CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

3120.4H CHG 1

4/28/95

SUBJ: AIR TRAFFIC TECHNICAL TRAINING

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 Retain this transmittal until superseded by a new basic order.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

Remove pages	Dated	Insert pages	Dated
1-1-1 and 1-1-2	6/1/95	1-1-1 and 1-1-2	6/1/95
2-2-1 thru 2-2-4	6/1/95	2-2-1 thru 2-2-4	6/1/95
3-1-1 and 3-1-2	6/1/95	3-1-1 and 3-1-2	6/1/95
3-2-3 and 3-2-4	6/1/95	3-2-3 and 3-2-4	6/1/95
3-2-7 and 3-2-8	6/1/95	3-2-7 and 3-2-8	6/1/95
3-3-1 and 3-3-2	6/1/95	3-3-1 and 3-3-2	6/1/95
3-3-5 and 3-3-6	6/1/95	3-3-5 and 3-3-6	6/1/95
A-5 thru A-10	6/1/95	A-5 thru A-10	6/1/95
D-3 and D-4	6/1/95	D-3 and D-4	6/1/95
D-11 and D-12	6/1/95	D-11 and D-12	6/1/95
D-15 and D-16	6/1/95	D-15 and D-16	6/1/95
D-31 thru D-34	6/1/95	D-31 thru D-34	6/1/95
D-41	6/1/95	D-41	6/1/95
F-5 and F-6	6/1/95	F-5 and F-6	6/1/95
F-9 and F-10	6/1/95	F-9 and F-10	6/1/95
F-15 and F-16	6/1/95	F-15 and F-16	6/1/95
F-33 and F-34	6/1/95	F-33 and F-34	6/1/95
F-37 and F-38	6/1/95	F-37 and F-38	6/1/95
F-49 and F-50	6/1/95	F-49 and F-50	6/1/95
F-61 and F-62	6/1/95	F-61 and F-62	6/1/95
F-67 and F-68	6/1/95	F-67 and F-68	6/1/95

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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.

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).

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.)

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.

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.

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.

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.

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)

* Terminal

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
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
Dupount(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

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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)

Section—III

* En Route

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

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Figure A-5 (Continued)

Flight Service

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
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

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Figure A-6

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.

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.

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.

(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:	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. 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. 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 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.

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.

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.

Section 4. CLEARANCE DELIVERY POSITION TRAINING (Course 55061) *

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.

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.

Section 6. LOCAL CONTROL/CAB COORDINATOR POSITION TRAINING (Course 55063) *

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.

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: OJF 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 conflictions.

(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.

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: 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/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.

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