

VOLUME 3 GENERAL TECHNICAL ADMINISTRATION
CHAPTER 21 THE ADVANCED QUALIFICATION PROGRAM

Section 4 Safety Assurance System: The Advanced Qualification Program Approval Process

3-1566 GENERAL. This section establishes how the Federal Aviation Administration (FAA) shall grant or withdraw approval of all or part of an Advanced Qualification Program (AQP). This section is related to Safety Assurance System (SAS) Element 2.1.6 (AW or OP), Advanced Qualification Program.

A. Scope. The approval process applies to qualified Title 14 of the Code of Federal Regulations (14 CFR) parts 121, 135, and 142 certificate holders that apply for an AQP.

B. Extended Review Team (ERT). The review and surveillance of an AQP prior to final approval is equivalent to a recertification of the applicant's training program. To ensure the maintenance of an effective and standardized process, the Air Carrier Training Systems and Voluntary Safety Programs Branch (AFS-280) will lead a team to conduct the review and certification of the AQP.

C. The ERT May Include (but is not limited to) the Following Personnel:

- FAA manager (AFS-280).
- Principal operations inspector (POI) (or a designated representative).
- Training Center Program Manager (TCPM) (if applicable).
- Aviation safety inspector (ASI) staff program manager (AFS-280).
- Aircrew program manager (APM) (if applicable).
- Aviation Safety Inspector – Cabin Safety (ASI-CS) (if applicable).
- Aviation Safety Inspector – Aircraft Dispatch (ASI-AD) (if applicable).
- Instructional system design specialist (AFS-280).
- Data management specialist (AFS-280).

D. Additional Technical Personnel can be Added to the ERT as Required.

- Principal security inspector (PSI).
- National Simulator Evaluation Team (NSET).
- Flight Standardization Board (FSB) or Flight Operations Evaluation Board (FOEB).

E. Role of AFS-280. AFS-280 will provide assistance to the Flight Standards District Office (FSDO), certificate management office (CMO), or certificate management unit (CMU) from initial application through the final fleet approval as a collaborative effort. An approved certificate holder's AQP application will initiate the AFS-280/FSDO/CMO/CMU partnership. AFS-280 will provide assistance in the development, implementation, and review as well as follow-on reviews of the certificate holder's AQP. AFS-280 and the FSDO/CMO/CMU will manage program approvals and revisions through an ERT process. Since team members are not

co-located, maintaining effective communications is an essential part of the ERT process. AFS-280 will provide the ERT with collaborative program management tools to improve and facilitate the review process.

F. Role of the AFS-280 Manager. The FAA manager is the person responsible for ensuring that the regulatory requirements for AQP are met and approved AQP standards are maintained. In this capacity, the FAA AFS-280 manager provides oversight of the AQP process and documentation through all phases. The manager will also chair the AQP ERT. The manager will retain a quality assurance (QA) role and coordinate with the POI any modifications and subsequent approvals throughout the life of the AQP.

G. Role of the POI and/or TCPM. The POI and/or TCPM are responsible for ensuring that AQP regulatory requirements are met and that through surveillance the AQP provides a satisfactory level of safety and airman competence. The POI and/or TCPM will provide oversight of the instructor/evaluator program and adherence to approved documentation for all AQP curricula. The POI/TCPM will coordinate with the manager of the voluntary safety programs any modifications and subsequent approvals throughout the life of the AQP.

Table 3-78. Approval Authority Matrix for Each AQP Curriculum

Document Title	Approval Authority by Phase				
	I	II	III	IV initial	V final
Application	AFS-280				
Task Analysis		ERT	ERT	ERT	ERT
Qualification Standards		ERT	ERT	ERT	ERT
Instructional Development Methodology		ERT	ERT	ERT	ERT
Curriculum Outline		ERT	ERT	ERT	Revision POI
Implementation and Operations Plan		ERT	ERT	ERT	ERT

H. Approval Authority. Table 3-78, Approval Authority Matrix for Each AQP Curriculum (above) summarizes the approval authority by phase and AQP document. Except for the Phase I application, Line Operational Evaluation (LOE) scenario content, and Phase V curriculum outline revisions, the ERT is the approving authority for all AQP documents and document revisions in all phases. All ERT AQP approval letters will be forwarded through the POI/TCPM to the certificate holder. For all AQP documents and phases for which the ERT is designated as the approval authority, the FAA AFS-280 manager and the POI/TCPM will cosign the approval letters. Following approval for continuing operation (Phase V), approval of curriculum outline changes shall be managed and signed by the POI. (See Figure 3-99, Sample Approval Letter—Phase II; Figure 3-100, Sample Approval Letter—Phase III; Figure 3-101, Sample Approval Letter—Phase IV; and Figure 3-102, Sample Approval Letter—Phase V).

I. Training Center Requirements (Part 121, § 121.923). A training center may apply to develop a provisionally approved AQP prior to the establishment of a contract, agreement, or other arrangement to provide such training to a specific part 121 or 135 certificate holder, but may not implement an AQP training program until FAA approval specific to a certificate holder has been received.

3-1567 PHASED APPROVAL PROCEDURES. The following paragraphs describe how the FAA will work with an applicant to review or analyze material and to provide guidance for phased approvals. Applicants shall develop and implement their AQP in five sequential phases:

- Phase I - Initial Application.
- Phase II - Curriculum Development.
- Phase III - Training System Implementation.
- Phase IV - Initial Operations.
- Phase V - Continuing Operation.

A. Phase I - Initial Application. Refer to the current edition of Advisory Circular (AC) 120-54, Advanced Qualification Program, and Figure 3-96, Advanced Qualification Program—Documentation Checklist and Review Job Aid, in Volume 3, Chapter 21, Section 1.

