

ORDER

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

450
3120.18A

11/22/83

SUBJ: NATIONAL EN ROUTE AND TERMINAL AIR TRAFFIC TRAINING PROGRAMS

1. PURPOSE. This order revises the National En Route and Terminal Air Traffic Training Programs.

2. DISTRIBUTION. This order is distributed to the director level in Washington, regions, and Aeronautical Center; branch level in the Office of Personnel and Training and the Air Traffic Service; Personnel Management and Air Traffic Divisions in the regions; the division level in the FAA Academy at the Aeronautical Center; a limited distribution to all Air Traffic Field Offices.

3. CANCELLATION. Order 3120.18, National En Route and Terminal Air Traffic Training Programs, dated January 15, 1976, is canceled.

4. BACKGROUND. On August 7, 1975, Acting Deputy Administrator, ADA-1, approved the National En Route and Terminal Air Traffic Training Programs for implementation in January 1976. This order updates the established programs and describes the training programs to be followed by en route and terminal air traffic control facilities and the FAA Academy. The programs provide a nationally standardized training program for all en route and terminal developmental controllers in their progression to the full-performance level.

5. RESPONSIBILITIES.

a. The FAA Academy shall:

(1) Develop and revise as necessary to maintain program currency, the National En Route and Terminal Training Programs for developmental employees from their entrance on duty until their attainment of the full-performance level. Instructional materials, visual aids, etc., shall be provided and revised by the FAA Academy, Air Traffic Branch, for the resident portion of the programs and those portions of the field conducted program which are nationally standardized.

(2) As outlined in paragraphs 6 and 7 of this order, conduct en route and terminal training, Phases I, II, III, and Xa, and terminal Phase IV, in accordance with nationally standardized pass/fail criteria.

(3) Input phase completion data in Consolidated Personnel Management Information System (CPMIS) in accordance with established procedures.

Distribution: A-W(minus PT/AT)-1; A-W(PT/AT)-3; A-X(minus PM/AT)-1; A-X(PM/AT)-2; A-Y(minus AY)-1; A-Y(AY)-2; A-FAT-0(LTD) Initiated By: APT-310

b. En Route and Terminal Air Traffic Control Facilities shall:

(1) In accordance with nationally developed standards and materials supplied by the FAA Academy, conduct the appropriate phases of training relating to their option as outlined in paragraphs 6 and 7 of this order.

(2) Ensure that all personnel undergoing qualification training enter the program at the appropriate phase of training. Prerequisites for entering each phase are listed in paragraph 9 of this order.

(3) Develop, and revise as necessary to maintain program currency, instructional materials, visual aids, etc., which pertain to local procedures in the field conducted portions of the National En Route and Terminal Training Programs.

(4) Forward tracking data in conformance with Order 3120.22, National Air Traffic Training Tracking System.

c. Regional Personnel Management Divisions shall:

(1) Ensure that all hiring is in accordance with schedules established by the Office of Personnel and Training prior to affected Academy class starts.

(2) Ensure entry into CPMIS of all training data for tracking.

(3) Provide feedback to the Office of Personnel and Training regarding information obtained during evaluation/field visitations and highlight problem areas or suggestions for program improvement.

d. The Office of Personnel and Training shall:

(1) Exercise staff supervisory control over all aspects of development, issuance, guidance, evaluation, and certification of this program.

(2) Be the approving office for all testing and evaluation devices applicable to the national training program outlined in this order.

(3) Institute national procedures for the correlation of recruitment and training schedules.

(4) Be the office having primary responsibility for the tracking, monitoring, evaluation, and certification of both the Academy- and facility-conducted portions of the training program, including instructor qualifications.

6. EN ROUTE PROGRAM DESCRIPTION. The training program consists of thirteen phases, each designed to coincide with the sequential progression of training from entry on duty to full-performance level. A more detailed description of this program may be found in the training plan, including attachments, and the En route Instructional Guide EP 12-0-1.

a. Phase I, Entrance on Duty (EOD) Processing and Indoctrination (Approximately 3 days). Phase I training shall be conducted at the Academy. This training shall be administered immediately upon an employee's entrance on duty. Subjects to be covered are:

- FAA Organization
- Employee Benefits
- Employee Responsibilities
- Security and Safety
- Functions of Air Traffic Service
- Human Relations

b. Phase II, Fundamentals of Air Traffic Control (Approximately 3 weeks). All Phase II training shall be conducted at the FAA Academy and shall include subjects contained in the training plan and attachments thereto. Examples of the subjects covered are as follows:

- Principles of Flight
- Meteorology
- Air Traffic Services
- Flight Assistance Service
- Aircraft Types and Characteristics
- Navigation
- Fundamentals of Radar
- FAR's
- Communications
- NAS System

c. Phase III, Non-Radar Air Traffic Control Orientation and Evaluation (Approximately 8 weeks). All Phase III training shall be conducted at the FAA Academy. This training shall consist of but not be limited to:

- Completion of Synthetic Area Chart
- Solution of Control Problems

d. Phase IV, Radar Air Traffic Control. This phase has been redesignated Phase Xa.

