to an uncontrolled airport.
- (l) Recognize similar-sounding callsigns and initiate appropriate action.
- (m) Identify the beacon codes assigned to hijacks and the application of procedures involving hijacks.
- (n) Explain the effects of high-performance military climbs.
- (o) Describe procedures for handling emergencies, joining airways, and transponder failures.
- (p) Explain the application of radar separation, speed control, and vectoring techniques as applied to departing and arriving aircraft.

- (q) Identify procedures for:
  - (1) Identification of VFR aircraft.
  - (2) VFR practice approaches.
  - (3) Handling VFR arrivals without the ATIS.
  - (4) Hand-offs of VFR aircraft to the center.
  - (5) VFR arrivals to secondary airports.
  - (6) VFR aircraft below MVA.
- (r) Describe effects of winds aloft on vectoring and speed control.
- (s) State the correct coordination on land line for sequence and other items.
- (t) Provide traffic advisories and safety alerts.
- (u) Describe the ARTS controls and their functions, and correct entries.

## 2. Evaluation.

(a) **Knowledge.** Periodic skill checks will be performed to provide feedback as to expected performance relative to current levels of training. Areas needing improvement will be noted and recommendations made for targeted training.

(b) **Counseling.** Instructors are responsible for providing initial counseling. It is important that timely counseling be provided when student's weaknesses are identified, in an attempt to resolve problems impeding his/her progress. Formal documentation of each counseling session is required and will become part of the student's records.

### (c) Assessment.

(1) At the conclusion of laboratory training, each student shall be given one assessment scenario during which a PV specialist will evaluate the individual's strengths and weaknesses.

(2) After a debriefing session with the student's instructor, the PV specialist will debrief the student. This is not a pass/fail assessment.

(3) Upon completion of PV, the individual will return to his/her facility for the next stage of training.

(4) PV will provide a synopsis of the assessment to the student's TA with strengths and weaknesses identified.



## **Section 3. FLIGHT DATA POSITION TRAINING**

### **(Course 55060)**

**GENERAL:** The purpose of this development stage is to prepare the individual for flight data position qualification and certification.

The individual has completed performance verification (PV), which covered the fundamentals of air traffic control (ATC) and afforded the first opportunity to apply control procedures in a simulated environment. The individual has also demonstrated a capability to perform in this environment and is now ready for training in the specific items needed to enter OJT on the flight data position of operation. This stage of training is administered in two parts: classroom instruction and OJT. The classroom training uses facility-prepared instructional materials to supplement Academy-prepared materials.

**PREREQUISITE:** Successful completion of PV.

**CLASSROOM TRAINING:** The classroom portion of training is administered using lesson plans developed by the Academy and the facility and conducted under the direction of the training administrator (TA). In some facilities, classroom training for more than one area may be taught at the same time (e.g., flight data and clearance delivery). In these situations, lesson plans should be developed accordingly.

If a terminal facility does not have a training staff to conduct classroom instruction, the facility is responsible for developing self-study materials that will cover all of the required subject matter.

**ON-THE-JOB TRAINING:** OJT shall be conducted in the operational environment under the direction of the individual's training team. OJT shall be conducted after successful completion of the necessary classroom training.

**a. CLASSROOM TRAINING—PART I.** The individual shall successfully demonstrate the skills listed below in the classroom section of training.

1. **Compile Statistical Data.** In accordance with Orders 7110.65 (Air Traffic Control) and 7210.3 (Facility Operation and Administration) and local directives, the individual will be able to identify and correctly record statistical data relating to various types of air traffic activities using the following forms:

- (a) Daily Record of Facility Operation, 7230-4.
- (b) Personnel Log, 7230-4.
- (c) Position Log, 7230-10.
- (d) Airport Traffic Record, 7230-1.
- (e) Instrument Operations, 7230-26.
- (f) Approach Data Worksheet, 7230-16.
- (g) Multi-Channel Recorder Check Record, 6670-1.
- (h) Incident Report, 8020-11.
- (i) Flight Assist Report, 7230-6.

2. **Prepare and Distribute Flight Data.** In accordance with Order 7110.65, Order 7340.1 (Contractions), Order 7210.3, and local directives, the individual will be able to:

- (a) Identify the types of FAA terminal facilities.
- (b) Identify, by their two-letter designators, the positions of operation at his/her facility.
- (c) Explain the coordination required between flight data and other positions of operation at his/her facility.
- (d) Determine acceptable handwritten entries and make strip revisions.
- (e) State the different types of flight progress strips and their uses.
- (f) Identify the data posted in spaces 1 through 9 on the three variations of the terminal flight progress strip.
- (g) Post the required data on the three variations of the flight progress strip, using standard characters, symbols, and abbreviations.



3. Operate FAA Interphone Systems. In accordance with Orders 7110.65, 7340.1, and 7210.3, and local directives, the individual will be able to:

- (a) List the three types of interphone circuits.
- (b) List the components of an interphone system.
- (c) List three methods used for signaling on interphone circuits.
- (d) List three circuit status lamp indications and explain the circuit status each indicates.
- (e) Identify each circuit available at the flight data position.
- (f) State the type of information for which each circuit is used.
- (g) State the priority of various messages.
- (h) Select standard interphone phraseology.
- (i) Transmit various types of messages, using standard interphone procedures and phraseology.
- (j) Select alternate methods of relaying interphone messages.
- (k) List the proper offices to be notified of an interphone failure.
- (l) List the reports required when an interphone failure occurs.

4. Receive and Relay Weather Information. In accordance with Order 7110.65, Order 7210.3, TEM 17-1 (Weather for Air Traffic Control), and local directives, the individual will be able to:

- (a) Identify types of surface aviation weather reports.
- (b) Decode and encode surface aviation weather reports.
- (c) State requirements for pilot weather reports (PIREP), significant meteorological information (SIGMET), and airmen's meteorological information (AIRMET).
- (d) Receive, post, and relay weather reports.
- (e) Decode terminal forecasts.

5. Unusual Situations. In accordance with Orders 7110.65 and 7210.3 and local directives, the individual will be able to:

- (a) Identify the personnel authorized to declare an emergency.
- (b) State notification procedures and the parties to be notified in an emergency situation.

- (c) State the location and types of emergency equipment available.
- (d) State the procedures for initiating an emergency alert and notifying emergency equipment.
- (e) State the procedures for handling information requests and alert notices.
- (f) State the actions required in the event of a hijack or aircraft bomb threat.
- (g) Select the course of action required upon receipt of a unidentified flying object (UFO) sighting report.
- (h) State the actions required for handling special flight operations.
- (i) State the FAA policy regarding release of information and the persons authorized to receive such information.
- (j) Identify the persons authorized to request transmission of alerts through FAA facilities.
- (k) State the actions that are required of a specialist involved in an incident.
- (l) Select the course of action required when receiving sonic boom, reckless flying, and noise/damage complaints.

6. Receive and Relay NOTAM Information. In accordance with Order 7110.65, Order 7340.1, Order 7930.2 (NOTAM Handbook), and local directives, the individual will be able to:

- (a) Encode and decode Notices to Airmen (NOTAM).
- (b) Receive, relay, and post NOTAM information.

7. Operate the Airport Weather Information System (AWIS).

- (a) State the function of AWIS switches and indicator lamps.
- (b) Describe the procedures for composing and transmitting AWIS messages.
- (c) Determine the functions of edit keys.
- (d) State the purpose of function keys.
- (e) Describe the proper sequence of composing and transmitting a tower visibility report via the AWIS.

8. Operate ATIS. In accordance with Orders 7110.65 and 7210.3, the individual will be able to:
  - (a) Explain the function, operating procedures, control criteria, and message content of the automatic terminal information service (ATIS).
  - (b) Prepare and broadcast an ATIS message in accordance with prescribed procedures.
9. Operate Standby Radio Equipment. In accordance with local equipment familiarization checkout procedures, the individual will be able to:
  - (a) Identify standby and emergency communications equipment at his/her facility.
  - (b) State the frequencies assigned to standby equipment at his/her facility.
  - (c) Explain the operation of various types of standby equipment.
10. Changing Tape Recording Reels.
  - (a) State the requirements for use of recorders at air traffic facilities.
  - (b) State the order of priority for assignment of recorder channels at terminal facilities.
  - (c) State the requirements for checking and changing recorder tapes at his/her facility.
  - (d) List the three items that are placed on each recorder reel before storage.
  - (e) State the actions required when the tape recorder alarm system at his/her facility is activated.
11. Monitor Navigational Aids. In accordance with Orders 7110.65 and 7210.3, the individual will be able to:
  - (a) Interpret monitor panel indications.
  - (b) State the functions of the automatic course alignment and signal monitor (ACM) and the automatic transfer and shutdown unit (ATU).
  - (c) State navigational aid (NAVAID) monitoring procedures.
  - (d) Define VOR/VORTAC monitoring categories.
  - (e) Determine when to attempt NAVAID restoration.
  - (f) List the appropriate outage notification procedures.
  - (g) Select the correct form to be used to record equipment outages.
  - (h) Identify tower responsibilities during flight check.