1) Applicant. The applicant shall submit a written application to the manager of AFS-280 and to the POI/TCPM, consisting of an application cover letter stating intent to develop, implement, and operate an AQP.

2) FAA Review. AFS-280 shall accomplish the review and analysis of the application as follows:

- The applicant's proposed methodology for program development.
- The applicant's ability to execute the processes of development, implementation, and operation.
- Missing or incomplete application information.

3) Application Approval. After determining that the applicant's submittal is satisfactory, the AFS-280 manager, in collaboration with the POI/TCPM, shall approve acceptance of the application. This approval will permit the applicant to proceed to Phase II.

B. Phase II - Curriculum Development. Refer to AC 120-54 and Figure 3-96.

1) Required Documents. The applicant shall submit the following documents to the ERT:

- A current, complete copy of the flight operations training manual (or comparable document), with permanent distribution to certificate-holding district office (CHDO) and AFS-280 of future changes/revisions.
- Such other publications, certificate holder/applicant manuals, and manufacturer documentation as requested by the ERT to assist in the team's activities.
- Supporting task analysis.
- Qualification standards.
- Instructional systems development methodology.
- Curriculum outline(s).
- AQP Implementation and Operations Plan (I&O Plan).

2) Review and Evaluation.

a) The ERT shall evaluate all documents for completeness and accuracy of technical content. The content of the supporting task analysis and qualification standards shall be reviewed for comparison to the 14 CFR sections they replace (e.g., 14 CFR parts 61, 63, 65, 121, 121 appendices E and F, and 135 (see Figure 3-105, Qualifications Standards Document—Regulatory Comparison Chart)), the practical test standards (PTS), FSB reports, and the air carrier's operations specifications (OpSpecs). (See Figure 3-96.)

b) The ERT shall review the applicant's instructional systems development methodology with respect to the means proposed for ensuring that the content of the supporting task analysis will be incorporated into the curriculum, and for consistency with the guidelines of Volume 3, Chapter 19. (See Figure 3-96 (Job Aid)).

c) The ERT shall review the implementation and operations plan for completeness, feasibility, and adequacy of the applicant's resources to support and maintain the proposed AQP curriculum. (See Figure 3-96 (Job Aid)).

d) Upon satisfactory completion by the applicant of all requested changes, the AFS-280 manager and the POI/TCPM shall jointly approve the applicant's documentation (see Figure 3-96 (Job Aid)). This approval will allow the applicant to proceed to Phase III.

C. Phase III - Implementation. In this phase, the applicant will complete development of required courseware and conduct preliminary assessment of training resources and materials, such as dry running new Line-Operational Simulation (LOS) and LOE scenarios, testing the feasibility of proposed data acquisition strategies, or other such activities as are called for in the applicant's I&O Plan. AQP qualification and observation of instructors and evaluators shall be accomplished in this phase. Similarly, if not already completed, flight training equipment must be qualified by the FAA in accordance with 14 CFR part 60 policies and procedures.

1) FAA Review and Evaluation. FAA activities in this phase will consist principally of observing or participating in new LOS/Special Purposed Operational Training (SPOT)/LOE scenarios and monitoring and observing the AQP training provided to instructors and evaluators.

a) Surveillance of Phase III activities.

b) Assigned CMO inspectors shall accomplish this surveillance. Inspectors shall also attend the applicant's evaluator training for their own qualification. Surveillance shall be augmented with visits from representatives of AFS-280. Flight training device (FTD) or flight simulator evaluation and qualification will be conducted in accordance with part 60 regulations and guidance. ERT activities in this phase will consist of observing, monitoring, and participating in the AQP training programs. Particular emphasis will be placed on:

- Instructor/evaluator training and observation.
- Training scenarios.
- Validation.
- LOE.

c) The I&O Plan.

1. The ERT shall evaluate the applicant's readiness to conduct and maintain the proposed AQP curriculum.

2. Once Phase III has concluded, the applicant will provide the ERT with an updated I&O Plan.

3. The ERT shall coordinate the resolution of any remaining concerns as required. Based on the recommendations of the ERT, the FAA manager of the voluntary safety programs and the POI will approve or deny initial operations – Phase IV.

4. Initial approval permits the applicant to execute the updated I&O Plan through the qualification or continuing qualification cycle (usually 24 months). The AQP curriculums Phase IV expiration will be set by the ERT in the approval letter. (See Volume 3, Chapter 19, Section 2, Figures 3-71 Letter of Initial Approval (Part 135), and 3-72, Letter of Initial Approval (Part 121)).

5. The ERT shall then notify the certificate holder/applicant that the AQP has been approved under part 121 subpart Y for initial operations.

2) OpSpecs Entry.

3) Approval of Initial Operations. Phase IV requires the air carrier to add an entry into the automated OpSpecs through Web-based Operations Safety System (WebOPSS):

4) OpSpec A034, Advanced Qualification Program (AQP). (See Figure 3-103, Operations Specification.)

D. Phase IV - Initial Operations.

1) Applicant. The applicant operates and maintains an approved AQP curriculum, submits updated training program evaluation results through the ERT as appropriate, and submits digital performance proficiency data directly to AFS-280 in accordance with the requirements specified for the applicant's program.

2) Review and Evaluation. AFS-280 and the certificate holder or applicant shall accomplish trend analysis of the AQP data. Surveillance of all of the certificate holder's or applicant's Phase IV operations shall be accomplished by inspectors who are knowledgeable of the applicant's approved AQP, and by other FAA representatives, as appropriate.

