

VOLUME 3 GENERAL TECHNICAL ADMINISTRATION**CHAPTER 19 TRAINING PROGRAMS AND AIRMAN QUALIFICATIONS****Section 2 Safety Assurance System: Training Approval Process****3-1095 REPORTING SYSTEM(S).**

A. Program Tracking and Reporting Subsystem (PTRS) Activity Codes. Initial Approval: 1306; Final Approval: 1307.

B. Safety Assurance System (SAS). This section is related to SAS Elements 2.1.1 (OP), Training of Flight Crew Members; 2.1.2 (OP), Training of Check Airmen and Instructors; and 2.1.5 (OP), Appropriate Airmen/Crewmember Checks & Qualifications.

3-1096 GENERAL.

A. Overview. Training curriculum approvals follow the five-phase general process for approval or acceptance described in 8900.1 Volume 3, Chapter 1, Section 1. The basic steps of this process must be followed. Each phase, however, may be adjusted to accommodate existing circumstances. Depending on the complexity of the operator's request and the availability of Federal Aviation Administration (FAA) resources, the approval process may be accomplished in just a few days, or may last many months. The approval process applies to each operator requesting approval of a new curriculum or a revision to a currently approved curriculum. Inherent in the approval process is the FAA's responsibility to deny approval of any training which does not meet regulatory requirements or which has been found deficient. Training curricula which have been granted approval and later found either to be in conflict with regulatory requirements or to be ineffective must be appropriately modified by the operator, or FAA approval must be withdrawn. This section establishes procedures for granting approval or withdrawing approval of all or part of a training curriculum. When appropriate, job aids have been developed to assist inspectors in the approval process of curriculum segments. These job aids are discussed in subsequent sections of this chapter.

B. Applicability. The training approval process discussed in this section applies only to Title 14 of the Code of Federal Regulations (14 CFR) part 121 operators and part 135 operators. Part 121 subparts N and O training, checking, and qualification can be approved for part 121 operators and part 135 operators. Part 135 subparts E, G, and H training, checking, and qualification can be approved for only part 135 operators (refer to part 135 § 135.3).

3-1097 OPERATIONS CONDUCTED UNDER BOTH PARTS 121 AND 135.

A. Differences Between Parts 121 and 135. There are only a few differences in the training required by parts 121 and 135. Part 121, however, generally contains more stringent requirements. To maintain the requisite level of safety without unnecessary restrictions and redundant training, certain considerations may be given to operators using flightcrew members in operations conducted under both parts 121 and 135. All regulatory requirements applicable to the operation in which the flightcrew member is engaged must be met. Training which meets the same requirements of both parts 121 and 135, however, does not have to be repeated. Training

curricula may be combined if the training given clearly meets all applicable regulatory requirements. For most aircraft, however, a combined curriculum may not be possible due to differences in the training requirements between parts 121 and 135.

B. Part 121 Subparts N and O. The FAA recognizes that the flightcrew member training, checking, and qualification requirements of part 121 will always meet or exceed the requirements of part 135. This is consistent with the recognition that part 121 affords the highest standards of safety in civil flight operations. Therefore, as a matter of safety policy, the FAA will both permit and encourage compliance with part 121 subparts N and O by operators who conduct part 135 operations. It is FAA policy that a training, checking, and qualification program submitted by a part 135 operator, which is found by the FAA to be in compliance with part 121 subparts N and O, will be considered as a program that exceeds the requirements of part 135 and will be approved by the FAA for use by that operator. Principal operations inspectors (POI) are authorized to approve curriculum segments (including qualification curriculum segments which permit training to be substituted for checking), provided the operator adopts all the training, checking, and qualification requirements of part 121 subparts N and O, except as follows:

1) In accordance with § 135.3(b), a pilot serving in part 135 operations as a second in command (SIC) in a commuter operation with airplanes in which two pilots are required by the type certification rules may meet the requirements of § 135.245 instead of the requirements of part 121, § 121.436. The minimum crew requirement is typically found in the Airplane Flight Manual (AFM) or type certificate (TC).

2) In accordance with § 135.3(c), certificate holders conducting part 135 operations (except commuter operations with airplanes in which two pilots are required by the type certification rules) may choose to comply with the operating experience requirements of § 135.244, instead of the requirements of § 121.434.

3-1098 INITIATING THE APPROVAL PROCESS—PHASE ONE.

A. Approval Process Initiation. The training approval process can be initiated by either the operator or the FAA as follows:

1) **Operator Initiated.** The operator informs the FAA that it is planning to establish a new training curriculum or to change an existing curriculum.

2) **FAA Initiated.** The FAA informs an operator that revisions to its training program are required based on recently acquired information relative to training techniques, aviation technology, aircraft operational history, operator performance, or regulatory changes.

B. Needed Information. When a proposal is initiated by the operator, one of the first steps the POI or certification project manager (CPM) should take is to obtain the following basic information:

- Type of operation;
- Type of equipment to be operated;

- Geographic areas of operation;
- Proposed training schedules;
- Proposed date of revenue operations;
- Proposed contract training, if any;
- Type of flight simulation training device (FSTD) to be used, if any; and
- Facilities to be used.

3-1099 FAA INVOLVEMENT IN PHASE ONE.

A. POI Responsibilities. Early in the process, the FAA and the operator should establish, through discussion, a common understanding of both the regulatory training requirements and the direction and guidance provided in this handbook. The POI or CPM and the operator must examine the entire operation to ensure that any training necessitated by operational requirements, authorizations, or limitations (such as those in the operations specifications (OpSpecs), minimum equipment lists (MEL), deviations, and exemptions) is included in the operator's training curricula. The training program is the area most affected by operational changes. The POI should review all general requirements in the regulations and in this order that apply to the proposed operation. The POI should be aware of changes to the information initially provided by the operator. The POI should discuss with the operator the sequence and timing of events which occur in the development and the granting of initial and final approval of a training curriculum. If the operator's proposal involves complex operations (such as long-range navigation or polar navigation operations), the POI must consult appropriate sections of this order and other relevant documents and be prepared to advise the operator during this phase. In such a case, the POI should also determine whether assistance from an FAA specialist is necessary. If an operator's proposal includes related aircraft differences training, the operator must first receive approval of the related aircraft designation from the Air Transportation Division (AFS-200) prior to initial approval of the curriculum. (See Volume 3, Chapter 19, Section 12 for additional information regarding related aircraft designation and related aircraft differences training.)