12. Operate FDEP/FDIO. In accordance with the flight data entry printout (FDEP), FDEP data card, and Flight Data Input/Output (FDIO) User's Guide, the individual will be able to:

- (a) Compose, in the proper format, routine messages that may be entered into the ARTCC central computer complex from an FDEP/FDIO terminal facility.
- (b) Interpret computer-originated error responses and take corrective action.
- (c) Recognize errors in message construction and initiate message correction procedures prior to entry into the computer.
- (d) Identify major components of the FDEP/FDIO and interpret the meaning of the various status lamps and switches.
- (e) Install new strips in the flight strip printer and change the ribbon.
- (f) Identify the function of the data communications control unit (DCCU) as an interface between the FDEP/FDIO facility and the central computer complex.

13. Report Tower Visibility.

- (a) State various categories and types of visibility.
- (b) State correct visibility reporting procedures.

14. Test on Position Information.

**b. PART I EVALUATION.**

1. Locally prepared evaluation shall be administered on the information delivered during this portion of classroom training.

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

**c. CLASSROOM TRAINING—PART II.**

1. Local Airport Information. The individual will describe local airport information including:

- (a) Local services:
  - (1) Principal operations.
  - (2) Location of local offices.
  - (3) Services.

- (b) Scheduled air carriers:
  - (1) Names.
  - (2) Principal routes.
  - (3) Aircraft types.
  - (4) Local special operations (testing, training).
- (c) Air taxi, charter service, or fixed-base operation:
  - (1) Names.
  - (2) Principal routes.
  - (3) Aircraft types.
  - (4) Nature of operation.
  - (5) Hours of operation.
- (d) Military operations:
  - (1) Offices—hours of operation.
  - (2) Types of operations.
  - (3) Aircraft types.
- (e) Miscellaneous operations:
  - (1) Civil Air Patrol.
  - (2) Border Patrol.
  - (3) Other.

2. Local Area. Given an unlabeled chart of the local area depicting airway structures and NAVAID symbols, the individual will label or draw the following:

- (a) Airway structure:
  - (1) Victor/jet.
  - (2) Minimum altitudes (MOCA, MEA, MRA).
  - (3) Intersection.

- (4) Mileage between fixes (nonradar facilities only).
  - (5) Radials.
- (b) Radio NAVAIDs:
  - (1) Nondirectional radio beacons (NDBs).
  - (2) VOR/VORTAC/TACAN areas.
- (c) Boundaries.
- (d) Restricted and joint-use areas.
- (e) Approach aids.
- (f) Adjacent airport facilities.
- (g) Topographical features.
- (h) Departure and arrival routes:
  - (1) Preferential routing—inbound and outbound.
  - (2) Clearance limits—release fixes.
  - (3) Departure/arrival fix.
  - (4) Others as applicable.
- (i) Location identifiers:
  - (1) VOR/VORTAC/TACAN.
  - (2) NDBs.
  - (3) Compass locators.
  - (4) Fan markers.
  - (5) Intersections.
  - (6) Waypoints.
  - (7) Other airports/heliports.

3. Position-Associated Equipment. The individual shall demonstrate proper use and apply procedures of the following equipment:

(a) Terminal FDEP equipment.

(1) Equipment description and functions:

- a Alphanumeric keyboard.
- b Error indications and their causes.
- c Use of associated switches and keys.
- d Flight strip printer.
- e Receive-only mode.
- f Tear-off bar.
- g Forms sensing contact.
- h Keys and lights.
- i DCCU.
- j Detection of hardware errors.
- k Local data check light.

(2) FDEP/FDIO message entry:

- a Message fields.
- b Message types and examples.
- c Message composition and formats.
- d Message correction prior to entry.
- e Message entry procedures.

- (3) Computer acceptance checking and computer messages:
  - a Acceptance checking.
  - b Acceptance messages.
  - c Qualified acceptance.
  - d Rejection messages.
  - e Error messages.
  - f Error responses.
- (b) Interphone systems.
  - (1) Location and use of associated equipment:
    - a Terminal boxes.
    - b Speakers.
    - c Jacks.
    - d Handsets.
    - e Headsets.
  - (2) Use of lines:
    - a Ring.
    - b Discrete dial codes.
    - c Voice call.
    - d Automatic ring.
  - (3) Operational characteristics:
    - a Termination display.
    - b Lighting systems.
    - c Monitoring capabilities.
    - d Conference circuits.
    - e Override capabilities.



- (4) Circuit identification and location:
  - a Name or number of each line.
  - b Physical location on keybox panel.
  - c Color or code (if applicable).
- (5) Alternate methods of relay:
  - a Other Service F lines.
  - b Commercial telephones.
  - c Associated flight service station (FSS).
  - d Local tower emergency radio equipment.
  - e Computer systems.
- (6) Interphone failure notification procedures:
  - a Appropriate maintenance notification.
  - b Preparation of required reports of outages.
- (c) Radio communications equipment.
  - (1) Transmitter control panels.
  - (2) Receiver selector panels.
  - (3) Microphones.
  - (4) Standby equipment:
    - a Location.
    - b Types of equipment available.
    - c Control panel operation.
    - d Tuning or selection.

- (5) Radio failure notification procedures:
  - a Appropriate maintenance notification.
  - b Preparation of required reports of outages.
- (d) ATIS.
  - (1) Operation:
    - a Recording time.
    - b Playback procedure.
    - c Updating procedures.
  - (2) Control panel:
    - a Record button.
    - b Reset button.
    - c Light indications.
  - (3) Message content.
- (e) NAVAID monitoring devices.
  - (1) Aids:
    - a Location.
    - b Frequency.
    - c Identification.
    - d Operation.
  - (2) Monitoring panels:
    - a Location.
    - b Operation.
  - (3) Use of standby equipment.

- (4) Notification procedures:
  - a Appropriate maintenance notification.
  - b Preparation of required reports of outages.
- (f) Recording equipment.
  - (1) Positions recorded.
  - (2) Servicing:
    - a Recording time.
    - b Playback procedure.
    - c Tape change procedure.
    - d Monitor panel.
    - e Erasing procedure.
- (g) Teleautograph and/or electrowriter.
  - (1) Servicing.
  - (2) Messages formats.
  - (3) Distribution of data received.
- (h) Other equipment.
  - (1) Automated Radar Terminal Systems (ARTS):
    - a Alphanumeric keyboard.
    - b Message entry and computer responses.
  - (2) Console instruments:
    - a Altimeter(s).
    - b Wind instruments.
    - c Clocks.

## (3) Lighting:

a Airport lighting control panel(s).

b Operational quarters.

## (4) Miscellaneous equipment:

a Light signal guns.

b Time stamps.

c Traffic counters.

d Binoculars.

e Runway visibility value/runway visual range (RVV/RVR) indicators.

## (5) Personnel safety equipment.

## 4. Procedures.

## (a) The individual shall briefly describe facility positions of operations including:

(1) Location.

(2) Major duties and responsibilities.

(b) The individual shall describe the general purpose and location of the following publications and shall explain the application of procedures contained therein, as they pertain to the flight data position:

(1) FAA Orders and/or handbooks.

(2) Facility directives and memorandums.

(3) Letters of agreement.

(4) Reading binder.

(5) Airman's Information Manual.

(6) Search and rescue procedures.

- (c) The individual shall explain the handling of flight plans and flight progress strips including:
  - (1) Format.
  - (2) Methods of revising strips.
  - (3) Local variances in strip format.
  - (4) Control symbols.
  - (5) Standard symbols.
- (d) The individual shall compose interphone messages and describe requirements including:
  - (1) Types and priorities of calls:
    - a Emergency.
    - b Control, coordination, and advisory.
    - c Flight plans.
    - d Other general information.
  - (2) Standard procedures:
    - a Proper routing of calls.
    - b Call-up techniques.
    - c Answering techniques.
    - d Procedures for relaying various data.
    - e Acknowledgments and sign-off techniques.
    - f Phraseology.
- (e) The individual shall interpret, disseminate, and describe requirements for NOTAM including:
  - (1) Types:
    - a NAVAIDs.
    - b Hazards.
    - c Lighting.

d Airports.

e General.

(2) Method of receipt.

(3) Origination.

(4) Display.

(f) The individual shall describe the procedures for maintaining daily records and forms including:

(1) Collecting strips and records.