3) Focus. The focus of this phase is validating the AQP curriculum through the acquisition of performance/proficiency data, surveillance, and lessons learned during the course of conducting the curriculum. Applicants will summarize the lessons learned and adjustments made to the curriculums in the annual report. In addition, adjustments made to the AQP will be reflected in revisions to the approved AQP documents. A joint ERT and certificate holder or applicant program review is recommended after completion of the first qualification curriculum or continuing qualification evaluation period, with periodic reviews as required thereafter during

the first continuing qualification cycle. The purpose of these reviews is to identify, recommend, and plan needed changes. At the midpoint of Phase IV, the first annual report will be submitted to the ERT. A joint review and annual report will be accomplished prior to Phase V approval.

4) Notification. The ERT shall notify the certificate holder or applicant by letter that the AQP has been approved for Phase V (see Figure 3-102).

5) OpSpec A034. The POI and the certificate holder shall modify the previously issued A034 OpSpec paragraph to include the Phase V approval date.

E. Phase V - Continuing Operations. Phase V involves continuing operation of the certificate holder's AQP. The certificate holder's procedures for curriculum maintenance, as documented in the I&O Plan, shall be executed on a continuing basis and shall be reviewed periodically by the FAA, as appropriate. The certificate holder will submit student proficiency data to AFS-280 on a continuing basis for trend analysis purposes. AFS-280 shall provide POIs with periodic reports on the results of those analyses, as required.

3-1568 METHOD OF GRANTING INITIAL OR PROVISIONAL APPROVAL.

A. Approval by Letter. The ERT shall grant initial or provisional AQP approval by letter. The AFS-280 manager and POI/TCPM shall sign all letters of initial/provisional approval. The approval letter shall include at least the following information:

- The specific identification of the curriculums and curriculum segments initially or provisionally approved; including page numbers and/or revision control dates (date of List of Effective Pages (LEP)).
- A statement that initial or provisional approval is granted; including expiration date(s).
- Any specific conditions affecting the approval.
- A request that the applicant provide the FAA with advanced notice of scheduled activities so evaluations may be planned.
- Directions to enter OpSpec A034, if appropriate.

B. Copies. A copy of the approval letter shall be maintained by the certificate holder, the CHDO, and by AFS-280. For a training center, copies of a provisional approval letter shall be maintained at the training center, at the FAA district office responsible for oversight of the training center, and by AFS-280. When a training center's AQP is approved for a specific air carrier, copies of the approval letter shall be maintained by the above three offices, as well as by the CHDO, and by the certificate holder.

C. Stamped Approval Endorsement or an Acceptable Substitute (i.e., Electronic Stamp). For initial and final approval, the LEP of all AQP required documents are stamped approved, dated, and signed by the POI.

Figure 3-97. Example Initial Approval Stamp

FAA INITIAL APPROVAL
 OFFICE DESIGNATOR:
 EFFECTIVE DATE:
 NAME:
 SIGNATURE:

D. Provisional Approval for a Training Center.

1) Section 121.923 provisional approval allows a training center to engage with a part 121 or 135 certificate holder in tailoring a generic AQP curriculum to a given air carrier's specific operations. The major difference between the development of an AQP by a training center and by an air carrier is that the training center can develop generic AQP documentation and individual curriculum segments through Phase II. This documentation is given a provisional approval. A provisional AQP allows a training center to accomplish front-end AQP development through Phase II and to offer its services as an approved AQP provider before establishing a contract or other arrangements with a specific certificate holder. An application for provisional approval shall contain the same information as that specified in this chapter for a certificate holder, except that certificate holder-specific information may be omitted.

2) A provisional AQP cannot be employed for use with a specific certificate holder without additional development to tailor the program to the needs of a specific air carrier.

E. Request and Approval for Use of a Training Center.

1) A certificate holder or applicant that wishes to use a training center for AQP training must submit a letter of request directly to the FAA manager of the voluntary safety programs, with a copy to the POI and TCPM. The letter of request should specify the training center, identify the AQP curriculum, and cite the time frame for which such AQP services would be conducted.

2) The AQP review process and curriculum documentation required for a training center to obtain approval to conduct an AQP for a specific certificate holder is identical to that required of an air carrier. All documentation must be consistent with the multi-phased development process outlined in this guidance, and must be specific to the certificate holder for whom such training will be conducted.

3) AQP documentation developed by a training center for a specific certificate holder or applicant will be submitted directly by the training center to the FAA manager of the voluntary safety programs for review and approval. The FAA manager of the voluntary safety programs will then form an AQP ERT as appropriate. Once formed, the ERT review and approval process is identical to the review and approval process outlined in this section.

3-1569 METHOD OF DENYING INITIAL OR PROVISIONAL APPROVAL. If the FAA determines that initial or provisional approval for training centers must be denied, the FAA shall notify all the affected certificate holders/applicants in writing. The letter shall identify any

deficiency that was the cause of denial. The principal applicant may redevelop or correct the deficiencies and resubmit the AQP for approval.

3-1570 REVISION CONTROL PROCESS.

A. Program Revisions. After a certificate holder begins training and qualification under an AQP, the FAA may require the certificate holder, pursuant to § 121.405(e), to make program revisions. AQP document revisions are submitted to the FAA AFS-280 manager and the POI. In Phases II through IV, the revision is reviewed by the ERT and approved using the notification process for the appropriate curriculum phase. The process is identical in Phase V, except that review and approval of revisions to the curriculum outline are made directly by the POI.

B. Copies of Revisions. Copies of all revisions in all phases, including the curriculum outline, will be provided to both the FAA manager of the voluntary safety programs and the POI. Each revision must indicate which AQP documents are being revised, and must include the following items:

- A brief synopsis of each change and what pages/items are affected.
- Change bars or acceptable substitute identifying the text/chart that has been changed.
- The date of the revision and revision number on each page or graphic.
- The LEP.

NOTE: If a certificate holder chooses to integrate the required AQP documents into an established manual structure, each document's location must be identified and each revision request must identify the AQP document that is being revised and which manual contains the document.