B. Advice and Guidance Given to the Operator. An FAA inspector should be prepared to provide advice to an operator during training curriculum development. During phase one, the operator must be informed of the procedure for requesting initial approval and of the types of additional supporting information which the POI will require the operator to submit. An inspector should be prepared to provide advice and guidance to the operator on the following:

- The general format and content of curricula, curriculum segments, training modules, and flight maneuvers and procedures documents;
- Courseware;
- Facilities;
- Qualifications of instructor personnel; and
- Other areas of the operator's proposed training program.

C. Importance of Early Involvement. Early FAA involvement is also important for the following reasons:

1) FAA advice and guidance during development of training may provide a useful service to the operator. This advice may save the operator and the FAA from unnecessary use of resources. It may also prevent the operator from submitting a training curriculum proposal which would not be approved by the FAA.

2) The POI can become familiar with the material the operator intends to submit. This facilitates review of the proposal before the granting of initial approval.

3) The POI can begin planning long-range needs, such as qualification of inspectors on the operator's aircraft, and evaluation of the program's overall effectiveness.

4) Early FAA inspector involvement in the development of training programs is appropriate. An FAA inspector, however, must act in an advisory capacity only. The inspector must avoid active participation in the actual training program development. The operator is responsible for the development of its own training program. The FAA inspector must not assume that responsibility.

D. Additional Help. As the operator's proposals solidify, any significant requirements which may affect office or regional inspector resources should be discussed with the district office manager (OM). An FAA inspector may need training on an operator's aircraft type. Requests for inspectors from outside the office or region to assist in the training approval process may be necessary.

E. Potential Causes of Approval Delays. The operator should be aware of the potential for delays in approval. Such delays may be caused by any of the following reasons:

- The applicant for a certificate not meeting the schedule of events;
- The operator failing to expeditiously transmit information to the FAA;
- A change in plans (e.g., changing either the training locations or the type of aircraft);
- Inadequate, insufficient, or unclear material submitted in phase two;
- Deficiencies in the training discovered during phases two, three, or four;
- Delays in obtaining FSTDs and training equipment or FSTD approval; and
- Higher priority work (such as accidents) assigned to the POI or other inspectors associated with the training approval process.

3-1100 REQUESTS FOR INITIAL APPROVAL—PHASE TWO.

A. Overview. Phase two begins when the operator submits its training proposal for initial approval in writing to the FAA. The operator is required to submit to the FAA an outline of each curriculum or curriculum segment and any additional relevant supporting information requested by the POI. These outlines, any additional supporting information, and a letter must be submitted to the FAA. This letter should request FAA approval of the training curriculum. Two copies of each curriculum or curriculum segment outline should be forwarded along with the letter of request to the FAA.

B. Required Information in Curricula. Each operator must submit its own specific curriculum segment outlines appropriate for its type of aircraft and kinds of operations. These outlines may differ from one operator to another and from one category of training to another in terms of format, detail, and presentation. Each curriculum should be easy to revise and should contain a method for controlling revisions, such as a revision numbering system. Curricula for different duty positions may be combined in one document, provided the positions are specifically identified and any differences in instruction are specified for each duty position. Each curriculum and curriculum segment outline must include the following information:

- Operator's name,
- Type of aircraft,
- Duty position,
- Title of curriculum and/or curriculum segment including the category of training,
- Consecutive page numbers, and
- Page revision control dates and revision numbers.

C. Required Curriculum Segment Items. Each curriculum and curriculum segment must also include the following items, as appropriate:

- 1) Prerequisites prescribed by 14 CFR or required by the operator for enrollment in the curriculum.
- 2) Statements of objectives of the entire curriculum and a statement of the objective of each curriculum segment.
- 3) A list of each training device, mockup, system trainer, procedures trainer, and other training aid which will be used in the curriculum. (The curriculum may contain references to other documents in which the approved devices and aids are listed.)
- 4) A list of FSTDs approved under part 121, § 121.407 or part 135, § 135.335, as applicable, including approvals for particular maneuvers, procedures, or functions.
- 5) Descriptions or pictorial displays of normal, abnormal, and emergency maneuvers and procedures which are intended for use in the curriculum, when appropriate. These descriptions or pictorial displays, when grouped together, are commonly referred to as the flight maneuvers and procedures document. The operator may choose to present detailed descriptions and pictorial displays of flight maneuvers and procedures in other manuals. For example, the flight maneuvers and procedures document may be described in an aircraft operating manual. However, as a required part of the training curriculum, it must either be submitted as part of the curriculum or be appropriately referenced in the curriculum.
- 6) An outline of each training module within each curriculum segment. Each module should contain sufficient detail to ensure that the main features of the principal elements or events will be addressed during instruction.
- 7) Training hours which will be applied to each curriculum segment and the total curriculum.

8) The checking and qualification modules of the qualification curriculum segment used to determine successful course completion, including any 14 CFR qualification requirements for flightcrew members to serve in part 121 or part 135 operations (e.g., operating experience (OE), consolidation of knowledge and skills, and line checks).

3-1101 ADDITIONAL RELEVANT SUPPORTING INFORMATION—PHASE TWO.

As specified in § 121.405(a)(2) and § 135.325(a)(2), an operator must submit any additional relevant supporting information requested by the POI. This information is that additional information the POI finds necessary for determining whether the proposed training program is feasible and adequately supported. It is information which would be difficult to include in a curriculum outline format. The type and amount of supporting information needed will vary depending on the type of training, aircraft types to be operated, and kinds of operations. The POI must determine the appropriate types of supporting information to be required. This should be limited to only that information critical to the determination of the proposed training program's acceptability. The following list of types of relevant supporting information is not all-inclusive, but includes information that is typical.

