CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

8400.10 CHG 6

7/28/92

SUBJ: AIR TRANSPORTATION OPERATIONS INSPECTOR'S HANDBOOK

1. PURPOSE. This change transmits the following:

a. Volume 2. Air Operator Certification
Chapter 3. Selected Practices
Section 4. Amendment, Surrender, Suspension, Revocation, and Replacement of Operating Certificates

b. Volume 3. Air Operator Technical Administration
Chapter 1. Operations Specifications
Section 7. Amendment, Surrender, and Suspension of Operations Specifications
Chapter 5. Aircraft Dispatcher Training and Qualification Programs
Section 1. Aircraft Dispatcher Training Curriculums
Section 3. Aircraft Dispatcher Basic Indoctrination Curriculum Segments
Section 4. Aircraft Dispatcher Initial Equipment and Transition Ground Training Curriculum Segments
Section 5. Aircraft Dispatcher Qualification Curriculum Segments and Recurrent and Requalification Curriculums
Chapter 6. Operational Control
Section 1. General Topics
Section 2. Flight Dispatch Systems and Domestic Operating Rules
Section 3. Part 121 Flight Release Systems and Supplemental Operating Rules
Section 4. Part 121 Flag Operations, Supplemental Operations Outside the Contiguous States, and Extended Overwater Operations
Section 5. Part 135 Flight-Locating Systems and Operating Rules

c. Volume 4. Aircraft Equipment and Operational Authorizations
- Chapter 5. Air Ambulance Operations
  - Section 1. Background and Definitions
  - Section 2. Authorizations for Part 135 Air Ambulance Services
  - Section 3. Air Ambulance Service Operational Procedures
  - Section 4. Air Ambulance Service Training Programs

d. Volume 5. Airman Certification and Designated Examiners
- Chapter 1. Direction, Guidance, and Procedures
  - Section 2. Phases of Certification
- Chapter 5. Air Transportation Designated Examiners
  - Section 1. General
  - Section 2. Administration of Designated Examiner Programs
- Chapter 6. Aircrew Designated Examiner (ADE) Program
  - Section 1. General
  - Section 2. ADE Program Management
  - Section 3. Aircrew Program Designees (APD's)
- Chapter 7. Aircraft Navigator Certificates
  - Section 1. General
- Chapter 9. Selected Practices
  - Section 8. U.S. Airman Certificates and Special Purpose Airman Certificates Issued on the Basis of a Foreign Airman Certificate
  - Section 9. International Crewmember Certificates

e. Volume 6. Surveillance
- Chapter 2. Specific Types of Inspections
  - Section 5. Operator Trip Records Inspections (PTRS Code 1628)
  - Section 6. Manuals Inspections (PTRS Code 1621)
  - Section 7. Overwater En Route Inspections (PTRS Code 1624)
  - Section 8. Proficiency and Competency Check Inspections (PTRS Code 1632)

2. EXPLANATION OF CHANGES.

a. The direction and guidance published in this change supersede RELATED information in FAA Orders 8430.1D and 8430.6C. Portions of both 8430.1D and 8430.6C remain in effect.

b. Handbook bulletins will no longer be included with published Changes to the 8400.10 handbook. As a result, inspectors must discard the existing published handbook bulletin index and accompanying bulletins in Appendix 3. In the future, inspectors will retrieve the latest handbook bulletins from the FAA.MAIL 8400.10 Bulletin Board and file them in Appendix 3 after page i.

3. DISPOSITION OF TRANSMITTAL. This transmittal is to be RETAINED AND FILED IN THE BACK OF THIS HANDBOOK until it is superseded by a new basic order.

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Thomas C. Accardi
Director, Flight Standards Service

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SECTION 4. AMENDMENT, SURRENDER, SUSPENSION, REVOCATION, AND REPLACEMENT OF OPERATING CERTIFICATES

233. GENERAL. This section contains information, direction, and guidance to be used by principal operations inspectors (POI's) and other involved inspectors for accomplishing the amendment, surrender, suspension, revocation, and replacement of operating certificates.

A. *Background.* The basis for these various certificate actions is found in section 609 of the Federal Aviation Act (FA Act) and in FAR's 13.19, 121.29, 121.53, 121.77, 135.9, and 135.15. These certificate actions may be initiated by either the FAA or the operator. These actions can proceed with a full agreement between the POI and the operator or they may be contested.

NOTE: The term "operator" is used in this section to refer to the holder of either an air carrier certificate or an operating certificate (see volume 2, chapter 1, section 2).

B. *Definitions.* Inspectors should have an understanding of the distinctions between the various certificate actions that can occur. Inspectors should also have a knowledge of the following general definitions:

- *Certificate:* A certificate is a document that contains the name of the operator, a broad statement of the operator's operating authority, and an effective date. An operator may not conduct operations without a currently valid certificate.

- *Amendment of a Certificate:* The amendment of a certificate is a change to the information on the face of the document, usually as the result of a name change or administrative change. Certificates rarely require amendment because the details of operating authorizations are contained in the operations specifications.

- *Surrender of a Certificate:* The surrender of a certificate occurs when an operator voluntarily gives up operating authority.

- *Suspension of a Certificate:* The suspension of a certificate is the temporary, involuntary removal of an operator's operating authority by the FAA using due process of law. Suspension usually results in either the restoration, revocation, or surrender of the operator's operating authority.

- *Revocation of a Certificate:* The revocation of a certificate is the permanent, involuntary removal of an operator's operating authority by the FAA using due process of law.

- *Replacement of a Certificate:* The replacement of a certificate is the reissuance of a new certificate to an operator when the operator's original certificate has either been lost or destroyed.

235. AMENDMENT OF A CERTIFICATE. An operator's certificate must be amended whenever there is a change in the information on the face of the document. For example, the amendment of a certificate is required when there is a change in the legal name of the owner or an administrative change.

A. *Administrative Change to a Certificate.* An administrative change to a certificate may be required because of an error in the preparation of a certificate or because a piece of information on the certificate has become outdated. When an administrative change is made to a certificate, the original certificate number and date are retained. An administrative change to a certificate does not interrupt the operator's authority to conduct operations. Some events which necessitate an administrative change to an operator's certificate are as follows:

- A change in the address of the operator's principal base of operations

- A change to correct a mistake

- A change in the certificate-holding district office (CHDO)

- A change in name of the FAA or a change in the FA Act

NOTE: DBA's (doing business as) are no longer placed on certificates (see paragraph 137A of this handbook volume). The deletion of a DBA is considered to be an administrative change. The addition or deletion of a DBA does, however, require an amendment to paragraph A1 of the operator's OpSpecs.

B. *Operator-Initiated Amendment.* In the case of an operator initiating an amendment, such as a name or ownership change, documentation is required. The POI must determine what these requirements are and discuss the requirement with the operator. A clear understanding at this stage of the process precludes difficulties from arising later.

(1) FAR 121.77 and FAR 135.15 require that an operator desiring an amendment submit an application for amendment to the CHDO at least 15 working days before the requested effective date. The application consists of a letter of request and any required documentation.

(2) The POI shall conduct a preliminary review of the application for completeness and general acceptability. The entire review process may be little more than a formality. In such cases, the POI may issue the certificate immediately upon completion of the review. In other cases, the full review process can require detailed analysis. When the full review cannot be completed within 10 days, the POI shall notify the operator of the estimated time that will be required. In the case of an administrative change, the POI should reissue the certificate with the original effective date, certificate number, and an added amended date.

(3) When the operator submits incomplete documentation, the POI shall promptly inform the operator that action cannot proceed until the deficiency is corrected. Usually these deficiencies will be overcome in the normal process of events. Should the operator's proposal be unacceptable or should the operator fail to proceed, the POI shall notify the operator in writing that the proposal has been denied. The letter must include a clear statement of why the proposal has been denied.

(4) FAR 121.77(c) and FAR 135.15(d) state that those operators that have received a denial to an application for amendment may petition the Director of Flight Standards Services (AFS-1) for a reconsideration. The petition must be made within 30 days of the operator's receipt of the letter of denial. The operator may submit the appeal directly to the CHDO. In such a case, the CHDO shall immediately notify AFS-1 and forward a copy of the petition through the regional flight standards division (RFSD) and AFS-200. An analysis of the circumstances surrounding the matter shall be forwarded by the same route within 5 working days.