(2) Checking daily traffic count.

(3) Compiling daily tabulation.

(4) Storing records and forms.

(g) The individual shall describe airport emergency equipment and procedures including:

(1) Location.

(2) Types available:

a Firefighting.

b Ambulance.

c Off-airport equipment.

d Other.

(3) Methods of alerting:

a Location of alarm.

b Operation of alarm.

c Coded categories of alert.

(4) Offices to be notified.

(h) The individual shall describe procedures for conducting/receiving position relief briefings. The individual will draw a local tower visibility chart and demonstrate the ability to identify specified visibility markers.

**5. Weather.**

(a) The individual shall describe weather information including:

(1) Types of reports available:

a Surface observations.

b Forecasts.

c Winds aloft forecast.

d Advisories.

e Charts.

(2) Source.

(3) Time available.

(4) Format.

(5) Interpretation.

(6) Disposition.

(b) The individual shall successfully complete the tower visibility examination in accordance with the National Weather Service (NWS) standards. Request this exam from the following address:

Mike Monroney Aeronautical Center  
FAA Academy, Meteorological Coordinator & Training Consultant, AMA-909  
P.O. Box 25082  
Oklahoma City, OK 73125

(c) For facilities equipped with a Limited Aviation Weather Reporting Station (LAWRS), the individual shall successfully complete the LAWRS examination in accordance with NWS standards. The individual is not required to complete the tower visibility exam.

**d. ON-THE-JOB TRAINING.**

1. Demonstration. Through OJT, the individual will be able to demonstrate the ability to:

(a) Receive, process, and deliver flight plan information.

(b) Operate communications equipment.

(c) Effectively communicate and coordinate.

(d) Operate FDEP/FDIO equipment.

- (e) Use ARTS equipment as required.
- (f) Operate and service recording equipment.
- (g) Process flight plans manually.
- (h) Receive, issue, and relay weather NOTAM and PIREP information and update ATIS information.
- (i) Observe and report weather.
- (j) Provide significant weather advisories.
- (k) Detect and report equipment malfunctions.
- (l) Maintain status board and statistical information.
- (m) Provide maximum possible assistance to other controllers during unusual/emergency situations.
- (n) Conduct/receive position relief briefings.

**NOTE:** Flight data is a noncontrol position regardless of location within a facility.

**2. Evaluation.**

(a) As specified in Chapter 3 of this order, the individual shall be assigned target hours for qualification and certification, and the individual's supervisor shall conduct and document performance and certification skill checks.

(b) An OJT Instruction/Evaluation Report, FAA Form 3120-25, shall be completed by the OJT Instructor for each session of training conducted (see Appendix B, pages B-5 and B-6 of this order). The completed profile form shall be discussed with the individual and the training team shall meet at timely intervals to review the individual's overall progress in training.

(c) If the individual does not meet the requirements for position qualification and certification, follow the process specified in Chapter 3 of this order.



## **Section 4. CLEARANCE DELIVERY POSITION TRAINING**

### **(Course 55061)**

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**GENERAL:** The purpose of this development stage is to prepare the individual for clearance delivery position qualification and certification.

This stage of training is administered in two parts: classroom instruction and OJT. The classroom training uses facility-prepared instructional materials to supplement the Academy-prepared materials.

**PREREQUISITE:** Successful completion of PV.

**CLASSROOM TRAINING:** The classroom portion of training is administered using lesson plans developed by the Academy and the facility and conducted under the direction of the training administrator (TA). In some facilities, classroom training for more than one area may be taught at the same time; e.g., flight data and clearance delivery. In these situations, lesson plans should be developed accordingly.

If a terminal facility does not have a training staff to conduct classroom instruction, the facility is responsible for developing self-study materials that will cover all of the required subject matter.

**ON-THE-JOB TRAINING:** OJT shall be conducted in the operational environment under the direction of the individual's training team. OJT shall be conducted after successful completion of necessary classroom training.

**a. CLASSROOM TRAINING.** The individual shall successfully demonstrate the skills listed below in accordance with Orders 7110.65 and 7210.3, and shall complete an examination on the material.

1. Clearance Delivery.

- (a) State the functions of the clearance delivery position.
- (b) List the conditions for which departure clearances or departure instructions would be issued.
- (c) List six instrument flight rules (IFR) departure clearance items in sequence.
- (d) State when the term "ATC" should be omitted as a clearance prefix.
- (e) Define clearance limit.
- (f) Describe a NAVAID fix, as determined by reference to a radial and distance from VORTAC when the fix is not named.
- (g) State when the directions of a takeoff/turn or initial heading to be flown may be specified.
- (h) State the standard phraseology used when necessary to assign a crossing altitude that differs from the standard instrument departure (SID) altitude.
- (i) State the requirement that is applicable when route or altitude in a previously issued clearance is amended.
- (j) State the standard phraseology used to assign frequency and beacon code information to departing IFR aircraft.
- (k) Match beacon codes with the appropriate IFR departure categories.
- (l) List the conditions that must be met in order to issue an abbreviated departure clearance.
- (m) State the conditions and standard phraseology used to issue special visual flight rules (SVFR) clearances.
- (n) State the conditions and standard phraseology used to issue a VFR-on-top clearance.
- (o) Select the provisions that should be included in gate hold procedures.
- (p) Select the provisions that should be included in pretaxi clearance procedures.

2. Local Clearance Delivery.

- (a) Describe the procedures and phraseology pertaining to:
  - (1) Gate hold procedures.
  - (2) Delivery of clearances.

- (b) Explain the procedures and coordination requirements for:
    - (1) Processing flight progress strips.
    - (2) Processing flight plans.
    - (3) Processing clearance requests.
  - (c) Explain the application of all position-related items in:
    - (1) Letters of agreement.
    - (2) Directives.
    - (3) Position binders.
  - (d) Explain ARTS data entry functions (if applicable).
3. Procedures. Describe the procedures for conducting/receiving position relief briefings.

**b. ON-THE-JOB TRAINING.**

1. Academic Procedures. Through OJT, the individual will be able to demonstrate the ability to:
- (a) Select, review, and process flight progress strips.
  - (b) Issue clearances and ensure pilot read-back accuracy.
  - (c) Relay clearance amendments to aircraft.
  - (d) Provide service on request for SVFR, tower/en route, and radar service clearances (e.g., terminal radar service area [TRSA] and class B airspace).
  - (e) Provide service on request to file IFR flight plan.
  - (f) Apply gate hold procedures.
  - (g) Detect and report equipment malfunctions.
  - (h) Provide timely and useful information to aircraft regarding hazardous conditions.
  - (i) Use ARTS equipment as required.
  - (j) Conduct/receive position relief briefings.

## 2. Evaluation.

(a) As specified in Chapter 3 of this order, the individual shall be assigned target hours for qualification and certification, and the individual's supervisor shall conduct and document performance and certification skill checks.

(b) An OJT Instruction/Evaluation Report, FAA Form 3120-25, shall be completed by the OJT Instructor for each session of training conducted (see Appendix B, pages B-5 and B-6 of this order). The completed profile form shall be discussed with the individual, and the training team shall meet at timely intervals to review the individual's overall progress in training.

(c) If the individual does not meet the requirements for position qualification and certification, follow the process specified in Chapter 3 of this order.

## Section 5. GROUND CONTROL POSITION TRAINING (Course 55062)

**GENERAL:** The purpose of this development stage is to prepare the individual for ground control position qualification and certification.

This stage of training is administered in two parts: classroom instruction and OJT. The classroom training uses facility-prepared instructional materials to supplement Academy-prepared materials.

**PREREQUISITE:** Successful completion of PV.

**CLASSROOM TRAINING:** The classroom portion of training is administered using lesson plans developed by the Academy and the facility and conducted under the direction of the training administrator (TA). In some facilities, classroom training for more than one area may be taught at the same time (e.g., ground and local control). In these situations, lesson plans should be developed accordingly.

If a terminal facility does not have a training staff to conduct classroom instruction, the facility is responsible for developing self-study materials that will cover all of the required subject matter.

**ON-THE-JOB FAMILIARIZATION:** OJF shall be assigned at the discretion of the training team in accordance with Chapter 3 of this order.

**ON-THE-JOB TRAINING:** OJT shall be conducted in the operational environment under the direction of the individual's training team. OJT shall be conducted after successful completion of necessary classroom training.

**a. CLASSROOM TRAINING.****1. Part I—Ground Control Information.**

(a) **Introduction/Overview.** The individual shall be provided pertinent information concerning his/her working environment.

(1) Airport layout-related knowledge.

(2) Cab layout-related knowledge.

(3) Letters of agreement, facility directives, orders, notices, performance standards, and position responsibilities.