C. Revising Approved Portions of an AWP. A revision to an approved portion (initial or final) of an AQP cannot be implemented until the applicant receives FAA approval.

3-1571 WITHDRAWAL OF INITIAL OR PROVISIONAL APPROVAL. The FAA may decide to withdraw initial or provisional approval at any time the AQP is not in regulatory compliance, does not provide for safe operations, or does not effectively prepare crewmembers or dispatchers to meet qualification standards. The FAA will withdraw initial or provisional approval in writing, stating the reasons for the withdrawal and the effective date of withdrawal. An applicant who receives a letter of withdrawal may revise or refine the curriculum and resubmit it for initial or provisional approval.

3-1572 FINAL APPROVAL. Based on the results of evaluations accomplished during the period of initial approval, the FAA shall grant or deny final approval of an AQP. Final approval is accomplished by stamped endorsement of AQP documents and by approval letter.

A. Stamped Approval Endorsement or an Acceptable Substitute (i.e., Electronic Stamp). For final approval, the list of effective pages of all AQP required documents are stamped approved, dated, and signed by the POI. As approved changes are made to AQP

documents, the “Final Approval” endorsement shall be reaccomplished on each revised page of the LEP.

Figure 3-98. Example Final Approval Stamp

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

B. Approval Letter. The ERT shall grant final AQP approval by letter. The AFS-280 manager and POI/TCPM shall sign all letters of final approval. After final approval is granted the POI will sign all curriculum outline approvals. The letter shall contain the same information as the initial approval letter except the expiration date.

C. Copies. A copy of the approval letter shall be kept on file in the CHDO, at AFS-280, by the certificate holder or applicant, and, where applicable, at the location designated as the principal training site of a training center approved under § 121.923.

3-1573 GENERAL PROVISIONS FOR WITHDRAWAL OF FINAL APPROVAL. The FAA may withdraw final approval of a curriculum at any time if the FAA determines that sufficient safety reasons exist or that required data is not being maintained and provided. Before withdrawing approval, the FAA shall make reasonable efforts to convince an applicant to correct its AQP. The FAA shall withdraw approval by letter. The letter shall identify the affected curriculums, state the reasons for the withdrawal, and state the effective date of the withdrawal (except in an emergency, not less than 7 days after receipt of the letter). The letter shall advise the certificate holder that withdrawal may be appealed and shall provide instructions on how to appeal.

3-1574 APPEAL OF A WITHDRAWAL. To appeal withdrawal of final approval, a certificate holder should petition the Director of Flight Standards Service (AFS-1) for reconsideration within 30 days after receiving withdrawal notification. The petition should be in writing and should explain in detail why the certificate holder believes the withdrawal should not occur.

A. Denial of Appeal. The Director may immediately deny the petition after considering all relevant information presented if the Director believes that an emergency exists that directly affects aviation safety. In this case, the Director shall inform the certificate holder, by letter, of the decision to deny the appeal due to the existence of an emergency. The letter shall state that an emergency exists and shall describe the deficiencies and the actions necessary to correct them.

B. Stay of Withdrawal. If the Director does not believe that an emergency exists, the Director shall carefully consider both the certificate holder’s petition for appeal and the FAA’s reason for withdrawal of approval. In this case, the certificate holder’s petition provided it goes out within 30 days, stays withdrawal, and the certificate holder may continue to use the AQP curriculum pending the decision of the Director. The Director may find it necessary to conduct additional evaluations of the certificate holder’s AQP.

C. Director's Final Decision. In any case, the Director shall make a final decision within 60 days of receiving the certificate holder's petition. The Director may rescind or modify the letter of withdrawal or uphold the withdrawal. If the decision is to modify or uphold the withdrawal, the certificate holder shall be notified by letter. The letter shall contain the reasons for denying all or part of the petition.

3-1575 DATABASE MANAGEMENT AND ANALYSIS.

A. Data Collection and Analysis. Data collection and analysis are fundamental parts of an AQP. Data collection is required for all AQP curricula (§ 121.917(c)) as defined by each carrier's approved AQP data collection and analysis section of the certificate holder's I&O Plan. Data collection and analysis processes must ensure that the certificate holder obtains performance information on its personnel, instructors, and evaluators that will enable the certificate holder and the FAA to determine whether the form and content of training and evaluation activities are satisfactorily accomplishing the overall objectives of the curriculum.

B. AQP Quality Control (QC) Requirements. An AQP requires data collection in order to establish and maintain QC of curricula for crewmembers, dispatchers, instructors, and evaluators. Good data management practices are necessary to determine whether an AQP is meeting its objectives. Considerations for data entry include the method, the hardware/software required for data input, and the hardware/software required for data storage and manipulation. Database design is at the discretion of the carrier, providing that the design can generate the required report tables specified.

C. Data Collection Requirements. Data collection requirements for the AQP vary with the curriculum, the type of curriculum activity (training, validation, or evaluation), the type of participant (crewmember, dispatcher, instructor, or evaluator), and the overall management objectives for use of the data. All performance data collected on each proficiency objective must be relative to the applicable AQP qualification standards defined for the training and evaluation activities.

D. Collecting and Storing Data. Data is collected from each student's performance and is de-identified and stored in aggregate in a Performance/Proficiency Data Base (PPDB). This data is used to analyze training programs and/or groups of participants, not for tracking individual accomplishment. Collection and analysis of this data is designed to identify and correct problems, validate AQP curriculums, and identify developing trends.

E. Participant Data Collection. AQP requires that the data collection conducted by a participant for its own use in monitoring training will support more analytical detail and diagnostic functions than the data collected for submission to the FAA. The participant must do an analysis of the effectiveness of the training.