(5) A new certificate number is required when there is a change in ownership or operator name. When the POI is ready to prepare the new certificate, the POI must contact AVN-120. The POI should give an explanation of the changes to AVN-120 and request a new certificate number. In most cases, the designator element of the certificate number will remain the same. The type certificate code and the numeric or alpha suffix element should be appropriately changed to form the new certificate number (see volume 2, chapter 1, section 4).

(6) An amended certificate shall be prepared with the new certificate number and a new effective date. The amended certificate shall be exchanged for the superseded certificate. The operator's Vital Information System (VIS) file should be updated to reflect any new information that may be on the certificate.

C. *FAA-Initiated Amendment.* On rare occasion, it is necessary for the FAA to make an amendment to an operator's certificate. In this case the POI shall contact the operator and explain the circumstances. The POI shall prepare the amended certificate and have the operator exchange its current certificate for the amended one.

NOTE: One circumstance which has caused difficulty is a change in CHDO. The FAA may decide to change the CHDO without the operator's concurrence. Should this situation arise, the POI should explain to the operator that, since such a change is an internal FAA matter, it does not constitute an amendment of the operator's certificate. In this case, the POI should make the change and issue the changed certificate to the operator. The operator may not appeal this type of action.

D. *Re-Examination.* A change in ownership or other significant event requires an evaluation by the POI to determine whether the operator remains properly and adequately equipped and able to conduct safe operations. The evaluation process may or may not lead to a complete re-examination. When a substantial change in an operation

occurs, the POI may find it necessary to increase surveillanceof the operation or to initiate a formal re-examination of the operator under FAR 13.19(b) and section 609 of the FA Act. A significant event would be a change which could affect the safety of that operation.

(1) POI's should initiate an evaluation of an operator when the following events occur:

- A substantial change in management personnel
- A substantial change in flightcrew personnel
- Signs of significant financial stress
- The addition of a new type or make model aircraft to the operator's fleet
- A change in the base of operations
- A change in the operations conducted, such as Part 135 to Part 121
- A cessation of operations in excess of 30 days (This is not meant to include seasonal operators or on-demand operators for whom a 30-day lapse is a normal condition of business.)

(2) POI's should be aware that problems requiring a formal re-examination do not always occur immediately after a change in name or ownership occurs. When a change in name or ownership occurs, the POI shall request a letter from the operator that contains details of the changes in operations that are planned for a period of at least 6 months. These changes will be evaluated by the POI to determine the need for a formal re-examination. The POI may find later that, in spite of an operator's intention, other changes have occurred and a recertification may then be required.

237. SURRENDER OF A CERTIFICATE. POI's may request, but may not compel operators to voluntarily surrender, certificates. An operator may voluntarily surrender a certificate at any time. To do so, the operator should send the certificate to the POI with a written request that the certificate be cancelled and a statement of why the certificate is being surrendered. The request must be signed by either the operator, agent for service, or a court-appointed individual authorized to act for the operator. This procedure also applies to certificates that have been lost or destroyed. POI's shall enter a brief statement of the circumstances surrounding the voluntary surrender of the certificate in the "Remarks" section of the operator's VIS. A certificate that has been surrendered should be retained at the CHDO along with a copy of the operator's OpSpecs for a period of 3 years.

A. *Reinstatement of Voluntarily Surrendered Certificate.* A voluntarily surrendered certificate may not be reinstated. If the operator subsequently decides to reinstate operations, the operator must apply and qualify for a new certificate.

B. *Surrendering an Operating Certificate in Lieu of an Enforcement Action.* Operators may propose surrendering an operating certificate in lieu of enforcement action. POI's should not agree to such an action without the concurrence of the RFSD and Regional Counsel. Should such an agreement be reached, the operator's letter of request must contain a statement that the certificate is being surrendered on the basis that enforcement action will not be taken. When a certificate is surrendered, the POI shall enter a brief statement of the circumstances surrounding the voluntary surrender of the certificate in the "Remarks" section of the operator's VIS file.

239. SUSPENSION OF A CERTIFICATE. When a certificate is suspended, the Regional Counsel office will issue the operator a letter of suspension containing instructions with which the operator must comply. In general, the regional counsel will request that the operator's certificate be forwarded to the regional office, where it will be held until the end of the suspension period. Information concerning the disposition of a suspended certificate can be found in Order 2150.3A. When a certificate has been suspended, the operator's VIS file should be amended to reflect the suspended status.

241. REVOCATION OF A CERTIFICATE. Operators must forward revoked certificates to the address contained in the order revoking the certificate. Additionally, the operator's VIS file should be amended to show that the certificate has been revoked and should contain a statement of the reasons for the action in the "Remarks" section. Should revocation be appropriate, the POI should contact the operator and request that the operator voluntarily surrender the certificate. Should the operator refuse, the

POI shall proceed in accordance with the instructions in paragraph 245.A on emergency revocation.

243. REPLACEMENT OF A LOST OR DESTROYED CERTIFICATE. A lost or destroyed certificate may be replaced by the CHDO using the same information that was on the original certificate. The replacement certificate should have the word "DUPLICATE" annotated on the front of the certificate. A copy of the duplicate certificate should be retained in the CHDO's files. In the case of a destroyed certificate, the operator should send any remains of the certificate to the POI with a written request that the certificate be replaced and a statement of why the certificate is being surrendered. The request must be signed by the operator or an agent for service authorized to act for the operator.

245. ADVERSE ACTIONS. According to FAR 13.19(b), the FAA may find it necessary to amend, suspend, or revoke a certificate without the operator's concurrence. An adverse action of this nature should be initiated by the POI only after an unsuccessful attempt has been made to negotiate with the operator concerning the voluntary amendment or surrendering of the certificate. When an adverse action is necessary, the RFSD manager and the Regional Counsel will confer and decide whether an order should be issued for the amendment, suspension, or revocation of the operator's certificate. The POI must prepare the enforcement package in accordance with Order 2150.3A, "Compliance and Enforcement Program." The order to amend, suspend, or revoke a certificate should be a mutual decision between the POI, the RFSD manager, and the Regional Counsel.

A. *Emergency Revocation.* FAR 13.19 provides for the operator to have a hearing before the order which amends, suspends, or revokes the certificate can take effect. Should an emergency exist, however, the order which amends, suspends, or revokes the certificate may be made effective immediately.

B. *Appeals.* The operator may appeal an order amending, suspending, or revoking its certificate to the National Transportation Safety Board (NTSB). Should the operator elect to appeal a certificate action to the NTSB, the effective date of the order is stayed until the NTSB acts on the appeal, unless it is an emergency order.

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which can be incorporated into the OpSpecs by reference to the list in H120.

B. If the airports are to be listed in H120, the OpSpecs worksheet and computer provide a template for the information which must be listed. This information includes the following:

- Airport name
- Three-letter identifier of the airport, if available
- Aircraft authorized to use the airport (Normally, the operator's aircraft can be listed in the seven spaces provided at the top of the "Authorized Aircraft" column.)
- A notation that the airport is a regular airport (R) for the type of aircraft authorized

C. The following is an example of how this information can be formatted:

AIRPORT NAME	IDENT	AIRCRAFT AUTHORIZED					P.FOR IDENT
		SK61	BH222				
Albany County	ALB	R	R				
John F. Kennedy Intl	JFK	R	R				
La Guardia	LGA	R	R				

NOTE: If an airport is designated as provisional, the regular airport for which it serves as a provisional airport must be annotated. (Except in unique situations, an airport should not be designated as a provisional airport if it is located more than 30 statute miles from the regular airport.)

D. If the operator provides a list of airports to be incorporated into H120, this list must provide the same type of information previously discussed. This list must be annotated with the effective date of the listing. The list does not need to be physically attached to H120, but it must be maintained on file in the CHDO with copies of the operator's OpSpecs. If a list is provided by the operator, no entries should be made on the OpSpecs worksheet or in the computer. If no entry is made the computer will automatically print "See Attached Listing" below the text of H120.

E. H120 specifies that the operator must maintain a list of alternate airports which can be used. The list of alternates may be integrated into the list provided by the operator, if desired. If a separate list of alternate airports is maintained by the operator, it is not necessary for the FAA to maintain a copy. The POI, however, should occasionally inspect the list of alternates to determine airport and aircraft compatibility.