(4) Radio/interphone equipment-related knowledge.

(b) **Aircraft Recognition and Characteristics.** The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65, Order 7340.1, and TS-8-2:

(1) Define categories of aircraft and the terminology associated with aircraft operating characteristics.

(2) Identify the general recognition features used in aircraft identification.

(3) Explain the methods used to assign aircraft designators and names.

(4) Recognize selected civil aircraft and determine the category.

(5) Identify selected military aircraft.

(6) Identify selected helicopters.

(c) **Airport Utilization.** The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65, Order 7210.3, local facility directives, and local airport procedures:

(1) State the weather criteria that determine the activation of the system localizer and glideslope critical area restrictions.

(2) Assign the proper runway for departures at airports that do not have a runway-use program.

(3) Explain the purpose of formal and informal runway-use programs.

(4) State wind velocity criteria when describing the wind as calm.

(5) Define the conditional uses of and criteria for initiating intersection takeoffs.

(6) Describe the physical location of the airport diagram at your airport.

(d) Console Instruments. The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65, Order 7210.3, Order 6560.10B, and Federal Meteorological Handbook No. 1:

- (1) Determine how to cross-check wind indicators.
- (2) Identify a wind instrument error.
- (3) Determine the requirements for aneroid setting indicators (ASI) and mercurial barometer.
- (4) Describe the requirements for altimeter comparison checks of ASI and digital ASI (DASI) instruments.
- (5) Determine when to inform airway facilities (AF) personnel of altimeter (ASI/DASI) instrument outages.
- (6) Identify the basic units of an RVR system.
- (7) Use correct terminology when reporting RVR values and RVVs.
- (8) Determine valid readings from an RVR digital readout.
- (9) Describe alternative procedures used when the RVR is inoperative.

(e) Ground Control Procedures and Taxi Information and Clearances. This section is presented in two parts: 1) ground control procedures, and 2) taxi information and clearances. The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65:

- (1) Ground Control Procedures.
  - a Define a movement area.
  - b State the basis for providing airport traffic control service.
  - c State the first-priority duty of ground control.
  - d List the meanings of visual light signals used in conjunction with ground traffic operations.
  - e State the pilot receiver-only acknowledgment procedures for fixed-wing aircraft and helicopters.
  - f State the procedures and phraseology for describing vehicles, equipment, or personnel on the movement area.
  - g State the procedures and phraseology for describing the relative position of ground traffic.

- h List the phraseology used to approve or disapprove operational requests.
- i Differentiate between the meanings of the words "expedite" and "immediately" when used in ATC instructions.
- j State certain clearances to avoid in ground operations when applying wake turbulence procedures.
- k State the requirements and phraseology used to inform a pilot of an observed abnormal aircraft condition.
- l State the terms used to describe braking action.
- m State the requirements for issuing airport condition information to a pilot.
- n Select the airport conditions that warrant issuance of airport condition information.
- o State the phraseology used to describe aircraft identifications.
- p State the phraseology used to describe types of aircraft.

(2) Taxi Information and Clearance.

- a List, in sequence, the radio message format for initiating and replying to communication with an aircraft.
- b State the procedures and phraseology for transferring radio communications.
- c State the coordination requirements between ground control and local control, including those for the prevention of "runway incursion."
- d State the procedures and phraseology for formulating and issuing taxi information and clearances, including information and clearances for taxiing helicopters.
- e Select the phraseology that excludes conditional phrases.
- f List the methods used by ground control to determine the position of an aircraft.
- g State the requirements and phraseology for runway visibility reporting.
- h State the requirements for issuing departure information.
- i State the departure information that may be omitted if the pilot states "Have Numbers" or the appropriate ATIS code.
- j State who is responsible for the movement of aircraft or vehicles within loading, maintenance, or parking areas.



(f) **Emergency Procedures and Unusual Situations.** This section is presented in two parts: 1) determination and use of procedures in emergency situations, and 2) procedures used for handling unusual situations that require special handling but are not classified as emergencies. The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65 and Order 7210.3:

(1) **Emergency procedures.**

- a Describe in general terms when an emergency exists.
- b State the basis for the type of assistance needed in an emergency situation.
- c List four persons who may make a determination that a potential or actual emergency exists.
- d Identify who is responsible for handling a ground emergency after the alert has been initiated and for determining the emergency vehicle route.
- e State what action is required by ground control when a ground emergency occurs outside the airport proper.

(2) **Unusual situations.**

- a State to whom suspicious activity regarding the use of aircraft will be reported.
- b State the procedures to follow when the pilot of presidential or vice presidential aircraft makes a request concerning the movement of the aircraft.
- c Define the meaning of the code phrase "Safe Air One."
- d State the action to take when called by an experimental aircraft that intends to depart.
- e State the procedure to follow when information is received concerning an aircraft bomb threat.

2. **Part II—Local Ground Control Information.**

(a) **Position-Associated Equipment.** The individual will utilize and apply procedures for ground control position equipment including:

- (1) **Radio/telephone main and standby equipment.**
- (2) **Teleautograph or electrowriter.**
- (3) **NOTAM and weather-posting locations.**
- (4) **FDEP/FDIO printer and keyboard.**
- (5) **ATIS recording equipment.**
- (6) **RVR digital panel, RVR meter, and/or RVV meter.**

- (7) Visibility chart.
- (8) Airport status board.
- (9) Light gun.
- (10) Bright Radar Indicator Tower Equipment (BRITE).
- (11) Airport Service Detection Equipment (ASDE).
- (12) Airport ground lighting.
- (13) Approach lighting systems.
- (14) Obstruction lighting.
- (15) Personnel safety equipment.
- (16) ARTS.

(b) Procedures.

(a) The individual will explain the application of procedures contained in the following publications as they pertain to the ground control position:

- a FAA Orders and/or handbooks.
- b Facility directives and memoranda.
- c Letters of agreement.
- d Reading binder.
- e Airman's Information Manual.
- f Search and rescue procedures.

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

3. Evaluation.

(a) Part I Test. Complete an examination on the material contained in Part I.

(b) Given a blank diagram of your airport, and in accordance with local directives and local airport procedures, the individual will be able to:

- tower.
- (1) Draw the airport movement area and label movement areas that are not visible to the tower.
  - (2) Label the users, uses, and/or restrictions for gates, concourses, or parking areas.
  - (3) Label each taxiway with a designator and label as "preferential" those used as inbound and/or outbound routes for each runway.
  - (4) List any taxiways that are limited in use and the restrictions that apply.
  - (5) Label the "special use" areas, such as compass rose, bomb threat, runways, and hazardous cargo.
  - (6) List the runways included in a runway-use program, and tell whether the program is formal or informal.
  - (7) Label the area(s) designated as short takeoff and landing (STOL) runway(s), and state the requirements and conditions for use.

(c) Airport Layout. Given an unlabeled chart of the airport layout depicting runways, airport movement areas, and structures, and in accordance with local procedures, the individual will:

- (1) Indicate airport elevation and point of reference.
- (2) Identify landing and takeoff areas as follows:
  - a Runways, including:
    - Number and magnetic heading.
    - Surface composition (other than hard surface).
    - Marking special or restrictive use:
      - STOL.
      - Closed portions.
      - Displaced thresholds.
    - Length and width.
    - Distance remaining from intersections.
    - Lighted or unlighted, arresting barriers/cable systems.

b Helicopter pad(s), including:

- Location(s).
- Identification.
- Marking.

(3) Identify the following areas and indicate whether they are movement areas or nonmovement areas:

a Taxiways:

- Width.
- Number and identification.
- Lighted or unlighted.
- Restrictions.
  - Inbound.
  - Outbound.

b Ramp and gate locations:

- Itinerant.
- Air taxi.
- Fixed-base operations.
- Air carrier.
- Military.
- Cargo.
- Helicopter.
- Restrictions:
  - Time.
  - Weight.
  - Size.

c Special-use areas:

- Runup and "jet blast walls."
- Compass rose.
- Bomb detection.
- Explosive cargo.
- VOR checkpoints.

(4) Identify structures and support facilities, including:

a Emergency equipment.

b Hangars.

- Fixed base.
- Air carrier.
- Military.
- Private.

c Building and facilities—terminals:

- Main.
- Air carrier.
- Itinerant and air taxi.
- Military.
- Cargo.

d FAA facilities:

- Tower.
- Radar site.
- Transmitter and receiver site.
- Transmissometer site.

- FSS/AFSS.
- Flight standards field elements.
- Airway facilities field elements.
- Airport district office.

e Customs.

f Security.

g Airport management:

- Offices.
- Maintenance.

h Weather Service Office.