A. Description of Facilities. A description of facilities is appropriate if the POI is unfamiliar with the facilities, or if the facilities are not readily available for examination.

B. List of Ground and Flight Instructors and Qualifications. A list of ground and flight instructors and their qualifications may be requested. This information is particularly important if the operator intends to use contract instructors. The POI should determine whether the proposed instructors meet regulatory requirements and if they are qualified to conduct training.

C. Description of an FSTD. A detailed description of each FSTD is appropriate when the FSTD is not readily available for the POI's examination. This detailed description is particularly important when the operator intends to contract for a specific FSTD. This description should provide sufficiently detailed information to enable the POI to determine whether the training and checking to be conducted is appropriate for the level of the FSTD to be used.

D. Description of Qualification and Enrollment Prerequisites. A detailed description of minimum student qualifications and enrollment prerequisites is appropriate when such prerequisites are not described in detail in the curriculum. Examples of these prerequisites which may need to be detailed as supporting information include: type of airman certificate, aircraft type qualifications, previous training programs, minimum flight hours, experience with other part 121 or 135 operators, and recency of experience. This description may be useful to the POI when determining whether the proposed amount of detail outlined in training modules and the proposed training hours are adequate.

E. Recordkeeping Requirements. Copies of training forms and records to be used for recording student progress and the completion of training may be required. This ensures the operator has planned for the 14 CFR recordkeeping requirements. This type of supporting information shall be required of applicants for an air operator certificate. It may also be required of operators with any significant revision to existing training programs. These forms, records, or

computer transmittal worksheets must be designed so that attendance and course completion information is recorded and retrievable for verifying regulatory compliance.

F. Supporting Information. Supporting information may include samples of courseware, such as lesson plans and instructor guides. Descriptions of other types of courseware, such as home study, computer-based instruction (CBI), and Line-Oriented Flight Training (LOFT) scenarios, should be in enough detail to provide an understanding of how the training will be administered and of the proposed instructional delivery method. This information should describe the instructor–student interaction and indicate methods for measuring student learning.

3-1102 INITIAL REVIEW OF REQUESTS FOR APPROVAL—PHASE TWO. In phase two, the POI must review the submitted training curriculum and supporting information for completeness, general content, and overall quality. A detailed examination of the documents is not required during phase two. If after initial review, the submission appears to be complete and of acceptable quality, or if the deficiencies are immediately brought to the operator’s attention and can be quickly resolved, the POI may begin the phase three indepth review. If the submission is determined to be incomplete or obviously unacceptable, the approval process is terminated and the POI must immediately return the documents (preferably within 5 working days) with an explanation of the deficiencies. The documents must be immediately returned, so the operator will not erroneously assume the POI is continuing the process to the next phase. The approval process can be resumed when the revised training curriculum or curriculum segment is resubmitted.

3-1103 TRAINING CURRICULA SUBMITTED WITH AIR CARRIER OR OPERATING CERTIFICATE APPLICATIONS. An applicant for a certificate in the early stages of certification may be unable to provide all information required for its training program. For example, the applicant may not yet know what training facilities or FSTDs it intends to use. The lack of such information in the formal application does not necessarily indicate that the training curriculum attachment be returned. There should be an understanding between the applicant and the CPM that such portions are missing. The CPM may initiate the phase three indepth review without this type of information. Initial approval, however, of a curriculum segment must be withheld until all portions pertinent to the curriculum segment have been examined. For example, it may be appropriate to initially approve a ground training curriculum segment even though the FSTD has not yet been evaluated and approved for flight training. However, effective evaluation of training curricula can be hampered when an excessive number of incomplete curriculum segments are permitted. The CPM shall either delay initial approval of training curricula or return them to the applicant when an excessive number of incomplete curriculum segments have been submitted with the formal application.

3-1104 INDEPTH REVIEW OF SUBMITTED CURRICULA—PHASE THREE.

A. Specialists and/or FAA Offices. Phase three is initiated when the FAA begins a detailed analysis and evaluation of a training curriculum or curriculum segment. The purpose of this phase is to determine the acceptability of training curricula for initial approval. This phase ends either with the initial approval or with the rejection of all or part of the training curriculum. To complete an evaluation in a timely manner, the POI may need to involve other FAA

personnel early in this phase. Certain specialists or offices may be required to participate in the approval process as follows:

- 1) The principal security inspector (PSI) should be involved in security and hazardous materials (hazmat) training issues.
- 2) Various aviation safety inspector (ASI) specialists should be involved when appropriate. For example, navigation specialists should be involved with evaluating special navigation operations.
- 3) The POI may need to contact the Flight Standardization Board (FSB) and the Flight Operations Evaluation Board (FOEB) for information on training recommendations and MEL procedures. See Volume 8 for more information about FSBs and FOEBs.
- 4) The POI's district OM and certain regional headquarters (HQ) personnel may need to be involved with locating and directing additional FAA resources to accomplish the approval process.
- 5) AFS-200 may need to be involved with deviation and exemption requests.