F. Submitting De-identified Data. The FAA has established the requirements for the submission of de-identified data by curriculum. Specific guidance for data management is found in AC 120-54 and the AQP data management guide produced by the Airlines for America's (A4A) Data Management Focus Group. Copies are available from AFS-280 or can be downloaded from the AQP Web site (http://www.faa.gov/training_testing/training/aqp/). The list

of data analysis questions/queries maintained in the AFS-280 Data Analysis and Reporting Tool (DART) are shown in Figure 3-104, Data Analysis Questions.

G. Data Submission Requirements. Submission requirements are defined in three tables; the Performance Data Report Table (PDRT), the Skill Reason Table (SkIRsn) and the Training Objectives Report Table (TORT). The information in these tables is downloaded from the carrier's PPDB. The submissions are forwarded to the FAA AFS-280 manager electronically in calendar-month blocks using a Microsoft Access (mdb) format.

H. Grade Sheet Maintenance. The ERT should maintain copies of all grade sheets used in the validations and evaluations. Although grade sheets are not approved, the ERT must be able to compare them to the approved curriculum outlines and to ensure correlation between the data collecting requirements and the final product.

I. Analyzing Data. AFS-280 shall accomplish proficiency analysis, validation of performance measures, and other statistical analysis and research for approved AQPs. AFS-280 analyzes the de-identified data using standard automated queries and reports to identify AQP performance trends.

J. Web-Based Data Sites. SharePoint Web sites have been created to facilitate the exchange of AQP performance data between AFS-280 and CHDO using a Web-based electronic library. The library contains:

- AFS-280 QC reports on data files submitted by the airline each month.
- All performance data submitted by the airline for a given year.
- Quarterly and annual performance data assessments completed by AFS-280.
- Pivot tables containing 6 months of PDRT data.
- Quick reports that are designed to provide a quick overview of an airline's AQP.

Figure 3-99. Sample Approval Letter—Phase II

Date

Name

Director, Flight Standards and Training
Airlines, Inc.
747 Aviation Blvd.
Houston, TX 77032

Dear:

This letter is to notify you that the Federal Aviation Administration (FAA) Extended Review Team (ERT) (Training Systems and Voluntary Safety Program Branch (AFS-280) and _____ certificate management office (CMO)) has completed its review of the B-757 Advanced Qualification Program (AQP) Phase II documents listed below.

The following documents are approved:

- B-757 Pilot Task List, LEP dated 08/01/04.
- B-757 Qualification Standards, LEP dated 08/20/04.
- B-757 Curriculum Segment Outlines, LEP dated 08/30/04.
- Instructional System Design Methodology, LEP dated 08/01/04.
- Implementation and Operations Plan, LEP dated 08/01/04.

Contact Inspector _____ or Inspector _____ if you have any questions.

Sincerely,

Manager, AFS-280

Principal Operations Inspector

Figure 3-100. Sample Approval Letter—Phase III

Date

Name

Director, Flight Standards and Training
Airlines, Inc.
747 Aviation Blvd.
Houston, TX 77032

Dear:

This letter is to notify you that the Federal Aviation Administration (FAA) Extended Review Team (ERT) (Training Systems and Voluntary Safety Program Branch (AFS-280) and _____ certificate management office (CMO)) has completed its review of the B-757 Advanced Qualification Program (AQP) qualification and continuing qualification curriculums. This letter certifies that _____ Airlines AQP, B-757 qualification/ continuing qualification, are approved for Phase III Implementation (Small Group Tryouts), under Title 14 of the Code of Federal Regulations (14 CFR) part 121 subpart Y, and in accordance with the approved _____ Airlines Implementation and Operations (I&O) Plan. This approval is effective 7 January 2005 and is valid for a period of 120 days.

Please provide a master schedule of events to AFS-280 and the principal operations inspector (POI) as soon as possible so the extended review team may offer assistance and review as needed. Contact Inspector _____ or Inspector _____ if you have any questions.

Sincerely,

Manager, AFS-280

Principal Operations Inspector

Figure 3-101. Sample Approval Letters—Phase IV

Date

Name

Director, Flight Standards and Training
Airlines, Inc.
747 Aviation Blvd.
Houston, TX 77032

Dear:

This letter is to notify you that the Federal Aviation Administration (FAA) Extended Review Team (ERT) (Training Systems and Voluntary Safety Program Branch (AFS-280) and _____ certificate management office (CMO)) has completed its review of the B-757 Advanced Qualification Program (AQP). We are pleased to inform you that your B-757 Continuing Qualification curriculum has been approved under Title 14 of the Code of Federal Regulations (14 CFR) part 121 subpart Y for AQP Phase IV, Initial Operations, effective 7 June 2005.

The expiration date of this initial approval is _____. Please provide the CMO with advance notice of any training or evaluation conducted under this curriculum to allow for surveillance of the training in accordance with part 121 subpart Y. Future page changes to this curriculum must be accomplished in accordance with the approved revision control methodology.

The following documents are approved:

- B-757 Pilot Task List, Revision 2 LEP dated 05/20/05.
- B-757 Qualification Standards, Revision 2, LEP dated 05/15/05.
- B-757 Curriculum Segment Outlines, Revision 2, LEP dated 05/15/05.
- Instructional System Design Methodology Revision 2, LEP dated 05/15/05.
- Implementation and Operations Plan, Revision 2, LEP dated 05/15/05.

Note: Approval to conduct this curriculum will require the appropriate entry in Operations Specification (OpSpec) A034.

Contact Inspector _____ or _____ if you have any questions.