**b. ON-THE-JOB TRAINING.**

1. The individual shall demonstrate the ability to:
  - (a) Issue clearances and instructions.
  - (b) Establish and maintain positive aircraft identity.
  - (c) Plan, establish, and coordinate taxi traffic flow.
  - (d) Effectively communicate over the interphone or radio.
  - (e) Provide information to aircraft regarding hazardous conditions.
  - (f) Control ground vehicle traffic.
  - (g) Provide assistance to emergency aircraft.
  - (h) Detect and report equipment malfunction.
  - (i) Utilize BRITE/ASDE radar display.
  - (j) Conduct/receive position relief briefings.

2. Evaluation.

(a) As specified in Chapter 3 of this order, the individual shall be assigned target hours for qualification and certification, and the individual's supervisor shall conduct and document performance and certification skill checks.

(b) An OJT Instruction/Evaluation Report, FAA Form 3120-25, shall be completed by the OJT Instructor for each session of training conducted (see Appendix B, pages B-5 and B-6 of this order). The completed profile form shall be discussed with the individual and the training team shall meet at timely intervals to review the individual's overall progress in training.

(c) If the individual does not meet the requirements for position qualification and certification, follow the process specified in Chapter 3 of this order.





## Section 6. LOCAL CONTROL/CAB COORDINATOR POSITION TRAINING (Course 55063)

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**GENERAL:** The purpose of this development stage is to prepare the individual for local control position qualification and certification and cab coordinator position qualification and certification.

This stage of training is administered in two parts: classroom instruction and OJT. The classroom training uses facility-prepared instructional materials to supplement Academy-prepared materials.

**PREREQUISITE:** Successful completion of PV.

**CLASSROOM TRAINING:** The classroom portion of training is administered using lesson plans developed by the Academy and the facility and conducted under the direction of the training administrator (TA).

If a terminal facility does not have a training staff to conduct classroom instruction, the facility is responsible for developing self-study materials that will cover all of the required subject matter.

**ON-THE-JOB FAMILIARIZATION:** OJF shall be assigned at the discretion of the training team in accordance with Chapter 3 of this order.

**ON-THE-JOB TRAINING:** OJT shall be conducted in the operational environment under the direction of the individual's training team. OJT shall be conducted after successful completion of the necessary classroom training.

**a. CLASSROOM TRAINING.****1. Part I—Local Control Information.**

(a) Introduction/Overview. The individual shall be provided pertinent information concerning his/her working environment. The instructor must determine what local facility and area information is pertinent for individuals training at each facility. The suggested areas of study are outlined as follows:

(1) Terminal area local procedures.

(2) Letters of agreement, facility directives, orders, notices, performance standards, and position description and responsibilities.

(3) Radio/interphone equipment. Training programs in previous sections have covered the required knowledge in this area. That knowledge and OJT will enable individuals to perform the duties of local control in a more efficient manner.

(b) Airport Lighting. The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65, Order 7340.1, Airman's Information Manual (AIM), AC 150/5345-46A, and local directives:

(1) State when airport and heliport (rotating) beacons and obstruction lights are operated, and recognize them by color and characteristics.

(2) Determine the hours of operation, color, intensity, and emergency operation of runway and taxiway lights.

(3) List the requirements for the operation of high-speed turnoff lights.

(4) Identify the methods and procedures for operation of high- and medium-intensity runway lights, runway centerline lights, and touchdown zone lights.

(5) State the requirements for the operation of approach lights, sequenced flashing lights, visual approach slope indicators, and runway end identifier lights.

(c) Separation Minimums. This section is presented in five parts: 1) runway separation, 2) simultaneous operations on parallel runways, 3) helicopter separation, 4) initial IFR separation, and 5) visual separation. The individual shall successfully demonstrate the skills listed below in accordance with Orders 7110.65 and 7210.3:

(1) List the three aircraft categories and describe the type of aircraft included in each category.

(2) Determine the proper separation between a departing aircraft and another aircraft using the same runway.

- (3) Determine when takeoff clearance or landing clearance may be issued, anticipating that prescribed separation will exist.
  - (4) Determine when a small aircraft may take off behind a departing large aircraft from an intersection on the same runway.
  - (5) Determine the proper separation between an arriving aircraft and another aircraft using the same runway.
  - (6) Determine the proper separation for aircraft using intersecting runways.
  - (7) State when arriving touch-and-go, stop-and-go, and low-approach aircraft are considered departing aircraft.
  - (8) Determine when a low approach of not less than 500 feet above the runway may be authorized.
  - (9) State the conditions that must be met when authorizing simultaneous operations on parallel runways.
  - (10) Determine the proper separation between a departing or arriving helicopter and another helicopter.
  - (11) Determine the initial IFR separation required for:
    - a Successive departing aircraft.
    - b Departing and arriving aircraft.
  - (12) Identify procedures governing VFR departure of IFR aircraft.
  - (13) Describe the two methods of applying visual separation.
  - (14) Describe the traffic situations for which a VFR tower may be authorized to provide visual separation.
- (d) Heavy Jet/Wake Turbulence Separation Procedures. The individual shall successfully demonstrate the following skills listed below in accordance with Order 7110.65 and AC 90-23E:
- (1) Determine minimum separation standards that apply to aircraft following large/heavy jet aircraft.
  - (2) Determine when to give wake turbulence advisories.
  - (3) Use correct phraseology when giving wake turbulence cautionary advisories.

(e) **Control Procedures—Landing, Spacing, and Sequencing.** The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65:

- (1) Determine what information should be included in a clearance to hold VFR aircraft.
- (2) Select the phraseology for establishing the sequence of arriving and departing aircraft by requiring them to adjust flight or ground operation in order to achieve proper spacing.
- (3) Select the phraseology to authorize an aircraft to make a touch-and-go.
- (4) Match the components of a standard traffic pattern with their definitions.
- (5) Identify the basis for providing ATC service.
- (6) Identify certain procedures governing Stage II and Stage III service.
- (7) Determine when to provide preventive control service.
- (8) Determine procedures governing an overhead approach.
- (9) State arrival/landing information that may be omitted if the pilot states "Have Numbers" or the appropriate ATIS Code.
- (10) Determine the priority of service provided between aircraft practicing instrument approaches and itinerant aircraft.

(f) **Control Procedures—Runway Use and Related Information.** The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65:

- (1) Select the phraseology for instructions to aircraft arriving/departing simultaneously on intersecting runways and to arriving aircraft exiting the runway after landing.
- (2) Select the phraseology for issuing wind information and for canceling takeoff clearance.
- (3) Select the procedure to use when it appears that an aircraft is in violation of a Federal Aviation Regulation (FAR).
- (4) Determine when to hold aircraft short of the instrument landing system (ILS) critical area.
- (5) State when local control must issue the prevailing visibility and RVR/RVV to arriving aircraft.
- (6) Determine when to instruct a departing IFR aircraft to contact departure control.
- (7) Select the terms describing the quality of braking action.

(8) Determine the procedures to use when issuing clearance to land to an aircraft that is *not* in sight.

(9) Determine when to issue cautionary wake turbulence advisories, wind-shear information, safety alerts, and bird advisories.

(10) Determine under what conditions an aircraft may be authorized to cross the airport traffic area at an airspeed in excess of 250 knots.

(11) Identify procedures governing a VFR departure of an IFR aircraft and procedures governing a closed/unsafe runway.

(g) Helicopter Aerodynamics. This section is presented in two parts: 1) the forces acting on a helicopter and the factors affecting its various maneuvers, and 2) the functions of the controls used during helicopter flight. The individual shall successfully demonstrate the following skills in accordance with AC 61-13:

(1) Identify the four forces acting on a helicopter.

(2) State the factors affecting the various maneuvers of a helicopter.

(3) State the functions of the four controls used during helicopter flight.

(h) S-VFR—Fixed-Wing Aircraft/Helicopters. The individual shall successfully demonstrate the skills listed below in accordance with Order 7110.65:

(1) Determine where, when, and under what conditions SVFR may be authorized.

(2) Explain the basis for approval of SVFR operations.

(3) State the proper phraseology for approving SVFR flights into, out of, through, or within a surface area.

(4) Apply minimum separation between fixed-wing SVFR aircraft, fixed-wing SVFR and IFR aircraft, SVFR helicopters, and SVFR helicopters and IFR aircraft.

(5) State the weather minimums applicable to both fixed-wing aircraft and helicopters requesting SVFR clearances and the required controller actions when less than minimum weather conditions exist.

(6) Specify the priority afforded IFR aircraft over those requesting SVFR clearances, and the procedures to inform SVFR flight of the delay.