B. Required Evaluations. Before granting initial approval for a specific curriculum or curriculum segment, the POI must ensure that the following evaluations are accomplished:

- 1) A side-by-side examination of the curriculum outline with the appropriate regulations and with the direction provided in this order must be performed. This examination is to ensure that training will be given in at least the required subjects and in-flight training maneuvers. It should also ensure that appropriate training will be given on safe operating practices.
- 2) An examination of the courseware developed or being developed by the operator must be performed. This review should include a sampling of available courseware such as lesson plans, audiovisual programs, flight maneuvers and procedures documents, and student handouts. The courseware must be consistent with each curriculum and curriculum segment outline. From this review, the POI should be able to determine whether the operator is capable of developing and producing effective training courseware.
- 3) An inspection of training facilities, FSTDs, training equipment, and instructional aids (which will be used to support the training) must be performed if the POI is not familiar with the operator's training program capabilities.
- 4) The training hours specified in each curriculum segment outline must be evaluated. An inspector should not attempt to measure the quality or sufficiency of training by the number of training hours alone. This can only be determined by direct observation of training and testing (or checking) in progress, or by examination of surveillance and investigation reports. The specified training hours must be realistic, however, in terms of the amount of time it will take to accomplish the training outlined in the curriculum segment so as to achieve the stated training objectives. During the examination of courseware, an inspector should note the times allotted by the operator for each training module. These times should be realistic in terms of the

complexity of the individual training modules. The number of training hours for any particular curriculum segment depends upon many factors. Some of the primary factors are as follows:

- The aircraft family in which the specific aircraft belongs;
- Complexity of the specific aircraft;
- Complexity of the type of operation;
- Amount of detail that needs to be covered;
- The experience and knowledge level of the students; and
- Efficiency and sophistication of the operator's entire training program (including items such as instructor proficiency, training aids, facilities, courseware, and the operator's experience with the aircraft).

C. Criteria for Approval. If, after completing these evaluations, the POI determines that the curriculum or curriculum segment is satisfactory and adequately supported and that the training hours are realistic, initial approval should be granted. Sometimes a portion of the submittal may appear to be satisfactory. However, if that portion is dependent upon another undeveloped portion or another unsatisfactory portion, initial approval must be withheld. For example: a pilot-in-command (PIC) BE-100 initial equipment, flight training curriculum segment is satisfactory but related training modules within the initial equipment ground training curriculum segment are unsatisfactory. In such a case, it may be inappropriate to grant initial approval to the initial equipment flight training curriculum segment until the ground training curriculum segment is determined to be satisfactory.

D. Establishment of Priorities. During phase three of the approval process, the POI must establish priorities to ensure that, if appropriate, the granting of initial approval is not unnecessarily delayed. These priorities should assure that deficiencies are resolved so that initial approval can be granted before the operator's planned starting date for training.

3-1105 EXPIRATION DATES FOR INITIAL APPROVALS. When the POI determines that a training curriculum or curriculum segment should be initially approved, the POI must also determine an appropriate expiration date for the initial approval. The expiration date is important throughout phase four of the approval process. Sections 121.401(a)(1) and 135.323(a)(1) require the operator to obtain final approval of training curricula. The expiration date provides an incentive to the operator for refining all aspects of the program to assure that this regulatory requirement is met. The expiration date also provides the POI with a timeframe with which to plan evaluation activities for determining the effectiveness of the training. The expiration date assigned to an initially approved training curriculum must not exceed 24 months from the date of initial approval. The expiration date of initial approval may be reduced by the POI if it is apparent that a 24-month time frame will unnecessarily delay final approval. The POI should be aware that shortening the initial approval expiration date will commit him to completing the final approval phase within the shorter time period. The POI may grant final approval any time before the expiration date. Except when unforeseen circumstances preclude an adequate evaluation of training effectiveness, an extension to the initial approval expiration date should not be permitted. A new expiration date, however, may be established for a curriculum segment when there are significant revisions to an initially approved curriculum segment.

3-1106 METHOD OF GRANTING INITIAL APPROVAL.

A. Initial Approval is Granted by Letter. Sample letters granting initial approval are included at the end of this paragraph (Figure 3-71, Letter of Initial Approval (Part 135) and Figure 3-72, Letter of Initial Approval (Part 121)). The initial approval letter must include at least the following information:

- Specific identification of the curricula and/or curriculum segments initially approved, including page numbers and revision control dates;
- A statement that initial approval is granted, including the effective and expiration dates;
- Any specific conditions affecting the initial approval, if applicable;
- A request for advance notice of training schedules so that training may be evaluated in accordance with § 121.405 or § 135.325, as appropriate; and
- If the POI is authorizing a reduction in the programmed hours specified by part 121, a statement concerning the basis for reduction.

B. Other Acceptable Methods. An initial approval letter serves as the primary record of curriculum or curriculum segment pages that are currently effective. In the past, initial approval was stamped on each page of a curriculum. Although this method is no longer necessary, the POI and each operator may agree to use the method to account for revisions to training documents. If this method is used, the stamp must clearly indicate initial approval and the expiration date. Other acceptable methods include a list of effective curriculum or curriculum segment pages, or pages with preprinted signature and date blocks.

C. Return of Originals. The original pages of the curriculum or curriculum segment shall be returned to the operator with the transmittal letter. These documents should be retained by the operator as an official record. A copy of the training curriculum or curriculum segment, with a copy of the transmittal letter granting initial approval attached, and all additional relevant supporting information shall be maintained on file in the certificate-holding district office (CHDO) by the POI during the period that the initial approval is valid.

Figure 3-71. Letter of Initial Approval (Part 135)

ABC Airlines
Director of Operations
1 Park Avenue
New York, NY 11001

Dear Mr. Smith:

Initial approval is granted to ABC Airlines SD-330 Pilot in Command and Second in Command Initial Equipment Flight Training, pages 1 through 10, dated March 11, 1988. This training curriculum is initially approved in accordance with the provisions of 14 CFR part 135, § 135.325(a), effective March 30, 1988.

Initial approval of this training curriculum shall remain in effect until March 31, 1990, or upon the granting of final approval, whichever occurs first. ABC Airlines is requested to notify this office at least 10 days in advance of any training to be conducted under this program so that the FAA may evaluate the effectiveness of the program, in accordance with § 135.325(b).

Principal Operations Inspector

Figure 3-72. Letter of Initial Approval (Part 121)

ABC Airlines
Director of Training
1 Park Avenue
New York, NY 11001

Dear Mr. Townsend:

This letter in reference to ABC Airline's B-737 Pilot in Command and Second in Command Initial Equipment Ground Training curriculum, pages 100/1 through 100/15, dated April 14, 1988. This curriculum is granted initial approval, effective April 30, 1988. The approval is contingent upon a satisfactory evaluation of your advanced systems ground trainer scheduled for April 28 and 29, 1988.