Sincerely,

Manager, AFS-280

Principal Operations Inspector

Figure 3-102. Sample Approval Letter—Phase V

Date

Name

Director, Flight Standards and Training
Airlines, Inc.
747 Aviation Blvd.
Houston, TX 77032

Dear:

This letter is to notify you that the Federal Aviation Administration (FAA) Extended Review Team (ERT) (Training Systems and Voluntary Safety Program Branch (AFS-280) and _____ certificate management office (CMO)) has completed its review of the B-757 Advanced Qualification Program (AQP). We are pleased to inform you that your B-757 Continuing Qualification curriculum has been approved under Title 14 of the Code of Federal Regulations (14 CFR) part 121 subpart Y for AQP Phase V, Continuing Operations, effective _____.

Please provide the CMO with advance notice of any training or evaluation conducted under this curriculum to allow for surveillance of the training in accordance with part 121 subpart Y. Future page changes to this curriculum must be accomplished in accordance with the approved revision control methodology.

The following documents are approved:

- B-757 Pilot Task List, Revision 5 LEP dated 10/01/07.
- B-757 Qualification Standards, Revision 8, LEP dated 10/25/07.
- B-757 Curriculum Segment Outlines, Revision 18, LEP dated 05/03/08.
- Instructional System Design Methodology Revision 2, LEP dated 05/15/05.
- Implementation and Operations Plan, Revision 3, LEP dated 09/01/06.

Note: Approval to conduct this curriculum will require the appropriate entry in Operations Specification (OpSpec) A034.

Contact Inspector _____ or Inspector _____ if you have any questions.

Sincerely,

Manager, AFS-280

Principal Operations Inspector

Figure 3-103. Operations Specification

Following initial/Phase IV approval, all AQP air carriers are required to be issued Operations Specification (OpSpec) A034.

Sample OpSpec A034, Advanced Qualification Program (AQP).

- a. The certificate holder is authorized to conduct operations of an Advanced Qualification Program (AQP) under Title 14 of the Code of Federal Regulations (14 CFR) Special Federal Aviation Regulation (SFAR) 58 in accordance with the following provisions:
- b. The certificate holder is authorized to conduct operations under an AQP with the following indoctrination curriculum:

Indoctrination Curriculum	
Initial Approval Date	Final Approval Date
05/10/04	05/31/06

Indoctrination Curriculum. Only one entry is required (not fleet-specific) with an entry for initial and final approval, as applicable.

- c. The certificate holder is authorized to conduct operations in accordance with the following aircraft fleets and AQP curricula:

Aircraft	Qualification Curriculum Dates:		Continuing Curriculum Dates:		Instructor Evaluator Dates:		Comment
	Initial	Final	Initial	Final	Initial	Final	
M/M/S							
B737-200	5/19/04	5/31/06	2/20/05		4/09/04	5/1/06	
B737-800	11/1/05		7/1/04	6/30/06	7/1/04	6/30/06	
B757	9/20/05		1/15/06		9/20/05		
B767							
B747-400	11/1/05		7/1/04	6/30/06	4/10/04	4/30/06	
B747-200	1/15/06				1/15/06		
A319			5/20/06		4/30/06		
A320							

Enter the date of initial (Phase IV) and final (Phase V) approval for each make, model, and series (M/M/S) fleet type. Multiple fleet types that are considered one fleet type for certification and or training can be entered on one line or separate entries can be entered. The differences curriculums do not have to be accounted for in the OpSpec.

(1) Instructor/Evaluator – Instructors and evaluators must be trained prior to conducting an AQP curriculum. Consequently, the first date entered in the initial approval block for an instructor/evaluator curriculum should coincide with, or be prior to, the first entry made in the fleet qualification or continuing qualification initial approval column. The date of final approval simply reflects the date final approval of the instructor/evaluator curriculum was granted.

Figure 3-104. Data Analysis Questions

Data Analysis Questions
Which records in the Performance and Objective tables contain incomplete data values?
How many pilots and evaluations were graded for each evaluation type?
Which measured items are being performed for each evaluation type and how often are they being performed?
Which training objectives are evaluated for each Advanced Qualification Program (AQP) measured item?
Which measured items listed in the Training Objective Report Table were not performed in this data set?
What ratings were given for each measured item, by evaluation type?
What is the diagnostic content for each drill-down layer of performance data?
What is the MRate distribution of MItems?
Which measured items are receiving unsatisfactory ratings?
How many measured items with unsatisfactory ratings did each pilot receive?
Which training objectives support measured items receiving unsatisfactory ratings?
Are any currency measured items receiving unsatisfactory ratings?
Are any critical measured items receiving unsatisfactory ratings?
How many unsat First Look MItems were reported?
What measured item ratings are being assigned to each crew position?
What eval type ratings are being assigned for each crew position?
What measured item ratings are being assigned for each simulator?
What measured item ratings are being assigned to pilots flying with and without seat substitutes?
What measured item ratings are being assigned to pilots flying with seat substitutes as pilot in command (PIC), second in command (SIC) or Flight Engineer (FE)?
How often are seat substitutes being used?
What measured item ratings were given for each evaluation type?
What evaluation ratings are given for each evaluation type?
What measured item ratings were assigned by each evaluator?
What is the MRate grading average among evaluators?
What are MRate average statistics for evaluators?
What percent of sessions were observed by FAA inspectors?
What measured item ratings were assigned for sessions with and without FAA inspectors present?
What geographic areas are being covered in the random line checks?
What measured item ratings are being assigned for each geographic area?
What are the most frequent skill/reasons for measured item ratings?
Which Skill/Reasons are given for each MItem?
What comments are provided for each evaluation type?

Figure 3-105. Qualifications Standards Document—Regulatory Comparison Chart

Part of the Qualifications Standards Document.

Regulatory Variances.