(i) **Emergency Procedures and Unusual Situations.** This section is presented in two parts: 1) emergency situations and the procedures to determine a course of action, and 2) unusual situations not covered by standardized rules. The individual shall successfully demonstrate the skills listed below in accordance with FAR, Part 105; Order 7110.10 (Flight Services); Orders 7110.65 and 7210.3; local directives; and letters of agreement:

- (1) Identify emergency situations and select a course of action.
- (2) State minimum required information for inflight emergencies.
- (3) Determine required notifications.
- (4) Identify the five methods of aircraft orientation.
- (5) Determine when to exercise priority or special handling.
- (6) Determine a course of action for operations that are not normally encountered on a routine basis.

(j) **BRITE Qualification.** The individual shall successfully demonstrate the skills listed below in accordance with TM-14-2, Orders 7110.65 and 7210.3, and ETM 12-0-1 (Fundamentals of Primary and Secondary Surveillance Radar):

- (1) Define terms associated with primary radar and the ATC radar beacon system.
- (2) List the five basic components of BRITE.
- (3) Select and match BRITE controls with their functions.
- (4) Select the correct procedures used in the operation of BRITE by tower controllers.

(k) **Wind Effects.** This section is presented in two parts: 1) basic wind theory, operations under normal circumstances, and the characteristics of hazardous wind; and 2) wind shears and wind-shear detection equipment. The individual shall successfully demonstrate the following skills in accordance with AC 00-6A and AC 61-23B:

- (1) Define the forces that govern wind circulation.
- (2) Identify conditions associated with hazardous weather, including:
  - a Air masses and fronts.
  - b Turbulence.
  - c Clear air turbulence.

d Thunderstorms.

e Tornadoes.

f Hurricanes.

2. Part II—Local Control Functions.

(a) Position-Associated Equipment. The individual will utilize and apply procedures for local control position equipment, including:

- (1) Radio/telephone, main, and standby equipment.
- (2) ARTS.
- (3) Teleautograph or electrowriter.
- (4) NOTAM and weather-posting location.
- (5) ATIS recording equipment.
- (6) FDEP printer and keyboard.
- (7) RVR digital panel, RVR meter, and/or RVV meter.
- (8) Airport status board.
- (9) Light gun.
- (10) ASDE.
- (11) Airport ground lighting.
- (12) Approach lighting systems.
- (13) Obstruction lighting.
- (14) Visibility chart.
- (15) Arresting barriers/cable systems.
- (16) Personnel safety equipment.
- (17) NAVAID monitoring panel.

(b) Procedures. The individual will:

(1) Explain the application of procedures contained in the following publications as they pertain to the local control position:

- a FAA Orders and/or handbooks.
- b Facility directives and memorandums.
- c Letters of agreement.
- d Reading binder.
- e Airman's Information Manual.
- f Search and rescue procedures.

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

(c) BRITE Radar. The individual will utilize and apply the operational procedures for BRITE by:

- (1) Matching components with function or feature.
- (2) Matching control knobs with their functions.
- (3) Matching adjustment steps with their expected results.
- (4) Describing primary and secondary surveillance radar.
- (5) Describing radar phenomena.
- (6) Identifying radar operations.
- (7) Describing beacon code assignment procedures.
- (8) Describing radar identification and handoff procedures.\*
- (9) Explaining radar separation.\*
- (10) Explaining departure/arrival procedures as they relate to the local control position.\*
- (11) Describing radar additional services.\*
- (12) Describing emergency procedures.\*
- (13) Describing the stages of radar service.\*
- (14) Describing procedures for the transition from radar to nonradar control.\*

\* These items must be covered at facilities that use BRITE for IFR separation. These items can be accomplished only by completing FAA Academy PV.



**NOTE:** Facilities that have BRITE must provide the BRITE qualification examination as part of the local control certification. Additionally, those facilities that use BRITE for IFR separation must provide the radar qualification examination as part of local control certification. Individuals who have previously completed these examinations successfully need not retake them at a new facility.

Qualification examinations can be ordered from:

Mike Monroney Aeronautical Center  
Controlled Materials Unit, AMA-550  
P.O. Box 25082  
Oklahoma City, OK 73125

(d) ARTS. Using a simulated keyboard and quick reference card pertaining to the operation of the ARTS System, the individual will be able to:

- (1) List the units of equipment in the ARTS operational system.
- (2) List the principles of computer operation.
- (3) Define terms associated with ATC computer operation.
- (4) Interpret computer-generated data.
- (5) Identify associated and unassociated alphanumeric data.
- (6) Identify tabular data areas.
- (7) Recognize message error indications and system malfunction codes.

3. Evaluation.

(a) Part I Test. Complete an examination of the material covered in Part I.

(b) Airport Layout Map. Complete an airport layout map according to the criteria listed in Section 5a(3)(c) of this appendix. If the map has already been completed for ground control training, it does not have to be repeated.

(c) Terminal Area Map/Video Map. Given an unlabeled chart of the immediate terminal area depicting the surface areas, class B airspace, topographical features, points of reference, and other airports, the individual will identify the following:

- (1) Dimensions of all surface areas.
- (2) All airports and landing areas.
- (3) Instrument approach aids.

- (4) Visual reporting points.
- (5) Topographical features.
- (6) Obstructions.
- (7) TCA dimensions and altitudes.
- (8) Restricted and prohibited areas.
- (9) Terminal radar service area/airport radar service area (TRSA/ARSA) dimensions.
- (10) Any additional items as determined by the facility manager.

(d) Approach Chart Information. Given unlabeled approach plates, the individual will label the following:

- (1) Initial altitude at approach fix.
- (2) Procedure turn—direction from course.
- (3) Final altitude until FAF.
- (4) Final course.
- (5) MDA, HAT, HAA, and PH.
- (6) Missed approach.
- (7) Weather minimums.

**c. ON-THE-JOB TRAINING.**

1. The individual shall demonstrate ability to:

- (a) Assign runways.
- (b) Determine and issue instructions on separating arriving and departing aircraft.
- (c) Issue landing sequence and clearances.
- (d) Issue takeoff clearances and control instructions.
- (e) Issue control advisories and emergency assistance to aircraft.
- (f) Perform SVFR services.

- (g) Make and report visibility observations.
- (h) Operate airport and approach light systems.
- (i) Operate local BRITE:
  - (1) Interpret BRITE presentation.
  - (2) Provide service to arriving and departing flights.
  - (3) Utilize ARTS information and equipment.
- (j) Operate FDEP/FDIO equipment.
- (k) Coordinate arrival/departure information via the appropriate intrafacility/interfacility communications systems.
- (l) Conduct/receive position relief briefings.

## 2. Evaluation.

- (a) As specified in Chapter 3 of this order, the individual shall be assigned target hours for qualification and certification, and the individual's supervisor shall conduct and document performance and certification skill checks.
- (b) An OJT Instruction/Evaluation Report, FAA Form 3120-25, shall be completed by the OJT Instructor for each session of training conducted (see Appendix B, pages B-5 and B-6 of this order). The completed profile form shall be discussed with the individual and the training team shall meet at timely intervals to review the individual's overall progress in training.
- (c) If the individual does not meet the requirements for position qualification and certification, follow the process specified in Chapter 3 of this order.



## **Section 7. FACILITY TRAINING—NONRADAR TERMINAL CONTROL (Course 55064)**

**GENERAL:** The purpose of this development stage is to prepare the individual for nonradar terminal control position qualification and certification.

This stage of training is administered in two parts: classroom/simulation training instruction and OJT. The classroom/simulation training uses facility-prepared instructional materials to supplement Academy-prepared materials.

**CLASSROOM/SIMULATION TRAINING:** This training is administered using lesson plans developed by the Academy and the facility and conducted under the direction of the training administrator (TA). In some facilities, classroom training for more than one position may be taught at the same time (e.g., D01 and D02). In these situations, lesson plans should be developed accordingly.

If a terminal facility does not have a training staff to conduct classroom instruction, the facility is responsible for developing self-study materials that will cover all of the required subject matter.

**ON-THE-JOB  
FAMILIARIZATION:**

OJT shall be assigned at the discretion of the training team in accordance with Chapter 3 of the order.

**ON-THE-JOB TRAINING:**

OJT shall be conducted in the operational environment under the direction of the individual's training team. OJT shall be conducted after successful completion of necessary classroom training.

**a. CLASSROOM/SIMULATION TRAINING.**

1. Part I—Nonradar Terminal Control Position. This instructional presentation shall prepare the individual to perform the following nonradar control functions in accordance with local directives, AC 61-27C, and Orders 7110.65 and 7930.2:

- (a) Draw the terminal area map.
- (b) Identify and use IFR and VFR rules.
- (c) Apply separation standards.
- (d) Describe the use of the TERP's Manual.
- (e) Apply approach/departure procedures and minimum instrument approach altitudes.
- (f) Issue clearances, advisories, and control information using approved phraseology and proper format.
- (g) Review flight data for accuracy.
- (h) Relay weather reports and NOTAMS.
- (i) Receive and post flight progress reports.
- (j) Analyze traffic situations for potential conflicts.
- (k) Apply interfacility/intrafacility coordination requirements.
- (l) Provide flight assistance services.