242. - 260. RESERVED.

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which can be incorporated into the OpSpecs by reference to the list in H120.

B. If the airports are to be listed in H120, the OpSpecs worksheet and computer provide a template for the information which must be listed. This information includes the following:

- Airport name
- Three-letter identifier of the airport, if available
- Aircraft authorized to use the airport (Normally, the operator's aircraft can be listed in the seven spaces provided at the top of the "Authorized Aircraft" column.)
- A notation that the airport is a regular airport (R) for the type of aircraft authorized

C. The following is an example of how this information can be formatted:

AIRPORT NAME	IDENT	AIRCRAFT AUTHORIZED					P.FOR IDENT
		SK61	BH222				
Albany County	ALB	R	R				
John F. Kennedy Intl	JFK	R	R				
La Guardia	LGA	R	R				

NOTE: If an airport is designated as provisional, the regular airport for which it serves as a provisional airport must be annotated. (Except in unique situations, an airport should not be designated as a provisional airport if it is located more than 30 statute miles from the regular airport.)

D. If the operator provides a list of airports to be incorporated into H120, this list must provide the same type of information previously discussed. This list must be annotated with the effective date of the listing. The list does not need to be physically attached to H120, but it must be maintained on file in the CHDO with copies of the operator's OpSpecs. If a list is provided by the operator, no entries should be made on the OpSpecs worksheet or in the computer. If no entry is made the computer will automatically print "See Attached Listing" below the text of H120.

E. H120 specifies that the operator must maintain a list of alternate airports which can be used. The list of alternates may be integrated into the list provided by the operator, if desired. If a separate list of alternate airports is maintained by the operator, it is not necessary for the FAA to maintain a copy. The POI, however, should occasionally inspect the list of alternates to determine airport and aircraft compatibility.

242. - 260. RESERVED.

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SECTION 7. AMENDMENT, SURRENDER, AND SUSPENSION OF OPERATIONS SPECIFICATIONS

261. APPLICABILITY. FAR 121.79 and FAR 135.17 specify that operation specifications (OpSpecs) can be amended as a result of an operator's request or because the FAA determines that safety in air transportation or air commerce (in the case of a commercial operator) is affected and the change is in the public interest. In addition, an operator's OpSpecs may be amended by the FAA due to a change in the operator's operating environment. This section contains direction and guidance to be used by principal inspectors for the amendment, surrender, and suspension of OpSpecs for Part 121 and Part 135 air carriers and commercial operators (see volume 2, chapter 4 of this handbook for information on the processing of Part 129 foreign flag air carrier OpSpecs).

263. AMENDMENT PROCESS USING AUTOMATED OPSPECS. Regardless of who initiates the amendment of an operator's OpSpecs, the automation process involves the same basic procedures. The amendment of the OpSpecs may involve the principal inspector doing any of the following: entering new data to the Vital Information System (VIS), changing the OpSpecs checklist, changing the worksheets, or changing only an OpSpecs paragraph. When making such changes using the automated OpSpecs, principal inspectors should use the procedures that follow.

A. *Entry of New Data to VIS.* If new VIS data is required, the principal inspector must obtain the new data from the computer along with a copy of the current checklist. If new VIS data is not required, then the principal inspector must obtain a copy of the current checklist or, if neither the VIS nor the checklist have to be changed, then the principal inspector must obtain a set of worksheets for any affected paragraphs.

B. *Changing OpSpecs Checklist.* When the OpSpecs checklist must be changed, the principal inspector should enter or delete the appropriate statements and should also generate a set of worksheets for the affected paragraphs.

C. *Changing Worksheets.* The principal inspector should change the worksheets (whether obtained from the input of VIS or the checklist, or from the computer) by making appropriate selections and entering user-specific information. The principal inspector should then generate a draft set of the affected OpSpecs paragraphs.

D. *Changing a Standard OpSpecs Paragraph.* When Washington Headquarters changes a standard OpSpecs paragraph, the VIS data entry guide, checklists, and worksheets do not have to be changed; only the amended standard paragraph must be changed and a new page issued. In most cases, however, any change to an OpSpecs paragraph will require that the principal inspector make a corresponding change to the worksheets.

265. AMENDMENTS OF OPSPECS. When amending OpSpecs, a principal inspector should take into account the extent and complexity of the amendment. If the amendment is uncomplicated and involves only one or two paragraphs, then it may be practical to print only the affected paragraphs. If the amendment is extensive and involves entering VIS data or changing the checklist and worksheets (such as when an operator upgrades from Part 135 operations to Part 121 operations), then the principal inspector should generate a complete set of OpSpecs. The principal inspector should review the draft set of OpSpecs with the operator and, if necessary, make any corrections and resolve any conflicts. After the final corrections are made, the principal inspector should print and issue two sets of the amended OpSpecs to the applicant; one set for the applicant's review and files, and one set for receipt and return. An amendment may be initiated either at the operator's request or by FAA initiation. The procedures for these two methods of initiating an amendment are as follows:

A. *Amendment of OpSpecs at Operator's Request.* An operator may, in accordance with FAR 121.79(a)(1) or FAR 135(a)(2), initiate an application to amend its OpSpecs by submitting FAA Form 8400-8, "Operations Specifications," or by submitting a letter. Whether on the FAA Form 8400-8 or in the letter, the operator's request should include: a formal request for the desired changes, an explanation of the reasons for those changes, and any supporting information. In accordance with FAR 121.79(c) and FAR 135.17(b), the operator must file the application for amendment at least 15

days before the proposed effective date of the amendment.

(1) *Incomplete Application.* If the application is incomplete, the FAA should inform the applicant that the application is not acceptable in its present form but will be considered upon the receipt of additional, specified supporting documents and/or information.

(2) *Unacceptable Application.* The FAA may determine that the application is not acceptable because: the operator's request does not provide for an adequate level of safety in air transportation or air commerce, it would not be in the best interest of the public, or, it is in conflict with FAA policy or the FAR's. In such a case, the applicant should be informed, in writing, that the application is unacceptable and include a statement explaining why it is not acceptable. The operator will have certain rights of appeal which are discussed in paragraph 269 in this section.

B. *FAA-Initiated Amendment of OpSpecs.* If the FAA determines that an amendment to the operator's OpSpecs is justified, the FAA should amend the OpSpecs in accordance with the procedures discussed in section 2 of this chapter. In the case of a change in an operator's operating environment or when the FAA has specific safety concerns, the following procedures apply:

(1) *Change in the Operator's Operating Environment.* In some cases, the FAA may decide to amend an operator's OpSpecs due to a change in the operator's operational environment. For example, the FAA may create a new OpSpecs paragraph to ensure uniform compliance with a certain aspect of the FAR's. In such cases, the POI may initiate and amend an operator's OpSpecs due to the change, without the operator having to apply on the OpSpecs form (FAA Form 8400-8). Once the operator has demonstrated compliance with all appropriate FAR's and operational and airworthiness requirements, the OpSpecs may be issued in accordance with the procedures discussed in section 2 of this chapter.

(2) *Safety Concerns.* FAR 121.79(a)(2) and FAR 135.17(a)(1) provide the authority for the FAA to unilaterally amend an operator's OpSpecs when the FAA has determined that safety in air transportation and the public interest necessitates such an amendment. When amending an operator's OpSpecs under these regulations, the FAA is required by FAR 121.79(b) and FAR 135.17(d) to notify the operator in writing and then allow a minimum of 7 days for comments regarding the proposal. The 7-day period provides the operator with an opportunity to submit written information, views, and arguments on the proposal. After reviewing the comments, the FSDO either rescinds or adopts the amendment. If the FAA decides to amend the OpSpecs, the final amended OpSpecs should have an effective date of not less than 30 days after receipt by the operator. The operator has certain appeal rights which are discussed in paragraph 269. Examples of the types of FAA-initiated amendments due to safety concerns are as follows:

(a) The FAA will propose to amend an operator's OpSpecs when it is determined that the operator's operating environment or its operational capability is no longer consistent with the operating authorizations, conditions, and limitations contained in its OpSpecs. Examples of such cases are when the operator:

- Terminates operations with a specific make/model/series of aircraft that is authorized in its OpSpecs
- Has a series of accidents or incidents involving a particular type of operation (such as low visibility takeoffs and/or landings at a time when the OpSpecs authorize lower-than-standard weather minimums)
- Terminates a particular type of operation or area of operation (such as when the operator no longer conducts flag or MNPS operations)

(b) The FAA also amends an operator's OpSpecs when the standard automated OpSpecs have been amended on a national basis and Washington Headquarters has requested that POI's amend all of their operator's OpSpecs. In this case, the OpSpecs should be amended in accordance with guidelines and procedures that have been established by Washington Headquarters.