The expiration date of this initial approval is April 30, 1990. This office requests ABC Airlines provide at least 7 days advance notice of any training to be conducted under this curriculum to allow for evaluation of the training in accordance with 14 CFR part 121, § 121.405(b) and (c). Approval of the reduced training hours from the programmed hours required by § 121.419(b)(2) to 75 hours is based on the improved training techniques available from your advanced systems ground trainer.

Principal Operations Inspector

3-1107 METHOD OF DENYING INITIAL APPROVAL. If the POI determines that initial approval of a proposed training curriculum or curriculum segment must be denied, the operator shall be notified in writing of the reasons for denial. This letter must contain an identification of

the deficient areas of the training curriculum and a statement that initial approval is denied. It is not necessary that each minor deficiency which resulted in the denial be identified; however, the major deficiencies should be outlined in the letter. It is the operator's responsibility to redevelop or correct the deficient area before resubmission to the FAA. A copy of the denial letter and a copy of the proposed training curriculum or curriculum segment shall be kept on file in the CHDO. Figure 3-73 is a sample letter of a denial of initial approval.

Figure 3-73. Letter of Denial of Initial Approval

ARK Airlines
 Director of Operations
 48 Turnover Place
 Landover, MD 20765

Dear Mr. Townsend:

This letter is in response to your request for initial approval of Revision 2 to ARK Airline's DC-9 Pilot in Command and Second in Command Recurrent Ground Training curriculum, dated August 2, 1988. Your request for initial approval for revision 2 is denied for the following reason.

More than 70 percent of your scheduled operations occur in areas which during the winter months are subject to cold weather, snow, ice, and sleet. Your pilot workforce must have adequate training in the safe operating practices associated with a cold weather environment to enable them to cope effectively with such hazards. Revision 2 deletes training previously given on major aspects of cold weather operations and does not provide any identifiable instruction to your crews for operating flights in such conditions. Presently there is not another course of training for ARK Airline's pilots containing adequate information on cold weather procedures.

Principal Operations Inspector

3-1108 EVALUATING INITIALLY APPROVED TRAINING CURRICULA—PHASE FOUR.

A. Overview. Phase four begins when the operator starts training under the initially approved curriculum. This phase should provide the operator with adequate time to test the program and the flexibility to adjust the program during FAA evaluation. The POI must require an operator to provide ongoing schedules of all training and checking to be accomplished under an initially approved training curriculum. The POI must closely monitor training conducted under initial approval. Whenever possible, the first session of training conducted under initial approval should be monitored by the POI or a qualified Operations inspector. An FAA inspector does not need to observe every training session. A sufficient sampling of the training sessions, however, should be observed as a basis for a realistic evaluation. Inspectors qualified in the type aircraft, and other individuals knowledgeable of the curriculum subject matter, should assist in evaluating the training. During training under initial approval, the operator is expected to evaluate and appropriately adjust training methods as needed. Often, adjustments can be made by changing courseware and instructional delivery without (or with only minor) revisions to the initially approved curriculum. Conversely, it may be necessary for the operator to substantially

change the curriculum which may require another initial approval action by the POI before the changes can be put into effect. Sometimes proposed revisions may be transmitted to the POI just before the initial approval expiration date. If the change is significant, the POI may need to establish a different expiration date for the curriculum segment, or for the revised portions, to allow adequate time for a proper evaluation.

B. Identification and Correction of Curriculum Deficiencies. During phase four, the operator must demonstrate the ability to effectively train flightcrew members. Each deficiency identified during the evaluation of training conducted under an initially approved curriculum must be discussed with the operator. If the deficiencies are significant, they must be documented and kept on file. In most cases, when the cause of a deficiency has been accurately identified, the operator will make the necessary changes to correct the deficiency to obtain final approval. Each significant deficiency which has been accurately identified must be immediately corrected. If an operator does not take appropriate corrective action, the POI shall advise the operator in writing that initial approval is withdrawn. See paragraph 3-1114.

3-1109 ELEMENTS AVAILABLE FOR EVALUATING TRAINING—PHASE FOUR.

The POI must develop a plan for systematically evaluating training given under the initially approved training curriculum. This plan should remain in effect throughout the initial approval period. There are five elements which can be evaluated when assessing the overall effectiveness of training programs. These five elements are: curriculum segment outlines, courseware, instructional delivery methods and training environment, testing and checking, and surveillance and investigation of operator activities. These elements are interrelated; however, each can be evaluated separately. See Table 3-38, Elements for Training Evaluation, for a summary of the five elements.

A. Curriculum Segment Outlines. Before evaluating a training program, an inspector must become familiar with the contents of the curricula or curriculum segments to be evaluated. This preparation is essential if an inspector is to determine whether an operator has developed an effective course of instruction from its initially approved training curriculum.

B. Examination of Courseware. Direct examination of courseware includes reviewing materials such as lesson plans, workbooks, or flight instructor guides. The inspector must determine whether the courseware is consistent with the curriculum or curriculum segment and that it has been organized to facilitate effective instructional delivery. Courseware is usually the training program element which is most adaptable to revision or refinement. Inspectors must review at least a sampling of the courseware.

C. Observation of Instructional Delivery Methods and Training Environments. Direct observation of instructional delivery includes surveillance of training methods, such as instructor lectures, CBI presentations, and in-flight instruction. Effective learning can only occur when an instructor is organized and prepared and properly uses the courseware and various training aids. The inspector must determine that the instructional delivery is consistent with the courseware. For example, the inspector should note whether the instructor teaches the topics specified in the lesson plan. Training aids and FSTDs should function as intended during the instructional delivery. In addition, during training, the inspector should be sensitive to the type of questions being asked by students and should identify the reasons for any excessive repetition.

These conditions may indicate ineffective instructional delivery or courseware. The inspector must also determine if the instructional environment is conducive to learning. Distractions which adversely affect instructional delivery, such as excessive temperatures, extraneous noises, poor lighting, and cramped classrooms or workspaces, are deficiencies because they interfere with learning.