2. Part II—Equipment and Procedures.

(a) Position-Associated Equipment. Utilize and apply procedure for nonradar approach control position equipment including radio/telephone, main, and standby equipment.

(b) Procedures.

(1) Explain the application of procedures contained in the following publications as they pertain to the nonradar terminal control position:

- a FAA Orders and/or handbooks.
- b Facility directives and memoranda.
- c Letters of agreement.

- d Position binders.
- e Airman's Information Manual.
- f Search and rescue procedures.

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

3. Evaluation.

(a) Terminal Control Information.

(1) Given an unlabeled chart of local area depicting low-altitude and high-altitude airway structures and NAVAID symbols, and in accordance with local directives, the individual will draw and identify:

- a All items required on the flight data area map.
- b Primary and secondary holding fixes.
- c Holding patterns and altitudes.
- d Minimum safe altitudes.

(2) Given unlabeled approach plates, the individual will fill in or label the following:

- a Transitions.
- b Transition altitudes.
- c Initial altitudes at approach fix.
- d Procedure turn—direction from course.
- e Final altitude until FAF.
- f Heading—final approach course.
- g MDA, HAT, HAA, and DH.
- h Missed approach.
- i Minimums.

#### 4. Control Problem Administration.

(a) In either a radar or nonradar facility, the individual shall be given a series of locally prepared comprehensive control problems of progressively increased complexity.

(b) Each nonradar facility shall administer nonradar control problems. The individual shall satisfactorily demonstrate the ability to control 15 or more IFR operations per hour on the last problem. The number of control problems will be determined by the TA based upon individual needs.

(c) Each radar facility shall develop and administer radar-to-nonradar transition problems consistent with operational needs, as contained within local emergency contingency directives. Emphasis shall be placed on transition from the primary source of radar information to the primary backup mode and vice versa. Training shall ensure that personnel are knowledgeable in the procedures used to transition to the backup mode and that personnel can apply separation standards applicable to that mode.

(d) The control problems shall include traffic situations that involve:

- (1) Arrivals versus arrivals.
- (2) Departures versus departures.
- (3) Arrivals versus departures.
- (4) Arrivals versus air route traffic control center (ARTCC) airspace and overflights.
- (5) Arcs versus holding pattern airspace.
- (6) Loss of communication.
- (7) Emergency procedures.
- (8) SVFR procedures.

#### 5. Laboratory Evaluation.

(a) Evaluation control scenarios shall be administered at regular intervals and shall be pass/fail. If the individual does not meet the requirements for successful completion of the scenario, the TA may determine that additional training is warranted. This training may include:

- (1) Additional classroom instruction, and/or
- (2) Additional instructional scenarios followed by an evaluation scenario.

(b) If the individual does not meet the requirements for successful completion after additional training, the provisions of Order 3330.30 shall be followed.



**b. ON-THE-JOB TRAINING.****1. The individual shall demonstrate ability to:**

- (a) Separate aircraft in accordance with Order 7110.65.
- (b) Issue clearances, advisories, and control instructions.
- (c) Process flight progress reports.
- (d) Analyze traffic situations for potential complications.
- (e) Relay weather reports and NOTAMS.
- (f) Perform required interfacility/intrafacility coordination.
- (g) Provide flight assistance services.
- (h) Conduct/receive position relief briefings.

**2. Evaluation.**

(a) As specified in Chapter 3 of this order, the individual shall be assigned target hours for qualification and certification, and the individual's supervisor shall conduct and document performance and certification skill checks.

(b) An OJT Instruction/Evaluation Report, FAA Form 3120-25, shall be completed by the OJT Instructor for each session of training conducted (see Appendix B, pages B-5 and B-6 of this order). The completed profile form shall be discussed with the individual, and the training team shall meet at timely intervals to review the individual's overall progress in training.

(c) If the individual does not meet the requirements for position qualification and certification, follow the process specified in Chapter 3 of this order.



## Section 8. FACILITY TRAINING—RADAR CONTROL (Course 55065)

**GENERAL:** The purpose of this development stage is to prepare the individual for radar control position qualification and certification.

This stage of training is administered in two parts: classroom/simulation training instruction and OJT. The classroom training uses facility-prepared instructional materials to supplement Academy-prepared materials.

**PREREQUISITE:** Successful completion of PV.

**CLASSROOM/SIMULATION TRAINING:** This training is administered using lesson plans developed by the Academy and the facility and conducted under the direction of the training administrator (TA). In some facilities, classroom training for more than one position may be taught at the same time (e.g., R01 and R02). In these situations, lesson plans should be developed accordingly.

If a terminal facility does not have a training staff to conduct classroom instruction, the facility is responsible for developing self-study materials that will cover all of the required subject matter.

**ON-THE-JOB FAMILIARIZATION:** OJT shall be assigned at the discretion of the training team in accordance with Chapter 3 of this order.

**ON-THE-JOB TRAINING:** OJT shall be conducted in the operational environment under the direction of the individual's training team. OJT shall be conducted after successful completion of necessary classroom training.

**a. CLASSROOM/SIMULATION TRAINING.****1. Part I—Radar Terminal Control Position.**

(a) Given job-like situations pertaining to the operation of the radar approach control position, the individual shall successfully demonstrate the skills listed below in accordance with ETM 12-0-1 and Order 7110.65:

- (1) Describe primary and secondary surveillance radar.
- (2) Describe radar phenomena.
- (3) Identify radar operations.
- (4) Describe radar identification, handoffs, and beacon code assignment procedures.
- (5) Explain radar separation.
- (6) Explain departure/arrival procedures.
- (7) Describe radar additional services.
- (8) Describe emergency procedures.
- (9) Describe the stages of radar service.
- (10) Describe procedures for the transition from radar to nonradar control.

(b) At ARTS IIIA and IIIE equipped facilities, given a simulated keyboard and quick reference card pertaining to the operation of the ARTS IIIA or IIIE system, the individual shall successfully demonstrate the skills listed below in accordance with TM 11-4:

- (1) List the units of equipment in the ARTS IIIA or IIIE operational system.
- (2) List the principles of computer operation.
- (3) Define terms associated with ATC computer operation.
- (4) Interpret computer-generated data.
- (5) Identify associated and unassociated alphanumeric data.
- (6) Identify tabular data areas.
- (7) Recognize message error indications and system malfunction codes.

**2. Part II—Equipment and Procedures.**

(a) **Position-Associated Equipment.** The individual will utilize and apply procedures for:

- (1) Radar indicators.
- (2) ARTS equipment, including local and regional adaptations.
- (3) TPX-42.
- (4) Radio/telephone, main, and standby equipment.
- (5) Personnel safety equipment.
- (6) Radar system master control panel.
- (7) Other.

(b) **Procedures.** The individual shall:

(1) Explain the application of procedures contained in the following publications as they pertain to the radar control positions:

- a FAA Orders and/or handbooks.
- b Facility directives and memorandums.
- c Letters of agreement.
- d Position binders.
- f Airman's Information Manual.
- g Search and rescue procedures.

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

**3. Evaluation.**

(a) The individual will be able to pass the radar qualification examination.

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

(c) At ARTS-equipped facilities, the individual will be able to pass the facility-developed ARTS examination.

(d) Given an unlabeled video map/overlay, the individual will identify all items, plus:

- (1) Minimum vector altitudes.
- (2) Significant terrain areas and obstructions.
- (3) Primary radio frequencies for radar positions and adjacent control facilities.
- (4) Other items as determined by the facility.

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

(1) This training may include:

a Additional classroom instructions

and/or

b CATTS training.

(2) If the individual does not meet the requirements for successful completion after additional training, the provisions of Order 3330.30 shall be followed.

4. Radar Control Problem Administration. Radar Simulated Environmental Training in the National Terminal Air Traffic Training Program is being administered at terminal facilities utilizing the simulation capabilities of the ARTS equipment. Although not all facilities presently have the necessary equipment available for simulation training, the capability within the terminal ARTS structure does exist. The Enhanced/Training Target Generator (ETG/TTG) Radar Training Course gives the developmental an opportunity to learn and demonstrate, under simulated conditions, all the knowledge and skills required of a full performance level controller.

(a) Criteria. At facilities where Enhanced Target Generator/Training Target Generator (ETG/TTG) is available, simulated radar control problems shall be given to the maximum extent possible considering the equipment capabilities at the individual facility.