267. EMERGENCY AMENDMENT OF OPSPECS. FAR 121.79(b) and FAR 135.17(d) provide that the FAA may amend an operator's OpSpecs without a stay and also that the amendment will become effective immediately upon receipt by the operator. This case applies only when an emergency exists which requires immediate action with

respect to safety in air transportation and when the other procedures to amend OpSpecs found in FAR 121.79 and FAR 135.17 are impractical or contrary to the public interest. One example of when an emergency amendment to an operator's OpSpecs would be justified would be when the operator is knowingly operating a make/model/series of aircraft that is authorized in paragraph A3 of its OpSpecs, but is doing so either with unqualified crewmembers or with the aircraft not in an airworthy condition. Another example would be when the operator is continuing to operate flights into an airport or area that has been shown to be unsafe due to inadequate or unavailable facilities either because of a natural disaster or civil strife.

A. *Contents of Emergency Order.* In accordance with FAR 121.79(b), if an emergency amendment is made to an operator's OpSpecs, the amendment must contain the finding of the emergency action and the reasons for the action. The emergency order must also contain a statement that within 30 days, the RFSD manager will consider any facts presented by the operator which show that the emergency order is unwarranted or that the deficiencies in question have been corrected.

B. *Further Guidance.* An emergency amendment to an operator's OpSpecs does not constitute a certificate action within the meaning of Section 609 of the FA Act but is a certificate action within the meaning of Section 1005 of the FA Act and FAR 13.20. An emergency amendment to an operator's OpSpecs requires close coordination with the POI, the RFSD, and the office of Regional Counsel. A limited amount of guidance concerning such orders is contained in FAA Order 2150.3, "Compliance and Enforcement Program."

269. OPERATOR APPEAL RIGHTS. In all situations involving OpSpecs amendments or FAA-initiated, non-emergency amendments, an operator has certain appeal rights. These appeal rights are provided in FAR's 121.79 and 135.17, and are exercised according to the way in which the amendment was initiated, as follows:

A. *Operator-Requested Amendments.* If the FAA has determined that an operator's request for an amendment to its OpSpecs is unacceptable, the operator may, within 30 days after receipt of the CHDO's notice of disapproval, petition the Director of Flight Standards Service (AFS-1) to reconsider the CHDO's refusal to amend the OpSpecs (see paragraph 265A). During the course of the reconsideration time period, no amendments to the OpSpecs paragraph(s) will be made. A petition made by an operator more than 30 days after receiving the notice of disapproval, will not be considered by the FAA. If AFS-1 determines that an amendment to an operator's OpSpecs is justified, the appropriate RFSD office will be notified and instructed to amend the OpSpecs either as requested by the operator or as amended by the FAA. If AFS-1 determines, after considering the operator's petition, that an amendment is not appropriate, the operator and the RFSD will be notified accordingly. In the case of disapproval, the FAR's do not provide any additional appeal rights for the operator.

B. *FAA-Initiated Amendments.* When the FAA determines that an amendment to an operator's OpSpecs is necessary (see paragraph 265B), a notice of the proposed amendment must be provided, in writing, to the operator. The notice provides for not less than a 7-day period within which the operator may submit to the CHDO any written data, views, and arguments concerning the proposed amendment. If, after considering any objections the operator may have, the CHDO determines that the proposed amendment should be made, the CHDO will notify the operator, and send the amended OpSpec. The OpSpec will have an effective date of not less than 30 days after the date that the operator received the notice. The operator may, within the 30-day period, appeal the proposed amendment to the Director of Flight Standards Service (AFS-1). If the operator elects to petition AFS-1 for reconsideration of the proposed amendment, the effective date of the amendment is stayed until a decision has been made by AFS-1 as to the final disposition of the proposed amendment. If AFS-1 determines that the proposed amendment to the operator's OpSpecs is justified, the appropriate RFSD office will be notified to amend the OpSpecs. If AFS-1 determines, after considering the operator's petition, that the proposed amendment is not appropriate, the operator and the RFSD will be notified that there will be no amendment.

NOTE: If AFS-1 denies the appeal, the FAR's do not provide any additional appeal rights for the operator.

C. *Emergency Amendments.* As stated in paragraph 267, an emergency order amending an operator's OpSpecs must contain a statement that the operator has 30 days to reply in writing to the order or to request a hearing in accordance with Subpart D of Part 13. The emergency amendment to the OpSpecs remains effective until the matter is finally adjudicated.

271. SURRENDERING OF OPSPECS. Upon a change in its operating environment, an operator should exchange the appropriate paragraphs of its OpSpecs for the amended paragraphs that reflect the new operating environment.

A. *Criteria.* The criteria to hold a particular OpSpecs authorization is no less than that necessary for its original issuance. For example, if an operator was issued an authorization to conduct operations in MNPS airspace but no longer has aircraft equipped to conduct that kind of operation, the operator must surrender the MNPS authorization.

(1) If an operator ceases all operations and is no longer equipped, or able to conduct any kind of operation, the CHDO shall request that the operator voluntarily surrender all of the OpSpecs. Depending upon the circumstances, the CHDO may also request that the operator voluntarily surrender the certificate (see volume 2, chapter 3, section 4 for information on the surrender of certificates).

(2) Seasonal operators who are equipped to resume operations are not required to surrender OpSpecs during the inactive season.

B. *Refusal to Surrender.* If an operator does not meet the requirement to hold an OpSpecs paragraph, but refuses to surrender the paragraph, the POI shall amend the OpSpecs as discussed in paragraph 269 of this section. If safety in air commerce is affected, then an emergency amendment is appropriate.

C. *Voluntary Surrender.* If an operator voluntarily surrenders a part of its OpSpecs, an amended OpSpecs must be issued to reflect the operator's new operating environment. If an operator surrenders all of its OpSpecs, the OpSpecs shall be deleted from the VIS OpSpecs subsystem as described in the OpSpecs Subsystem User Guide.

273. SUSPENSION OF OPSPECS. The suspension of an operator's OpSpecs generally occurs after legal enforcement action. FAA Order 2150.3, "Compliance and Enforcement Program," contains the information, policies, guidelines, and procedures to be followed by principal inspectors when taking legal enforcement action against an operator and the when taking actions that would result in the suspension of the operator's OpSpecs.

274. - 280. RESERVED.

[PAGES 3-127 THROUGH 3-156 RESERVED]

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274. - 280. RESERVED.

[PAGES 3-127 THROUGH 3-156 RESERVED]

CHAPTER 5. AIRCRAFT DISPATCHER TRAINING AND QUALIFICATION PROGRAMS

SECTION 1. AIRCRAFT DISPATCHER TRAINING CURRICULUMS

1045. GENERAL. This chapter contains aircraft dispatcher training and qualification requirements and information, direction, and guidance for FAA personnel responsible for the evaluation and approval of aircraft dispatcher training curriculums. Each flag or domestic operator must qualify and use certified aircraft dispatchers to exercise operational control over its flights. Each flag or domestic operator must also obtain FAA approval of aircraft dispatcher training curriculums. Furthermore, each operator must ensure that its training program is complete, current, and in compliance with the regulations. This section contains definitions relevant to aircraft dispatcher training, a schematic depiction of aircraft dispatcher training programs, and guidance for inspectors concerning the training requirements and curriculum development for the five categories of training applicable to aircraft dispatchers.

NOTE: Unless otherwise specified in this chapter, the term "operator" applies equally to an applicant for a certificate and to an existing certificate holder.

1047. DEFINITIONS. The terms used in this chapter concerning training programs are consistent with their use in chapter 2 of this volume, "Training Programs and Airman Qualifications." The definitions of these terms are tailored specifically to aircraft dispatchers as follows:

- *Training Program:* A system of instruction which includes curriculums, facilities, instructors, supervisors, courseware, instructional delivery methods, and testing and checking procedures. A training program must satisfy Part 121 training program requirements and ensure that each aircraft dispatcher remains adequately trained and current for each aircraft and kind of operation which the operator conducts.