D. Observation of Testing and Checking. Direct observation of testing and checking is an effective method for determining whether learning has occurred. Examining the results of tests, such as oral or written tests or checks, provides a quantifiable method for measuring training effectiveness. The POI must examine and determine the causal factors of significant failure trends.

E. Surveillance and Investigation of Training and Checking in Progress. Direct observation of training and checking in progress is an effective method of evaluating training. Sometimes the opportunity for direct observation, however, will be limited. In such cases, the POI will have to rely more on his evaluation of other sources of information such as reports of surveillance and investigations. Results of inspection reports, incident or accident reports, enforcement actions, and other relevant information about the operator's performance should be reviewed by the POI for indications of training effectiveness. The POI must establish methods to evaluate these sources of information for trends which may develop while training is being conducted under initial approval. For example, repeated reports of deficiencies, such as excessive taxi speed, navigation deviations, incomplete briefings, or incorrect use of the checklists, may be traceable to a lack of specific training or ineffective training. Such information may provide indications that revisions or refinements are needed for a curriculum segment and/or training modules. This information should be used when developing the Comprehensive Assessment Plan (CAP) in SAS Module 2.

Table 3-38. Elements for Training Evaluation

	ELEMENTS AVAILABLE FOR EVALUATING TRAINING
CURRICULUM SEGMENT OUTLINES	Curriculum segment outlines contain the specific training modules and the amount of time allocated for the curriculum segment. The modules must be consistent with regulatory requirements and safe operating practices. This element requires direct examination.
COURSEWARE	Courseware converts curriculum outline information into usable instructional material. Courseware must be consistent with the curriculum outline and be organized to permit effective instructional delivery. It is readily adaptable to adjustments and refinement by the operator. This element usually requires direct examination.
INSTRUCTIONAL DELIVERY METHODS AND TRAINING ENVIRONMENT	Instructional delivery methods are used to convey information to the student. Effective learning is maximized if the instructional delivery adheres to and properly uses the courseware. The training environment should be conducive to effective learning. This element requires direct observation.
TESTING AND CHECKING	Testing and checking is a method for determining whether learning has occurred. Testing and checking standards are used to determine that a desired level of knowledge and skill has been acquired. Testing and checking also measures the effectiveness of courseware and instructional delivery. This element requires direct observation. It can be supplemented by examining operator records of tests and checks.
SURVEILLANCE AND INVESTIGATION OF OPERATOR ACTIVITIES	Surveillance and investigations produce information about an operator's overall performance. A high rate of satisfactory performance usually indicates a strong, effective training program. Repeated unsatisfactory performances can often be traced to deficiencies in a training program. This element requires the examination and analysis of surveillance and investigative reports.

3-1110 METHOD FOR GRANTING FINAL APPROVAL—PHASE FIVE. This phase involves the granting of final approval of an operator's training curriculum. Based on the results of the evaluation, the POI must determine whether to grant or deny final approval of a training curriculum. This determination must be made before the expiration date of the initial approval. If the POI decides not to grant final approval, the procedures outlined in paragraph 3-1113 or 3-1114 shall be followed. If the POI decides that final approval should be granted, the following procedures apply:

A. Programs that Contain a List of Effective Pages (LEP). Although the method presently stated in this order may still be used in the approval process (that is, stamping each page), another procedure may also be used. Final approval of the training curriculum can be granted and documented by the POI on the LEP. This means that the FAA has given final approval of every page of the operator's training curriculum, as listed on that page, but only one FAA approval block must be completed and signed.

1) The stamped page that documents final approval of the training curriculum and/or curriculum segment shall be stamped for approval, dated, and signed by the POI. The approval stamp that appears on the page must include at least the information shown in the stamp that appears in Figure 3-73A, Final Approval Stamp.

2) The original curriculum and/or curriculum segment must contain the one page that documents FAA approval on the LEP. The curriculum and/or curriculum segment must be transmitted to the operator with an approval letter signed by the POI in accordance with this section.

B. Programs that Do Not Contain an LEP. The original and a copy of each page of the training curriculum and/or curriculum segment shall be stamped for approval, dated, and signed by the POI. The approval stamp must appear on each page and include at least the information shown in the stamp that appears in Figure 3-73A.

C. Original Stamped Curriculum. The original stamped curriculum or curriculum segment must be transmitted to the operator with an approval letter signed by the POI. This letter must specifically identify the curriculum or curriculum segment, contain a statement that final approval is granted, and provide the effective date of approval. This letter must also state that final approval shall remain in effect until otherwise notified by the FAA that a revision is necessary in accordance with § 121.405(e) or § 135.325(d), provided the operator continues to train in accordance with the approved curriculum. If the POI is authorizing a reduction in the programmed hours specified by part 121, the letter must contain a statement concerning the basis for reduction. A copy of the stamped curriculum or curriculum segment and a copy of the approval letter must be kept on file in the CHDO. Figures 3-74 and 3-75 are sample letters of final approval.

Figure 3-73A. Final Approval Stamp

FAA FINAL APPROVAL	
OFFICE DESIGNATOR:	_____
EFFECTIVE DATE:	_____
NAME:	_____
SIGNATURE:	_____

Figure 3-74. Letter of Final Approval (Part 121)

ABC Airlines, Inc.
 Director of Training
 417 Oakton Boulevard
 Enid, OK 78154

Dear Mr. Townsend:

Final approval is granted to ABC Airlines' B-727 Flight Engineer Recurrent Ground Training curriculum, for pages 1 through 5, dated May 21, 2007, and for pages 6 through 7, dated April 15, 2008.

The effective date of final approval is January 20, 2009. ABC Airlines may continue to train in accordance with this curriculum until a revision is required by the FAA under 14 CFR part 121, § 121.405(e) or until ABC Airlines revises the curriculum.