e. Phase V, Assistant Controller Training (Approximately 120 Hours). This phase of training shall be facility-conducted and include, for example, the following:

- Completion of Center Map
- Operation of 300 System
- Distribution of Flight Progress Strips
- Processing of Flight Data
- Entering Messages Into Computer

f. Phase VI, Assistant Controller Qualification/Certification (Up to 40 hours OJT per position of operation). All Phase VI training shall be facility-conducted in an operational environment with on-the-job training as assigned, and supervised by the first-level supervisor.

g. Phase VII, Preliminary Radar Associate/Non-Radar Controller Training (Approximately 48 weeks). Phase VII shall be facility-conducted and is designed to allow the developmental controller to be operationally productive while preparing for Phase VIII. It consists of materials presented by the team supervisor, or his/her designee. The training department shall administer all written examinations.

h. Phase VIII, Radar Associate/Non-Radar Training and Evaluation (Approximately 240 Hours). All Phase VIII training shall be facility-conducted and consist, for example, of the following:

- Solution of Non-Radar Control Demonstration Problems
- Solution of Non-Radar Control Evaluation Problems
- Drawing Map of Assigned Area of Specialization
- Solution of Radar Associate Control Demonstration Problems
- Solution of Radar Associate Control Evaluation Problems

i. Phase IX, Radar Associate/Non-Radar Position Qualification and Certification (Up to 60 hours of OJT per required position of operation). This phase is designed to permit the developmental controller to gain certification on two positions of operation within the assigned area of specialization and shall be facility-conducted.

j. Phase X, Final Radar Associate/Non-Radar Position Qualification and Certification (Up to 60 hours of OJT per required position of operation). Phase X shall be facility-conducted, and it is during this phase that the developmental controller will receive OJT and certification on the remaining sectors within the assigned area of specialization.

k. Phase Xa En Route Radar ATC (Approximately 17 Days). This phase of training shall be conducted at the FAA Academy in two parts. The first part, which must be satisfactorily completed prior to entry into field radar training, is comprised of 44 hours of classroom instruction, 1 hour of ghost position training, and 63 hours of laboratory instruction. The second part will consist of an additional 28 hours of laboratory instruction in advanced radar techniques. Satisfactory completion of the second part is not required.

l. Phase XI, Radar Controller Training Evaluation (Approximately 240 Hours). All Phase XI training shall be facility-conducted and shall include but not be limited to the following:

- Operation of Radar Position
- Solution of Evaluation Control Problems
- Solution of Demonstration Control Problems

m. Phase XII, Initial Radar Qualification and Certification (Up to 60 hours of OJT per required position of operation). All Phase XII training shall be facility-conducted. During this phase, the developmental radar controller shall be required to gain certification on all sectors within the assigned area of specialization if assigned to a Level I Center. If assigned to a Level II or III Center, the developmental shall be required to gain certification on two radar positions within the assigned area of specialization.

n. Phase XIII, Final Radar Qualification and Certification (Up to 60 hours of OJT per required position of operation). All Phase XIII training shall be facility-conducted. During this phase of training, developmental controllers assigned to Level II or III Centers shall be required to qualify and gain certification on all remaining sectors within the assigned area of specialization.

7. TERMINAL PROGRAM DESCRIPTION. The terminal training program consists of eleven phases designed to accommodate the needs of the various levels of terminal facilities. A more detailed description of the terminal program may be found in the training plan, including attachments, and the Terminal Instructional Program Guide TP 12-0-1.

a. Phase I, Entrance on Duty (EOD) Processing and Indoctrination (Approximately 3 days). Phase I training shall be conducted at the Academy. This training shall be administered immediately upon an employee's entrance on duty. Subjects to be covered are:

- FAA Organization
- Employee Benefits
- Employee Responsibilities
- Security and Safety
- Functions of Air Traffic Service
- Human Relations

b. Phase II, Fundamentals of Air Traffic Control (Approximately 3 weeks). All Phase II training shall be conducted at the FAA Academy and shall include subjects contained in the training plan and attachments thereto. Examples of the subjects are:

- Principles of Flight
- Meteorology
- Air Traffic Services
- Flight Assistance Service
- Aircraft Types and Characteristics
- Navigation
- Fundamentals of Radar
- FAR's
- Communications
- NAS System

c. Phase III, Control Tower Operations (Approximately 3 weeks). All Phase III training shall be conducted at the FAA Academy. This training shall consist of:

- Operation of Flight Data Position
- Operation of Clearance Delivery
- Operation of Ground Control
- Operation of Local Control

d. Phase IV, Non-Radar Air Traffic Control (Approximately 8 weeks). Phase IV shall be FAA Academy conducted and consist of:

- Completion of Synthetic Approach Area Map
- Solution of Non-Radar Approach Control Demonstration Problems
- Operation of Non-Radar Approach Control Positions
- Solution of Non-Radar Approach Control Evaluation Problems

e. Phase V, Radar Air Traffic Control. This Phase has been redesignated Phase Xa.