- *Categories of Training:* A classification of training based on who will receive the training and on the purpose of the training. There are five categories of training that apply to aircraft dispatchers: initial new-hire (FAR's 121.451 and 121.422), initial equipment (FAR 121.422), transition (FAR 121.422), recurrent (FAR 121.427), and requalification (FAR's 121.422 and 121.427). Each category of training consists of one or more curriculums.

- *Curriculum:* A complete training agenda for one or more aircraft types; for example, a B-727 transition curriculum. Each curriculum consists of several curriculum segments.

- *Curriculum Segment:* An integral phase of training which can be separately evaluated and individually approved, but does not by itself qualify a person in the aircraft dispatcher duty position. The three curriculum segments relevant to aircraft dispatcher training are: basic indoctrination, ground training, and qualification. Each curriculum segment consists of one or more training modules.

- *Training Module:* A self-contained unit of instruction within a curriculum segment which contains descriptive information, elements, or events which relate to a specific subject. For example, an initial new-hire ground training curriculum segment must contain a training module (composed of "elements") pertaining to meteorology. As another example, a basic indoctrination curriculum segment must include a module pertaining to appropriate provisions of the FAR's. A training module includes an outline, appropriate courseware, and instructional delivery methods.

- *Checking and Qualification Module:* Qualification curriculum segments containing the competency check and operational familiarization modules referred to as subjects in Part 121.

- *Element:* The rudiment of the subject matter in

a training, checking, or qualification module that is subject-oriented. For example, a module of a basic indoctrination curriculum segment may include such elements as aircraft nomenclature and organization of the operator's general operations manual (GOM).

- *Event:* The rudiment of the subject matter in a training, checking, or qualification module that is task-oriented. An event encompasses the use of a specific procedure or procedures. During a training event, a student has the opportunity for instruction, demonstration, and/or practice using specific procedures. During a checking or qualification event, the evaluator has the opportunity to determine a student's ability to correctly accomplish a specific task without instruction or supervision.

- *Courseware:* Instructional material developed for each curriculum. This is information in lesson plans, instructor guides, computer software programs, audiovisual programs, workbooks, aircraft dispatcher manuals, and handouts. Courseware must accurately reflect curriculum requirements, be effectively organized, and properly integrate with instructional delivery methods.

- *Instructional Delivery Methods:* Methodology for conveying information to a student. For example, this may include lectures, demonstrations, simulations, audiovisual presentations, programmed instruction, workshops, and drills. Training devices, aircraft, and computer work stations are also considered to be instructional delivery methods.

- *Testing and Checking:* Methods for evaluating applicants as they demonstrate a required level of knowledge in a subject, and as they apply (if appropriate) the knowledge and skills learned in instructional situations to practical situations.

- *Training Hours:* The total amount of time necessary to complete the training required by a curriculum segment. Training hours must provide opportunity for instruction, demonstration, practice, and testing, as appropriate. This time must be specified as a specific number of hours on the curriculum segment outline.

- *Programmed Hours:* The hours specified in Part 121 for initial new-hire, initial equipment, and recurrent categories of training. Programmed hours are specified in curriculum segment outlines in terms of training hours.

- *Training/Checking Month:* The base calendar month during which an aircraft dispatcher is due to receive required recurrent training or a competency check. "Calendar" month means the first day through the last day of a particular month.

- *Eligibility Period:* Three calendar months: the calendar month before the "training/checking month," the "training/checking month," and the calendar month after the "training/checking month." Training or checking completed during the eligibility period is considered to be completed during the "training/checking month."

NOTE: If the training or checking occurs during the eligibility period, the "training/checking month" remains the same. A request to change the "training/checking month" to balance the training workload, must be coordinated with the principal operations inspector (POI) and annotated in the individual airman's training record. This change must occur before the eligibility period.

- *Initial Approval:* The conditional authorization of an operator to begin instruction to qualify personnel under a specific curriculum or curriculum segment pending an evaluation of training effectiveness. This authorization is given in the form of an initial approval letter and must contain a specific expiration date for the conditional authorization.

- *Final Approval:* The authorization of an operator to continue training in accordance with a specific curriculum or curriculum segment (see volume 3, chapter 15, section 2, paragraph 2109 of this handbook).

1049. TRAINING PROGRAMS: A SCHEMATIC DEPICTION. Some elements of a training program are depicted in figure 3.5.1.1. to show the relationship between the total training program and the categories of training, curriculums, curriculum segments, and training modules.

A. *Modular Approach.* The illustration in figure 3.5.1.1. is representative only and is intended to present a framework for the modular development of a training program. By using this "modular approach," the POI has various strategies available for the evaluation of training effectiveness and for the planning of long-term surveillance. These strategies are discussed in other sections of this chapter.

B. *Figure 3.5.1.1.* This depiction is divided into five parts as follows:

(1) Part A depicts representative components which, when combined, constitute an operator's overall training program. These components differ in that some must be specifically approved by the FAA (for example, curriculums), while others are accepted as essential supporting parts (such as facilities and equipment).

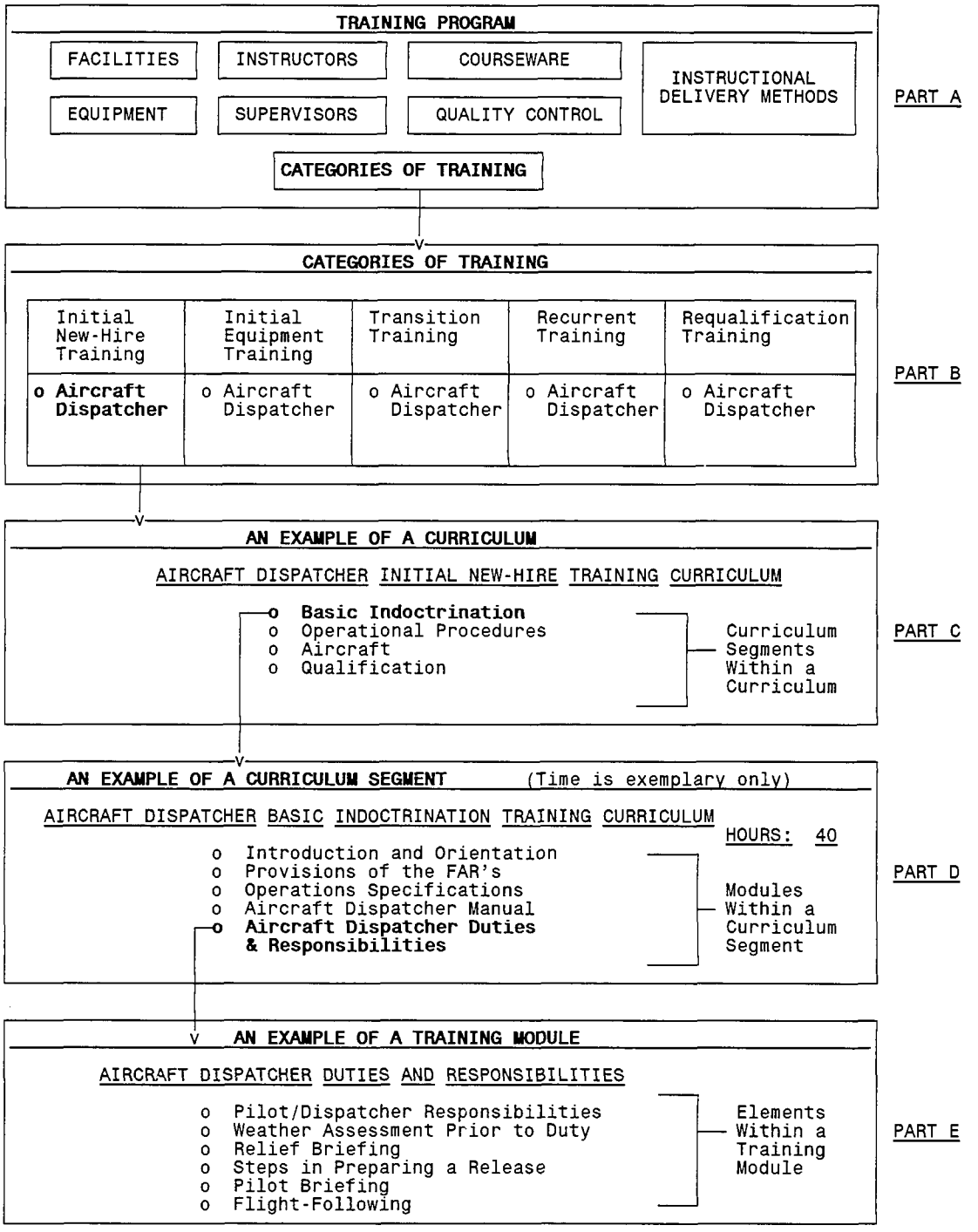
(2) Part B illustrates the five categories of training that are recognized by the FAA for aircraft dispatchers.