(b) At facilities where simulation is used, all problems shall be counted as classroom hours. Facilities shall develop simulated control problems of increasing complexity, utilizing the standards as described in this appendix.

(c) 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. The individual shall complete a series of simulated control problems as determined by the TA.

(d) To ensure training in varied traffic conditions, certain situations are to be included in each control problem. During the administration of a problem, each situation shall be noted and recorded to alleviate the possibility of giving the same problem variation in close succession. Special situations should not be limited to those shown, but should also include situations initiated by facility instructors. Space prohibits the listing of the many possible control situations that might occur, but a broad spectrum of traffic configurations is required for operational effectiveness.

(e) Control Problem Development.

(1) Definitions.

a **Volume level:** A measure of specialized activity expressed as a percentage of the maximum number of operations a full performance controller is expected to handle at each position of operation.

b **Complexity:** Factors, other than traffic volume, experienced in controlling traffic at a given position of operation.

(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 Control problems shall be developed for each position of operation started at the 50 percent volume level and progressively increased to the 110 percent volume level. The additional 10 percent will be added to ensure that the developmental encounters a greater volume of traffic than he/she will normally be expected to control.

b The formula is based on 110 percent traffic volume from an average period of a busy day (as defined and validated by the facility).

c To protect problem integrity, some variations of the problem should be made. Changes in aircraft identifications, equipment types, altitudes, and times are usually adequate for developing problem variations. Selecting random aircraft for special situations will also add depth to problem variations.

d The instructor shall determine the weather, flight conditions, VFR traffic, and any abnormal conditions that may affect the overall problem complexity and controller workload. The instructor shall simulate these conditions as near as possible to add realism to the problem.

e The instructor shall randomly incorporate pilot readback errors throughout the radar control problems. These are intentional readback errors made by ghost pilots to developmental in order to evaluate the developmental listening skills.

f The instructor should examine the problem closely to ensure that all problem objectives are met and the developmental will receive meaningful job-centered training. The instructor should provide a positive percentage and maintain the percentage throughout the remainder of the problem.

**g** The instructor shall introduce operations or situations that directly relate to problem 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 a position of operation, which affect complexity, separate problems should be administered for each change. Each problem shall state objectives, volume level, and complexity factors. Where applicable, ASR approaches shall be conducted as part of this training.

**h** Up to 1 hour shall be allotted for the radar control problems. This does not include the time spent for briefing and critique.

(3) **S.E.T. Problem Objectives.** The developmental shall independently perform all the duties of the simulated radar sector, including radio.

- a** Provide VFR traffic advisories.
- b** Provide no-gyro vectors.
- c** Control missed approaches.
- d** Recognize weather on a radar display and advise aircraft concerned.
- e** Vector aircraft around weather (if applicable).
- f** Handle airfiles.
- g** Recognize an aircraft with an inoperative transponder.
- h** Issue speed control instructions.
- i** Issue visual approaches.
- j** Apply appropriate radio failure procedures.
- k** Recognize when an aircraft is being hijacked and apply correct procedures.
- l** Transition from ARTS failure to primary and secondary radar.
- m** Resolve one emergency situation.
- n** Transition from radar to nonradar separation due to radar failure.
- o** Provide separation and service to an aircraft dumping fuel.
- p** Apply appropriate radio failure procedures.



(4) **Realtime Problem Development.** The guidelines outlined above have been proven to be most desirable when developing control problems. There may be other methods, such as obtaining 1 hour's traffic from the actual position and administering it as a control problem.

**a** There are pitfalls to this type of problem development because of the wide variance of traffic situations that do not always provide typical air traffic occurrences. All training should contain objectives and be directed toward developing the knowledge and ability of those receiving the training.

**b** Positive and methodical steps must be taken when developing simulated radar control problems. Complexity, special control events, abnormal traffic situations, weather conditions, script development, and instructor guides need to be considered to achieve the desired problem objectives.

(f) **Laboratory Evaluation.**

(1) The TA shall determine the number of radar S.E.T. scenarios that the individual will complete. Periodic evaluation scenarios shall be conducted to determine the individual's progress through the completion of the scenarios.

**EXAMPLE:** The TA may require the administration of 18 S.E.T. radar problems, with numbers 6, 10, 14, and 18 as pass/fail evaluation.

(2) It is necessary to complete scenarios at the lowest complexity level first and progressively work up to the highest. Scenarios at a given complexity level may be administered in any order to provide variation. The developmental will be required to complete training on a given set of radar control problems similar to those in the first position of operation. This requirement will ensure the developmental's exposure to the many prescribed special events and control situations that could occur.

(3) After completion of training on the first radar position, the developmental's progress shall be reviewed and the number of problems required on any succeeding position shall be mutually agreed upon by the facility training staff and area supervisor.

(4) The results of the individual's performance during each scenario shall be recorded on the OJT Instruction/Evaluation Report, FAA Form 3120-25, and discussed with the individual (see Appendix B, pages 5-6 of this order). Forms used during the evaluation scenario shall be retained and filed in the individual's training folder.

(5) Evaluation control scenarios shall be administered at regular intervals during the radar laboratory segment of training. The evaluations shall be pass/fail. If the individual does not meet the requirements for successful completion of the scenario, the training team and TA may determine that additional training is warranted. This training may include:

**a** Additional classroom instruction, and/or

**b** Additional instructional scenarios followed by an evaluation scenario.

(6) If the individual does not meet the requirements for successful completion after additional training, the provisions of Order 3330.30 shall be followed.

**b. ON-THE-JOB TRAINING.****1. The individual will demonstrate the ability to:**

- (a) Utilize and adjust radar equipment.
- (b) Apply radar separation standards.
- (c) Establish and maintain positive radar identification.
- (d) Provide nonradar separation to aircraft during loss of radar.
- (e) Resolve secondary radar problems.
- (f) Utilize radar/interphone equipment.
- (g) Process flight progress strips.
- (h) Initiate and update computer data.
- (i) Apply handoff procedures.
- (j) Provide radar service to VFR and IFR aircraft.
- (k) Provide assistance to aircraft in emergencies.
- (l) Operate DF equipment.
- (m) Conduct radar approaches.
- (n) Conduct/receive position relief briefings.

**2. Evaluation.**

(a) As specified in Chapter 3 of this order, the individual shall be assigned target hours for qualification and certification, and the individual's supervisor shall conduct and document performance and certification skill checks.

(b) An OJT Instruction/Evaluation Report, FAA Form 3120-25, shall be completed by the OJT Instructor for each session of training conducted (see Appendix B, pages B-5 and B-6 of this order). The completed profile form shall be discussed with the individual, and the training team shall meet at timely intervals to review the individual's overall progress in training.

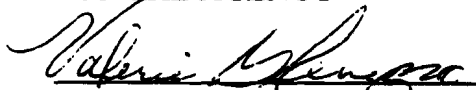
(c) If the individual does not meet the requirements for position qualification and certification, follow the process specified in Chapter 3 of this order.

## APPENDIX G

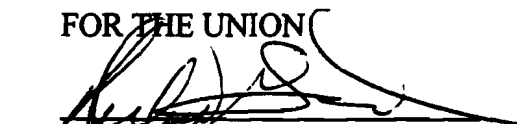
MEMORANDUM OF UNDERSTANDING  
BETWEEN THE  
NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION  
AND THE  
FEDERAL AVIATION ADMINISTRATION

1. This Memorandum of Understanding represents the results of impact and implementation negotiations between the National Air Traffic Controllers Association ("NATCA") and the Federal Aviation Administration ("FAA"). It represents the resolution of impact and implementation bargaining associated with FAA Order 3120.4H, Air Traffic Technical Training.
2. In those facilities which are implementing the Over-the-Shoulder requirements for On-The-Job Training instructors in order to comply with the provisions of 3120.4H, the impact and implementation of any such requirements will be handled locally in accordance with the provisions of Article 7 of the NATCA/FAA Agreement.
3. When a member of the bargaining unit does not successfully meet the current phase objectives and cites the validity of the simulated problems as a cause of their unsuccessful completion, the Employer shall test and validate the accuracy of those simulated control problems, in accordance with the appropriate Instructional Program Guide (IPG). In the event that the simulated control problems administered to the employee are not in accordance with the appropriate IPG, the Employer will allow the developmental the opportunity to repeat that phase of training.

FOR THE AGENCY

  
Valeria Greene-Reveyoso,  
ALR-AT Team

FOR THE UNION

  
Richard Gordon  
Director, Labor Relations

  
Susan Cornell, ATZ-100

Date: 3/9/95

Date: 3/13/95

M-2  
3/7/9