f. Phase VI, Flight Data (Up to 160 hours classroom and up to 80 hours OJT per position of operation). All Phase VI training shall be facility conducted. Its purpose is to prepare the specialists for position

qualification and certification. Training shall consist of but not be limited to operation of:

- Flight Data Entry and Printout Equipment
- Interphone Systems
- Radio Communications Equipment
- Automatic Terminal Information Service (ATIS) Equipment
- Navigational Aid Monitoring Devices
- Recording Equipment
- Teleautograph and/or Electrowriter

g. Phase VII, Clearance Delivery (Up to 20 hours classroom and up to 50 hours OJT per position of operation). Phase VII training shall be facility-conducted. It prepares the specialist for position qualification and certification. Training materials utilized shall be programmed self-study units and lesson plans developed by the FAA Academy, as well as locally developed materials.

h. Phase VIII, Ground Control (Up to 80 hours classroom and up to 150 hours OJT for each position for which qualification is required). Training shall be facility-conducted utilizing programmed self-study units and lesson plans developed by the FAA Academy, and/or materials developed at the facility. The purpose of this training is to prepare the specialist for position qualification and certification.

i. Phase IX, Local Control (Up to 80 hours classroom and up to 180 hours OJT per position of operation). All Phase IX training shall be facility-conducted utilizing units and lesson plans developed by the Academy, with OJT as assigned and supervised by the first-level supervisor. It is designed to prepare the specialist to demonstrate the ability to perform independently under general supervision, and attain qualification and certification on local control positions of operation.

j. Phase X, Non-Radar Terminal Control (Up to 120 classroom hours for those specialists who have not attended Phase IV or have not previously qualified in another facility. Additionally, sufficient classroom time should be given to all specialists to prepare them to take simulated control problems. Up to 80 hours is allowed on each simulated control position followed by up to 80 hours per position in an operational environment). All Phase X training shall be facility-conducted utilizing Academy and/or facility developed materials with OJT as assigned and supervised by the first level supervisor. The purpose of this training is to prepare the specialist for position qualification and certification.

k. Phase Xa Terminal Radar ATC (Approximately 17 days). This phase of training shall be conducted at the FAA Academy in two parts. The first part, which must be satisfactorily completed prior to entry into field radar training, is comprised of 44 hours of classroom instruction, 1 hour of ghost position training, and 63 hours of laboratory instruction. The second part

will consist of an additional 28 hours of laboratory instruction in advanced radar techniques. Satisfactory completion of the second part is not required.

1. Phase XI, Radar Position Certification (Up to 200 hours classroom and up to 120 hours OJT per position of operation). All Phase XI training shall be facility-conducted and prepare the specialist for position qualification and certification. It shall consist of but is not limited to the following:

- Operation of Radar Position
- Solution of Demonstration Control Problems
- Solution of Evaluation Control Problems
- Radar Position OJT
- Radar Position Certification

8. ACADEMY ATTENDANCE REQUIREMENTS.

a. Newly Hired Employees. All newly hired GS-7 en route and terminal developmental controllers shall attend Academy training.

b. Predevelopmentals. All employees hired below the GS-7 grade level shall attend Academy training not later than the second class starting after being promoted to GS-7.

c. Academy Radar Training. Students must have completed Phase IX, in their respective option, prior to attending Academy radar training. An exception to this is that terminal students who are initially assigned to radar only facilities shall attend Academy radar training at the conclusion of Phase IV of initial Academy training.

NOTE: Students enrolled in the Academy radar training course are required to complete a pre-course study package prior to their arrival at the Academy. For en route students, this consists of learning the "Aero Center" area map. For terminal students it consists of learning the simulated "Bravo" area map. Sufficient time (approximately 12 hours) shall be granted during duty hours for the student to accomplish this.

d. Change of Option.

(1) FSS specialists changing to the en route or terminal option shall enter the appropriate program in Phase III at the Academy. An FSS specialist who has previously completed either the terminal or en route program successfully at the Academy shall be entered into the appropriate phase of the field training program as determined by the receiving facility manager.

NOTE: The Regional Personnel Management Division shall schedule the employee, in paragraph 8d(1), to attend the Academy training not later than the second class starting after being selected for the position. FSS personnel changing option shall not be permanently assigned to the new option until they successfully complete the new option Academy training program.

(2) En route and terminal developmental controllers changing to the terminal and en route options respectively, shall not attend the Academy. The specialist shall be entered into the appropriate phase of the field training program as determined by the receiving facility manager.

9. PREREQUISITES.

a. Except as stipulated in paragraph 8c (Academy Radar Training), entry into Phase II and all subsequent phases of training requires successful completion of the preceding phase.

NOTE: The sequence of Terminal facility training Phases VI through XI is intended only as a normal progression. The facility manager, or his/her representative, shall determine the appropriate sequencing of these phases relative to the facility level. However, Phase IV shall be completed first and all phases shall be completed prior to promotion to full-performance level (FPL).

b. Academy students must satisfactorily complete the Academy radar training course to be eligible to enter field facility radar training.



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