(3) Part C is an example of a curriculum for the aircraft dispatcher duty position. This example depicts an aircraft dispatcher initial new-hire training curriculum.

(4) Part D is an example of a specific curriculum segment, which illustrates that it consists of several training modules. This example is the aircraft dispatcher basic indoctrination training curriculum segment.

(5) Part E is an example of a specific training module.

FIGURE 3.5.1.1.
SCHEMATIC DEPICTION OF AIRCRAFT DISPATCHER TRAINING PROGRAMS



1051. CATEGORIES OF TRAINING. There are six categories of training, of which five are applicable to certified aircraft dispatchers: initial new-hire, initial equipment, transition, recurrent, and requalification. The factors which determine the appropriate category of training are the student's previous experience with the operator and the student's current qualification status in relation to the specific airplane. Operators may develop and have approved several different curriculums for a specific aircraft in each category of training. While the regulatory requirements for course content may be identical for two different categories of training, the emphasis and depth of training required in each curriculum varies. When discussing training requirements, FAA inspectors should be specific regarding the category of training discussed and should use the nomenclature described in this handbook. Since use of this common nomenclature improves standardization and mutual understanding, POI's should encourage operators to use this nomenclature when developing new training curriculums or revising existing training curriculums. The five categories of training applicable to aircraft dispatchers are briefly discussed in the following subparagraphs:

A. *Initial New-Hire Training.* Operators must use the initial new-hire category of training to qualify personnel who have not had previous dispatcher experience with the operator. Initial new-hire training applies to certified dispatchers who have never worked for the operator and to personnel employed by the operator in a position other than aircraft dispatcher. This category includes initial new-hire basic indoctrination training, training in basic aircraft dispatcher duties, and training specific to one or more aircraft types. Since initial new-hire training is usually the employee's first exposure to specific company methods, policies, and procedures, it must be the most comprehensive of the five categories of training. Operators may organize initial new-hire training in a number of ways. Two common and acceptable methods follow:

(1) Operators may limit initial new-hire training to one specific aircraft type. After the new-hire aircraft dispatcher is qualified, the operator may then conduct transition training to qualify the aircraft dispatcher in other aircraft.

(2) Operators may design initial new-hire aircraft dispatcher training curriculums that qualify the new-hire aircraft dispatcher to dispatch all aircraft in the operator's fleet. An initial new-hire curriculum designed in this manner should contain both general and aircraft-specific training. For example, an initial new-hire aircraft dispatcher curriculum for B-727 and DC-9 aircraft could contain a general module on hydraulic systems, a module on the specifics of B-727 hydraulic systems, and another module on the specifics of DC-9 hydraulic systems.

B. *Initial Equipment Training.* Operators must use the initial equipment category of training to qualify an aircraft dispatcher who has previously trained and qualified as an aircraft dispatcher on one group of aircraft and is now qualifying on an aircraft in another group. The areas of emphasis in initial equipment training are the following:

- The general characteristics of the aircraft group
- The unique features of the specific aircraft
- The unique dispatcher duties related to the aircraft group and specific aircraft type

C. *Transition Training.* Operators must use the transition category of training for an aircraft dispatcher who has previously trained and qualified as an aircraft dispatcher on an aircraft type and is now qualifying on another aircraft type of the same group. The two areas of emphasis in transition training are the following:

- The unique features of the specific aircraft
- The specific dispatcher duties for that aircraft

D. *Recurrent Training.* Operators must use the recurrent category of training for an aircraft dispatcher who has been trained and qualified by the operator, and who must receive recurrent training and a competency check within the appropriate eligibility period to maintain currency. The area of emphasis in recurrent training is on aircraft dispatcher duties.

E. *Requalification Training.* Operators must use the requalification category of training to requalify an aircraft dispatcher who has been trained and qualified by the operator, but who has become unqualified due to not having satisfactorily completed recurrent training, a competency check, or operational familiarization within the appropriate eligibility period.

NOTE: Part 121 does not specifically address requalification training for dispatchers.

F. *Summary of Categories of Training.* The categories of training are summarized in general terms as follows:

(1) All personnel qualifying as aircraft dispatchers who have not been previously employed by the operator as a dispatcher must complete *initial new-hire* training.

(2) All currently qualified dispatchers who are being assigned by the operator to a different aircraft group for the first time must complete *initial equipment* training.

(3) All currently qualified dispatchers who are being assigned by the operator to any different type aircraft within the same group on which they have not been previously qualified must complete *transition* training.

(4) All aircraft dispatchers must complete *recurrent* training within the appropriate eligibility period.

(5) All aircraft dispatchers who have become unqualified must complete *requalification* training to re-establish qualification.

1053. CURRICULUM DEVELOPMENT. The operator is required to develop, obtain approval for, and maintain only those curriculums that will be used. For example, operators who operate only one group of airplanes are not required to develop initial equipment curriculums. Operators who train new-hire dispatchers on all aircraft they operate during initial new-hire training are not required to have a transition training curriculum. Such an operator would only need a transition curriculum if a new type of aircraft were added to the fleet.

A. *Aircraft Dispatcher Qualification.* Each person that is required to train under a specific curriculum must complete that curriculum in its entirety. When a person has completed the training and checking specified in a curriculum, that person is qualified to dispatch those aircraft types specified in the curriculum in Part 121 revenue service.

B. *Multiple Curriculums.* Operators may develop more than one curriculum for each applicable category of training. Each curriculum may be tailored to a specific group of students. An initial new-hire curriculum developed for students with little or no previous airline experience must be more extensive than a curriculum for students with previous airline experience. For example, an abbreviated curriculum for initial new-hire training may be used in merger or air carrier acquisition situations. In such cases, FAR 121.405 allows for a reduction in program hours.

1054. - 1060. RESERVED.

[PAGES 3-531 THROUGH 3-536]

SECTION 2. AIRCRAFT DISPATCHER TRAINING APPROVAL PROCESS

[TO BE DEVELOPED]

1061. - 1070. RESERVED.

[PAGES 3-538 THROUGH 3-548 RESERVED]

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[TO BE DEVELOPED]

1061. - 1070. RESERVED.

[PAGES 3-538 THROUGH 3-548 RESERVED]

SECTION 3. AIRCRAFT DISPATCHER BASIC INDOCTRINATION CURRICULUM SEGMENTS

1071. GENERAL. This section contains direction and guidance to be used by inspectors when evaluating the content of aircraft dispatcher basic indoctrination curriculum segments. FAR 121.415(a)(1) requires that all new-hire aircraft dispatchers complete basic indoctrination ground training in the initial new-hire category of training.

A. *Purpose of Basic Indoctrination Training.* The basic indoctrination curriculum segment is unique to the initial new-hire category of training. An aircraft dispatcher basic indoctrination curriculum segment serves the following purposes: as an introduction for the new-hire employee to the operator, as the manner in which the operator complies with the requirements of Part 121, and as the basis for subsequent aircraft dispatcher training. The aircraft dispatcher basic indoctrination curriculum segment consists of that information required as background for new-hire aircraft dispatchers for the ground training curriculum segment.