The Advanced Qualification Program (AQP) allows development of proficiency-based training programs that encourage innovation in the methods and technologies used during instruction and evaluation, as well as efficient management of the training systems. Since these innovations may require some deviations from the current regulations, the approved qualification standards replace the applicable portions of the existing Title 14 of the Code of Federal Regulations (14 CFR) part 121 regulations and other Federal Aviation Administration (FAA) training guidance as the definitive basis for the training program. This section describes the variance from current regulations approved for XYZ's AQP qualification and continuing qualification curriculums.

Part 121, § 121.401(c).

Requires instructor or evaluator verification of qualification. AQP allows completion of distributed training (e.g., home study) to be verified by an entry into XYZ's flight operations computer system. Upon successful completion of a computer-generated, random question exam, completion of the exam is logged electronically to each pilot's records. In this way, qualification on distributed training is verified automatically, rather than an instructor certifying crewmember completion of the training at the training center.

Section 121.419(b)(2).

Specifies that initial ground training for pilots and Flight Engineers (FE) of Group II airplanes must be 120 programmed hours unless the FAA approves a reduction under § 121.405 guidance. XYZ's AQP initial/transition curriculum includes all subjects listed in § 121.419(a), but for most airplanes is planned for less than 120 hours. Refer to the curriculum outlines in the appendix for the specific hours planned for each curriculum in each fleet. The days of training and classroom hours planned for AQP are approximately the same number of days/hours in the currently approved part 121 programs, with principal operations inspector (POI) approval letter of hourly reduction under § 121.405.

Section 121.424.

Refers to part 121 appendix E for the maneuvers and procedures to be included in flight training, and part 121 appendix F for the maneuvers and procedures to be included in the flight check. The maneuvers and procedures for training and checking in XYZ's AQP curricula are tailored for each airplane type and crew position and comply with the guidance in the part 121 subpart Y, the current edition of Advisory Circular (AC) 120-54, Advanced Qualification Program, and as approved by FAA for training and checking under AQP. Refer to the paragraph below titled § 121.441(b)(1) and part 121 appendices E & F for an explanation of the maneuver variances.

Section 121.427(c)(1)(iii).

Specifies that recurrent ground training for pilots and FEs on Group II airplanes must consist of at least 25 hours unless reduced under § 121.405. XYZ's AQP continuing qualification (recurrent) ground training curriculum incorporates a total of 18 planned hours. This includes 5 hours of distributed training and 13 hours of self-study/classroom instruction in aircraft specific, human factors, general subjects, security, and emergency drill training. The enabling objectives to be trained and validated in the continuing qualification curriculum are presented in module format in accordance with this order, and described in the objectives section of this document. The days of training and classroom hours planned for AQP are approximately the same number of days/hours in the currently approved part 121 program, with POI approval letter of hourly reduction under § 121.405.

Section 121.433(a).

Specifies the crewmember must complete a training program approved under part 121 subpart N for the type airplane and crew position. XYZ's flight crewmembers will complete the training program approved under part 121 subpart Y (AQP).

Section 121.433(c)(1)(iii).

Specifies a 6-month pilot-in-command (PIC) recurrent training requirement. XYZ will conduct annual recurrent training and checking under the part 121 subpart Y full crew concept guidelines. Refer to the recurrent training curriculum outline in the appendix.

Section 121.433(c)(2).

Specifies that the proficiency check for pilots be as provided for under § 121.441. XYZ pilots in an AQP will complete the proficiency check as a Line Operational Evaluation (LOE) under the part 121 subpart Y full crew concept guidelines.

Section 121.434(g)(2).

References the § 121.441 proficiency check as the start of the 120 days for pilots to accomplish 100 hours of flight time for consolidation of knowledge and skills. In XYZ's AQP, the start of the 120 days for completion of consolidation of knowledge and skills will be completion of the Line Operational Evaluation.

Section 121.441(a)(1).

Specifies that the PIC accomplish a proficiency check within the preceding 12 months and in addition, within the preceding 6 months, either a proficiency check or an approved simulator course of training under § 121.409. In XYZ's AQP, PICs will be scheduled for an annual crew oriented training and check (LOE) within the required 12 months (plus or minus 1 month). However, the PIC requirement at 6 months for either a proficiency check or a simulator training session will be eliminated. Exception: PICs in certain situations will be required training at the 6-month point (plus or minus 1 month).

Part 121 appendices E & F; & FAA Order 8900.1.

Require an Air Transportation flight instructor to train pilots in the interior and exterior visual inspection. XYZ' s AQP allows the interior and exterior inspection (Supporting Proficiency Objectives (SPO) 1.1.6.2 Aircraft Inspection) to be trained and validated by a ground instructor during the ground training segment of the qualification curriculum using advanced pictorials.

Section 121.441(b)(1) and part 121 appendices E & F.

Specifies that the proficiency check for pilots include at least the procedures and maneuvers in part 121 appendix F. All appendix E events are included in appendix F. In addition, appendix E includes the following six additional events not listed for the proficiency check in appendix F:

Night takeoff and landings [II.(e) & IV.(i)];

Zero flap approaches [III.(o), PIC only];

Missed approaches that include a power plant failure [III.(p)(4)];

Maneuvers	Part 121 Appendix E Air Carrier Training	Practical Test Standards FAA-S-8081-5E	Part 121 Appendix F Proficiency Check	AQP Qualification Curriculum	AQP Continuing Qualification Curriculum
Preflight					
Equipment Examination	N/A	Required (Page 1-1)	Required	Written/ETS/ Oral	Written/ETS/ Oral
Interior Preflight Inspection	Required	Required (Page 2-1)	Required	MV/LOE	Line check
Exterior Preflight Inspection	Required	Required (Page 2-1)	Required	MV/LOE	Line check
Taxiing	Required	Required (Page 2-3)	Required	MV/LOE	Line check
Powerplant Checks	Required	Required (Page 2-3)	Required	MV/LOE	Line check
Takeoffs					
Normal Takeoffs	Required	Required (Page 2-5)	Required	MV/LOE	Line check
Instrument Takeoff	Required	Required (Page 2-6)	Required	MV/LOE	MV/LOE
Crosswind Takeoff	Required	Required (Page 2-5)	Required	MV/LOE	Line check
Takeoff with Powerplant Failure	Required	Required (Page 2-7)	Required	MV/LOE	MV/LOE
Rejected Takeoff	Required	Required (Page 2-8)	Required	MV/LOE	MV/LOE