Approval of the reduced training hours from the programmed hours required by § 121.427(c)(1)(iii) to 20 hours is based on the improved training techniques available from your advanced systems ground trainer.

Principal Operations Inspector

Figure 3-75. Letter of Final Approval (Part 135)

ABC Airlines, Inc.
 Director of Operations
 Hoffman Building, Suite 306
 1012 Perkin Lane
 Motown, LA 58642

Dear Mr. Smith:

Final approval is granted to ABC Airlines, Inc. Cessna 310 Pilot in Command Upgrade Ground Training curriculum, pages 1 through 6, dated December 10, 2008.

The effective date of this final approval is June 9, 2009. ABC Airlines may continue to train in accordance with this curriculum until a revision is required by FAA under 14 CFR part 135, § 135.325(d) or until ABC Airlines revises the curriculum.

Principal Operations Inspector

3-1111 REVISIONS TO TRAINING CURRICULA.

A. Final Approval of Proposed Revisions. Revisions to initially approved training curricula shall be processed as described in paragraphs 3-1099 through 3-1109. To incorporate significant revisions into training curriculum with final approval usually requires the full training

approval process. Final approval, however, may be directly granted to a proposed revision if the revision involves any of the following situations:

- Correction of administrative errors such as typographical or printing errors;
- A reorganization of training or any changes in the sequence of training that does not affect the quality or quantity of training; and
- An improvement to the quality, or an increase in the quantity, of training.

B. Probable Causes of Revisions. Other proposed revisions, including any proposal to reduce the approved number of training hours, are subject to the training program approval process. Although each step in the process must be completed, the process may be abbreviated in proportion to the complexity and extent of the proposal. There are many factors that could require revisions to training curricula. Such factors include the following:

- The effects and interrelationships of changes in the kind of operations;
- The size and complexity of an operation;
- The type of aircraft being used;
- Any special authorizations through OpSpecs;
- A revised MEL; and
- Any exemptions or deviations.

3-1112 WITHDRAWING APPROVAL OF TRAINING CURRICULA. Before withdrawing approval of an operator's training curriculum or curriculum segment, the POI shall make reasonable efforts to convince the operator to make the necessary revisions. It is important to understand that withdrawing approval could be detrimental to the operator's business. The operator's ability to continue to hold a certificate may be in question if a new curriculum is not submitted for initial approval within a reasonable period of time. A decision to withdraw approval must be based on sound judgment and justifiable safety reasons. When sufficient reasons are established, it is mandatory for the POI to take immediate action to remove FAA approval from an ineffective or noncompliant training curriculum. When an approval is withdrawn, the POI must ensure that the operator clearly understands that any further training conducted under an unapproved curriculum is contrary to 14 CFR requirements. Enforcement action must be taken if any company employee who received unapproved training is used in part 121 or part 135 operations. The three methods for withdrawing approval of a training curriculum are as follows:

- Allowing an initially approved training curriculum to expire without granting final approval (paragraph 3-1113);
- Withdrawing approval of an initially approved training curriculum before the expiration date (paragraph 3-1114); and
- Withdrawing approval of a training curriculum which has already received final approval in accordance with § 121.405(e) or § 135.325(d) (paragraph 3-1115).

3-1113 EXPIRED TRAINING CURRICULA. A training curriculum granted initial approval has an expiration date. Usually, this date shall not be later than 24 months after the initial approval date. If the POI does not grant final approval before the expiration date, training under

that curriculum must terminate as of that date. Therefore, the POI shall not allow an initially approved curriculum to expire due to the FAA's inability to administratively grant final approval. Final approval may not be granted to an operator's training curriculum for several reasons. One reason, for example, may be the operator's inability to achieve an acceptable level of training effectiveness during phase four of the approval process. Another example of a reason for not granting final approval is the discontinued use of the initially approved curriculum. When the POI decides not to grant final approval before the expiration date, he must notify the operator of this decision in writing, at least 30 days before the expiration date of the initially approved curriculum. An operator not so notified may mistakenly assume that the initial approval will continue in effect until receipt of notification of either final approval or termination. The notification letter should contain the reasons for allowing the curriculum to expire and should state that any further training under the expired curriculum will not be in compliance with regulatory requirements. A POI who fails to provide this 30-day notification must establish a new expiration date so that appropriate notification can then be given to the operator.

3-1114 WITHDRAWAL OF INITIAL APPROVAL OF TRAINING CURRICULA.

A POI may decide to withdraw initial approval any time during phase four of the approval process. This action may be necessary if the training is not in regulatory compliance, does not provide for safe operating practices, or is ineffective in meeting training objectives. An operator who has received a letter withdrawing approval must revise or refine the training curriculum and resubmit it for initial approval. The POI must ensure that the operator understands that it is his responsibility to correct each deficiency in the training program. The POI withdraws initial approval of training curricula by letter. This letter must contain both a statement informing the operator that initial approval is withdrawn and the effective date of the withdrawal. This letter must include the reasons for withdrawal of approval and a precaution concerning the use of persons trained under a curriculum which is not FAA-approved. A sample letter for withdrawing initial approval is in provided Figure 3-76.

3-1115 WITHDRAWAL OF FINAL APPROVAL OF TRAINING CURRICULA. Each operator is responsible for ensuring that its training curricula, once they have been granted final approval, continue to provide training in accordance with the conditions under which final approval was granted. In accordance with §§ 121.405(e) and 135.325(d), whenever the FAA determines revisions to a curriculum that has been granted final approval are necessary, the operator shall, after notification, make the necessary changes to ensure the effectiveness and acceptability of its training. Such notification by the FAA effectively withdraws final approval. These regulations also provide the operator with certain appeal rights. Therefore, the following procedures will be applied when a decision is made to withdraw final approval of a training curriculum.