B. *Regulatory Requirements.* FAR 121.415(a)(1) requires that all new-hire aircraft dispatchers complete 40 hours of basic indoctrination training, unless the required number of hours is reduced under FAR 121.405 or FAR 121.401(d). FAR 121.415(a)(1) requires that training in the following subjects be included in the aircraft dispatcher basic indoctrination curriculum segment:

- Aircraft dispatcher duties and responsibilities
- Appropriate provisions of the FAR's
- Contents of the operator's operating certificate and operations specifications (OpSpecs)
- Appropriate portions of the operator's manual

C. *Optional Training Subjects.* Operators should include, and may take credit for, training given on other subjects in the aircraft dispatcher basic indoctrination curriculum segment. These subjects may be in addition to the subject areas required by the FAR's. This training consists of the information that new-hire aircraft dispatchers need as a foundation for the specific and detailed training to be conducted in the ground training curriculum segment. Among the appropriate subjects for this type of training are the following:

- *Overview of Company*: Type and scope of operations conducted
- *Company Structure*: Management organization; route structure; fleet composition (size and type); facility locations
- *Administrative Orientation*: Required documentation; scheduling; inner-company communications

1073. AIRCRAFT DISPATCHER BASIC INDOCTRINATION TRAINING. Aircraft dispatcher basic indoctrination training curriculum segments must consist of at least the "operator-specific" training modules dealing with the requirements of FAR's 121.415(a)(1) and 121.535 and other related topics. These operator-specific training modules include the following:

A. *"Duties and Responsibilities" Module.* This module contains the duties the new-hire aircraft dispatcher will be assigned after becoming qualified. For example, a small operator may assign the aircraft dispatcher with responsibilities for constructing flightplans, load planning, and performing weight-and-balance calculations. The industry trend, however, is to assign these functions to specialized groups of employees. FAR 121.533 requires that the aircraft dispatcher ensure that such functions have been adequately accomplished before releasing a flight, whether the functions have been accomplished by the aircraft dispatcher or by another employee. The new-hire aircraft dispatcher must be trained specifically as to how and by whom these tasks are to be accomplished in the operator's operation. Since the qualified dispatcher will be required to evaluate the adequacy of flight and load planning, the operator must ensure that the new-hire dispatcher has a thorough knowledge of the basic principles of these subjects.

B. *"Appropriate Provisions of the FAR's" Module.* This module contains policies and procedures that ensure that the

aircraft dispatcher and the operator are in compliance with the FAR's during flight operations. Operators should cite specific regulations during this "appropriate provisions of the FAR's" module and show how the operator's procedures are designed to comply with the FAR's as follows.

(1) Inspectors must ensure that at least the following provisions of Part 121 are covered:

- Subpart I - Airplane Performance Operating Limitations
- Subpart P - Aircraft Dispatcher Qualifications and Duty Time Limitations
- Subparts Q & R - Flight Time Limitations
- Subpart T - Flight Operations
- Subpart U - Dispatching and Flight Release Rules
- Subpart V - Records and Reports

(2) Inspectors should also ensure that the following FAR provisions are covered:

- Part 91
- Subpart C of Part 65
- Applicable portions of Parts 107 and 108
- HMR 175
- NTSB 830

C. *"Contents of the Operator's Operating Certificate and Operations Specifications" Module.* This module contains training in the specific operations the operator may conduct, such as operations which are prohibited, required weather minimums, and limitations. The new-hire aircraft dispatcher must be thoroughly familiar with this information before assuming dispatcher duties.

D. *"Appropriate Portions of the Operator's Manual" Module.* This module contains training on the organization and content of the relevant sections of the operator's manuals. Usually the training on the contents of the operator's manuals is covered simultaneously with the training on the operator's policies and procedures. Inspectors must ensure, however, that in this process the contents of the manuals are thoroughly covered. Operators must also provide aircraft dispatchers with information on the organization of the manuals and training on how to use the reference system of the manuals. Appropriate topics for this type of training are the following:

- Overview of manual sections, correlation of manual sections to the aircraft dispatcher training program
- Use of reference, revision, and distribution systems for manuals
- Access to manual when performing assigned duties
- Maintaining manual currency

1075. AIRCRAFT DISPATCHER BASIC INDOCTRINATION TRAINING MODULES. An aircraft dispatcher basic indoctrination curriculum segment must include as many training modules as necessary to ensure adequate training. Each training module must include a module outline containing, at least, a descriptive title of the training module and a list of the related elements or events to be presented during instruction on the module.

A. *Training Module Outline.* The training module outline must contain only those elements and events required to ensure that aircraft dispatcher students will receive adequate training. Operators are not required to include detailed descriptions of each element or event for initial approval, as detailed descriptions are more appropriate for courseware. During the final approval process, the inspector who evaluates the training must review the courseware to ensure that the scope and depth of the training modules are adequate.

B. *Construction of Modules.* Operators have a certain amount of flexibility in the construction of aircraft dispatcher basic indoctrination training modules.

(1) A training module for students with significant experience in Part 121 operations may be less comprehensive than a training module for students without that experience.

aircraft dispatcher and the operator are in compliance with the FAR's during flight operations. Operators should cite specific regulations during this "appropriate provisions of the FAR's" module and show how the operator's procedures are designed to comply with the FAR's as follows.

(1) Inspectors must ensure that at least the following provisions of Part 121 are covered:

- Subpart I - Airplane Performance Operating Limitations
- Subpart P - Aircraft Dispatcher Qualifications and Duty Time Limitations
- Subparts Q & R - Flight Time Limitations
- Subpart T - Flight Operations
- Subpart U - Dispatching and Flight Release Rules
- Subpart V - Records and Reports

(2) Inspectors should also ensure that the following FAR provisions are covered:

- Part 91
- Subpart C of Part 65
- Applicable portions of Parts 107 and 108
- HMR 175
- NTSB 830

C. *"Contents of the Operator's Operating Certificate and Operations Specifications" Module.* This module contains training in the specific operations the operator may conduct, such as operations which are prohibited, required weather minimums, and limitations. The new-hire aircraft dispatcher must be thoroughly familiar with this information before assuming dispatcher duties.

D. *"Appropriate Portions of the Operator's Manual" Module.* This module contains training on the organization and content of the relevant sections of the operator's manuals. Usually the training on the contents of the operator's manuals is covered simultaneously with the training on the operator's policies and procedures. Inspectors must ensure, however, that in this process the contents of the manuals are thoroughly covered. Operators must also provide aircraft dispatchers with information on the organization of the manuals and training on how to use the reference system of the manuals. Appropriate topics for this type of training are the following:

- Overview of manual sections, correlation of manual sections to the aircraft dispatcher training program
- Use of reference, revision, and distribution systems for manuals
- Access to manual when performing assigned duties
- Maintaining manual currency

1075. AIRCRAFT DISPATCHER BASIC INDOCTRINATION TRAINING MODULES. An aircraft dispatcher basic indoctrination curriculum segment must include as many training modules as necessary to ensure adequate training. Each training module must include a module outline containing, at least, a descriptive title of the training module and a list of the related elements or events to be presented during instruction on the module.

A. *Training Module Outline.* The training module outline must contain only those elements and events required to ensure that aircraft dispatcher students will receive adequate training. Operators are not required to include detailed descriptions of each element or event for initial approval, as detailed descriptions are more appropriate for courseware. During the final approval process, the inspector who evaluates the training must review the courseware to ensure that the scope and depth of the training modules are adequate.

B. *Construction of Modules.* Operators have a certain amount of flexibility in the construction of aircraft dispatcher basic indoctrination training modules.

(1) A training module for students with significant experience in Part 121 operations may be less comprehensive than a training module for students without that experience.

segment or at the end of the course. With some training methods, such as computer-based instruction (CBI), the certification may be based on student progress checks administered during the training course.

1079. EVALUATION OF TRAINING HOURS. FAR 121.415 specifies a minimum of 40 programmed hours of instruction for aircraft dispatcher basic indoctrination training. Operators who employ personnel with little or no previous Part 121 experience should program 40 training hours for basic indoctrination. POI's must consider the complexity of both the operation and the aircraft itself when evaluating aircraft dispatcher basic indoctrination curriculum segment outlines. Training hours for complex operations may exceed the 40-hour regulatory minimum. POI's may reduce the program hours based on conditions that would warrant a reduction of hours. For example, a reduction in program hours may be allowed when the operator's enrollment prerequisites require a verified high level of Part 121 experience. Another reason for a program hour reduction could be a pretest which accurately demonstrates the satisfactory proficiency and knowledge of the student.