Instrument Procedures					
Area Departure and Arrival	Required	Required (Pages 2-9; 2-15)	Required [1 Waivable]	MV/LOE	Line check
Holding	Required	Required (Page 2-16)	Required [Waivable]	MV/LOE	Brief
Normal ILS	Required	Required (Pages 2-16; 2-17)	Required	MV/LOE	MV/LOE
Autopilot Coupled ILS	Required	Not Required (Pages 2-16; 2-17)	Required	Train to Proficiency	MV/LOE
Manually Controlled ILS with Powerplant Failure	Required	Required (Pages 2-16; 2-17)	Required	MV/LOE	MV/LOE
Non-Precision Approach	Required	Required (Pages 2-18; 2-20)	Required	MV/LOE	MV/LOE
Second Non-precision Approach	Required	Required (Pages 2-18; 2-20)	Required	Train to Proficiency	Train to Proficiency
Circling Approach	Not Required	Required (Page 2-20) Note 5	Required [Waivable]	Train to Proficiency	Brief
Missed Approach from ILS	Required	Required (Pages 2-21; 2-22)	Required	MV/LOE	MV/LOE
Additional Missed Approach	Required	Required (Pages 2-21; 2-22)	Required	Train to Proficiency	Train to Proficiency
Missed Approach with Powerplant Failure	Required	Required (Pages 2-21; 2-22)	Examiner Discretion	MV/LOE	MV/LOE

Landing and go around with the horizontal stabilizer out of trim [IV.(b), PIC only];

Zero flap landings if the Administrator finds that event appropriate [IV.(h), PIC only];

Manual reversion (if appropriate) [IV(i)].

In accordance with part 121 subpart Y and AC 120-54, the events to be trained and validated/evaluated in XYZ's AQP are the Terminal Proficiency Objectives (TPO) and SPO described in the Proficiency Objectives section of this document. While occasionally labeled differently, these TPOs and SPOs are very similar to the events listed in appendices E and F, and all appendix E and F events are included, except steep turns and circling approaches. Circling approaches are not authorized in XYZ's operations and are not included in the curriculum. Refer to the Training & Evaluation Strategy section of this document for more information on training and evaluation procedures.

Part 121 appendix H(6), Advanced Simulation Training Program.

Specifies that a special Line-Oriented Flight Training (LOFT) program is required, consisting of at least a 4-hour course of training for each flightcrew, including at least 2 flight segments of the operator's route: 1 segment of normal operating procedures and 1 segment in appropriate abnormal and emergency flight operations. XYZ's AQP is structured to comply with the guidance contained in part 121 subpart Y and AC 120-54. As such, training, validation, and evaluation are conducted with a complete crew using the concepts of LOS. While XYZ's AQP does not currently include a LOFT, it does include Special Purpose Operational Training (SPOT) sessions and incorporates an LOE as the final performance evaluation to confirm operational proficiency. In all respects, the LOE resembles the traditional LOFT scenarios currently used in the approved advanced simulation training program.

Inflight Maneuvers					
Steep Turns	Required	Required (Page 2-10)	Required	Train to Proficiency	N/A
Approach to Stalls	Required	Required (Pages 2-10; 2-11)	Required [2 Waivable]	Train to Proficiency	Train to Proficiency
Flight Characteristics	As Necessary	As Necessary	As Necessary	Train to Proficiency	N/A
Powerplant Failures	Required	Required (Page 2-12)	Required	MV/LOE	MV/LOE
Abnormal and Emergency Procedures will include all systems maneuvers and procedures as required by Aircraft Flight Manual (AFM)	Required	Required (Pages 2-29; 2-30)	Required	A sampling of Abnormals and Emergencies will trained in the simulator and evaluated during MV and LOE.	Abnormals and Emergencies will be evaluated during ground school, trained in the simulator and evaluated during MV and LOE.
Landings					
Normal Landings	Required	Required (Page 2-23)	Required	MV/LOE	Line Check
Landing from an ILS	Required	Required (Page 2-24)	Required	MV/LOE	MV/LOE
Crosswind Landing	Required	Required (Page 2-23)	Required	MV/LOE	MV/LOE
Landing with Powerplant Failure	Required	Required (Page 2-25)	Required	MV/LOE	MV/LOE
Landing from a Circling Approach	Required	Required (Page 2-26)	Required	Train to Proficiency	N/A
Rejected Landing	Required	Required (Page 2-27)	Required	MV/LOE	MV/LOE
Zero Flap Landing	Required	Required (Page 2-28)	Required	FSB Report	FSB Report

Postflight					
After Landing	Required	Required (Page 2-31)	Required	Line Check	Line Check
Parking and Security	Required	Required (Page 2-31)	Required	Line Check	Line Check
Training					
Windshear/Microburst				Train to Proficiency	Train to Proficiency
GPWS Escape				Train to Proficiency	Train to Proficiency
Low Vis Taxi				Train to Proficiency	Train to Proficiency
PRM				Train to Proficiency	Train to Proficiency
Upsets/Catastrophic Failures				Train to Proficiency	Train to Proficiency
Mis Trim				Train to Proficiency	Train to Proficiency
RNAV Approach				Train to Proficiency	Train to Proficiency

RESERVED. Paragraphs 3-1576 through 3-1590.