A. Required Items of the Notification Letter. The CHDO shall inform the regional Flight Standards division (RFS) of the impending action to withdraw final approval. The POI must notify the operator in writing that revisions are required in accordance with § 121.405(e) or § 135.325(d). See Figure 3-77 for a sample letter of a notification for withdrawing final approval. The notification letter must contain the following:

- A statement that FAA approval of the training curriculum is withdrawn;
- A list of the revisions which must be made;

- A brief description of the reasons necessitating the revisions;
- A precautionary statement concerning the use of personnel trained under a curriculum which is not FAA approved;
- A statement that the actions specified in the letter may be appealed; and
- Instructions on how to make an appeal.

B. Revisions. If the operator chooses to revise the training program in response to the notification letter, the proposed revision will be processed in the same manner as a request for initial approval. The POI must reinitiate the five-phase approval process previously described.

C. Appeal of Decision by Operator. If an operator decides to appeal the POI's action, it must, within 30 days after receiving notification, petition the CHDO manager for reconsideration of the withdrawal of final approval. The petition must be in writing and contain a detailed explanation on why the operator believes the revisions described in the withdrawal notice are unnecessary.

1) If upon receipt of a petition, the district OM believes that an emergency exists which directly impacts aviation safety, he must immediately inform the operator in writing of his decision. The district OM's letter must include a statement that an emergency exists, a brief description of the revisions which must be made, and the reasons the revisions are necessary. In this case, the district OM's letter upholds the POI's decision to withdraw final approval. The operator must revise its training program if FAA approval is to be obtained.

2) If the district OM does not believe an emergency exists, careful consideration must be given to both the operator's petition and the POI's reasons for withdrawal of approval. The operator's petition stays the POI's withdrawal of final approval and the operator may continue to train under the training curriculum, pending the district OM's decision. The district OM may need to conduct additional evaluations of the operator's training program. It may be appropriate for the district OM to obtain additional facts from other sources. Consultation with the RFSO and Washington HQ may be advisable.

3) The district OM must make a decision within 60 days after receipt of an operator's petition. If the district OM accepts the operator's explanations, he will direct the POI to rescind the letter that withdrew final approval, either partially or fully. If the decision is to uphold the POI's action, the district OM must respond to the operator's petition in writing.

4) The letter denying the petition should indicate that careful consideration was given to the petition. The letter must also contain the reasons for denying the petition and a statement that confirms the withdrawal of final approval. The letter must also contain a statement that any training conducted under the unapproved training curriculum is contrary to 14 CFR.

3-1116 ORGANIZATION OF DISTRICT OFFICE TRAINING PROGRAM FILES.

The POI shall maintain a separate training program file for each operator at the CHDO. Each operator's training program file will be organized and maintained to keep each major curriculum type and any revisions together. Superseded training curriculum pages must be kept on file for 2 years. All correspondence and additional relevant supporting information associated with each training curriculum will be filed with the curriculum or curriculum segment, as appropriate.

Figure 3-76. Letter of Withdrawal of Initial Approval

ABC Airlines
Director of Training
49 Wheat Drive
Barley, Iowa 96496

Dear Mr. Roberts:

This letter notifies you that FAA initial approvals of the following training curriculum segments are withdrawn, effective April 1, 1988:

1. The emergency training segment for the DC-9 Second in Command Initial New-Hire Training curriculum, pages 9.1 through 9.3, dated 11/15/86.
2. The emergency training segment for the DC-9 Pilot in Command Upgrade Training curriculum, pages 9.31 through 9.33, dated 6/1/87.

The investigation of the in-flight incident that occurred on ABC Airline's Flight 943 on February 10, 1988, revealed that the flightcrew did not take positive action to isolate the source of smoke caused by malfunctioning cabin light ballast. During the FAA interview, the flightcrew displayed a lack of concern about the importance of taking immediate and positive action to control in flight fire and smoke. In addition, since this incident, inspectors from this office have been emphasizing fire and smoke-combating procedures during oral testing of DC-9 pilots taking the above listed training. These inspectors have observed that many of your DC-9 pilots have a serious lack of knowledge about fire and smoke control procedures and the use of fire-fighting equipment, particularly the type of extinguishers to be used in different classes of fire. We have discussed these deficiencies with your staff and they have effectively revised the Emergency Training curriculum segment for the DC-9 PIC/SIC Recurrent Training. Your staff, however, advises that they will not revise the training curricula listed above. Therefore, FAA initial approval is withdrawn. Initial approval can be reobtained by revising the curriculum to require detailed instruction on fire and smoke control procedures and fire-fighting equipment. It is contrary to 14 CFR part 121 to use pilots who have not been trained in accordance with an approved training curriculum.

Principal Operations Inspector

Figure 3-77. Letter of Withdrawal of Final Approval (Part 135)

ABC Airlines, Inc.
Director of Training
49 Wheat Drive
Barley, Iowa

Dear Mr. Roberts:

This letter notifies you that, effective April 7, 1988, final approval of your Cessna 500 Pilot in Command Upgrade Training curriculum, dated March 1987, is withdrawn in accordance with 14 CFR part 135, § 135.325(d). This course of training must be revised as discussed below if FAA initial approval is to be reobtained.

The revised curriculum is required to have more detailed ground and in-flight instruction on the performance, limitations, and proper operating procedures for the area navigation systems. During the past 2 months, three of your Cessna 500 flights failed to maintain the assigned route flight specified by the air traffic control (ATC) clearance. Two of the flights required ATC radar assistance for reestablishing ATC clearance. All three pilots involved in these deviations were recently upgraded to pilots in command by completing the aforementioned training curriculum. The FAA has determined, through interviews with these pilots, that the training being given does not provide sufficient knowledge for the proper operation of the area navigation systems.

You may file a petition for reconsideration of this withdrawal of final approval within 30 days after receipt of this letter by writing to Mr. Belsole, Manager, Utica Flight Standards District Office. Your letter should contain a complete explanation of why you believe final approval of the Cessna 500 Pilot in Command Upgrade Training curriculum should not be withdrawn. It is contrary to part 135 to use pilots who have not been trained in accordance with an FAA-approved training curriculum.

Principal Operations Inspector

RESERVED. Paragraphs 3-1117 through 3-1135.