1081. EVALUATION OF AN AIRCRAFT DISPATCHER BASIC INDOCTRINATION CURRICULUM SEGMENT OUTLINE FOR INITIAL APPROVAL. Inspectors must determine whether the training modules in the operator's basic indoctrination curriculum segment outline contain the required information for aircraft dispatchers to fully understand the operator's manner of conducting operations, the operator's means of regulatory compliance, and the guidance materials pertinent to an aircraft dispatcher's duties and responsibilities. Inspectors should use the job aid in this section when evaluating an operator's proposed aircraft dispatcher basic indoctrination curriculum segment outline (see figure 3.5.3.1.).

A. *Basic Indoctrination Curriculum Segment Job Aid.* This job aid (see figure 3.5.3.1.) is provided for guidance only and must not be construed as being a document that contains mandatory rules or regulatory requirements. The job aid is intended to assist inspectors during the evaluation of individual basic indoctrination training curriculum segment modules.

B. *Use of Job Aid.*

(1) When using the job aid, inspectors should make a side-by-side comparison of the operator's proposal to make the following determinations:

- Whether the proposal serves to acquaint the student with the operator's procedures, policies, practices, and methods of compliance

- Whether sufficient training module elements are listed to ensure that the appropriate depth and scope of the material will be presented

(2) The job aid is organized with training subjects listed in the left column and evaluation criteria or remarks listed across the top. Inspectors may use the spaces within the matrix for items such as notes, comments, dates, or checkmarks. There are also blank columns and rows in each job aid for inspectors to include additional training modules or evaluation criteria. This job aid is not intended to be retained after entry of the data into the Program Tracking and Reporting Subsystem (PTRS).

1082. - 1092. RESERVED.

FIGURE 3.5.3.1.
AIRCRAFT DISPATCHER BASIC INDOCTRINATION TRAINING JOB AID

	EVALUATION CRITERIA				
TRAINING SUBJECTS	Adequacy of Elements/Events	Adequacy of Courseware	Training Aids and Facilities		
Company Orientation					
Operator Policies and Procedures					
Dispatcher, GOM, Weather Manuals					
Operations Specifications					
FAR's & Applicable Rules/Regs					
Part 91, Subpart B Flight Rules					
Part 121, Subpart I Airplane Perform. Limitations					
Part 121, Subpart P Dispatcher Duty Time					
Part 121, Subpart P Dispatcher Qualification					
Part 121, Subpart Q & R Crew Duty Time					
Part 121, Subpart T Flight Operations					
Part 121, Subpart U Dispatch Rules					
U.S. & Int'l AIM, ICAO Flight Planning Doc.					
Hazardous Materials					
HMR 175					

[PAGES 3-554 THROUGH 3-560 RESERVED]

SECTION 4. AIRCRAFT DISPATCHER INITIAL EQUIPMENT AND TRANSITION GROUND TRAINING CURRICULUM SEGMENTS

1093. GENERAL. This section contains direction and guidance to be used by inspectors when evaluating the content of aircraft dispatcher initial equipment and transition ground training curriculum segments. FAR 121.422 requires that initial and transition aircraft dispatcher ground training curriculum segments include instruction in at least the following: general dispatch subjects, aircraft characteristics, operations procedures, and emergency procedures.

A. *General Dispatch Subjects.* General dispatch subject areas must include the following:

- International weather reports (if applicable)
- Communications (must include the characteristics of the systems to be used and the appropriate normal and emergency procedures to be used)
- Meteorology (must include the various types of meteorological information and forecasts and interpretation of weather, including the forecasting of en route and terminal temperatures and other weather conditions; frontal systems; wind conditions; the use of actual and prognostic weather charts; and, when jet aircraft are involved, the inclusion of upper-air reports and forecasts, including turbulence)

NOTE: Weather interpretation and adverse conditions must be strongly emphasized in initial training.

- Adverse weather phenomena (must include clear air turbulence, windshear, and thunderstorms
- NOTAM's
- Navigational charts and publications
- Joint dispatcher-pilot responsibilities
- Air traffic control (ATC) coordination procedures
- Familiarization with operation area
- Characteristics of special airports and other operationally significant airports which the operator uses (These characteristics may include terrain, approach aids, or prevailing weather phenomena.)

NOTE: The airports covered should include the airports in the area for which the aircraft dispatcher will be responsible after becoming qualified. The operator's emphasis should be on airports that create special problems for aircraft dispatchers in the operator's operations.

B. *Aircraft Characteristics.* The operator should provide both general training and aircraft-specific training when the aircraft dispatcher student is to be qualified on more than one type of aircraft. Training must be conducted on the general operating characteristics of the aircraft groups that the operator uses, such as turbojet or reciprocating aircraft. A description of each aircraft the aircraft dispatcher will be authorized to release is also required. This training must be *directly related* to aircraft dispatcher duties. The following areas should be emphasized in the operator's training program: aircraft operating and performance characteristics, navigation equipment, instrument approach and communications equipment, and emergency equipment. The operator must also provide training on the content and use of those portions of the flight manual applicable to aircraft dispatcher duties, such as MEL's, and abnormal and emergency procedures.

(1) Aircraft training must be tailored to aircraft dispatcher duties. It is not necessary for this training to contain the same degree of detail and emphasis on aircraft systems as exists in flightcrew training. POI's shall ensure that aircraft training is not conducted to the exclusion of other required training. For example, aircraft dispatchers should be taught that jet transport aircraft are equipped with constant speed drive (CSD) units; that CSD's are necessary for the proper functioning of the engine-driven generator; and that when a CSD is inoperative, the associated genera-

tor is also inoperative. Equipped with this knowledge, the aircraft dispatcher should be able to determine the correct action for an inoperative CSD by referring to the minimum equipment list (MEL). Aircraft dispatchers are not required to have detailed training on aircraft systems to comprehend this information.

(2) Operators may choose to conduct initial equipment training on one type of aircraft or to include all aircraft the operator operates in an initial new-hire curriculum. When the operator chooses to limit initial new-hire aircraft training to one specific type of aircraft, the aircraft dispatcher must be qualified on additional types of aircraft by means of transition training.

(3) FAR 121.418 requires that operators conduct differences training when the air carrier has aircraft variances within the same type of aircraft. This training should focus on the differences which affect aircraft dispatcher duties, such as operating characteristics, performance limitations, or MEL's.

C. *Operations Procedures.* Operators must provide training in the specific operations the aircraft dispatcher must perform and training relative to each type of aircraft the aircraft dispatcher is authorized to release. Operators must provide aircraft dispatchers with specific training in the following procedures:

- Operations under adverse weather phenomena conditions (must include clear air turbulence, windshear, and thunderstorms)
- Weight and balance computations and load control procedures
- Aircraft performance computations, to include takeoff weight limitations based on departure runway, arrival runway, and en route limitations, and also engine-out limitations
- Flight-planning procedures, to include route selection, flight time, and fuel requirements analysis
- Dispatch release preparation
- Crew briefings
- Flight monitoring procedures
- Flightcrew response to various emergency situations, including the assistance the aircraft dispatcher can provide in each situation
- MEL and CDL procedures
- Manual performance of all required procedures in case of the loss of automated capabilities
- Training in appropriate geographic areas
- ATC and instrument procedures, to include ground hold and central flow control procedures
- Radio/telephone procedures

D. *Emergency Procedures.* Operators must provide training to aircraft dispatchers in the procedures the dispatcher is to follow in case of an emergency. This training must cover actions taken to aid the flightcrew and to notify the company, government, and private agencies.

1095. AREAS OF EMPHASIS. Operators should emphasize specific areas for each category of training in the aircraft dispatcher ground training curriculum segment.

A. *Initial New-Hire Training.* In the initial new-hire category of training, operators must provide thorough training in each subject area. The operator must ensure that each aircraft dispatcher student has mastered each skill required to perform adequately on the job. In addition to the academic or classroom training, aircraft dispatchers are usually required to complete on-the-job training (OJT) to become proficient in the required aircraft dispatcher skills. Although the FAR's do not require OJT, it is an effective method the operator can use to develop a new-hire aircraft dispatcher's skills in the finer points of aircraft dispatcher duties and responsibilities. Furthermore, it is one of the best training methods for qualifying aircraft dispatchers to the standard of performance required on competency checks.

B. *Initial Equipment Training.* Operators must conduct initial equipment training when a currently qualified aircraft dispatcher is qualifying to dispatch an aircraft of a different group, such as turbojet, turbopropeller, or reciprocating.

The operator should emphasize two areas in this training: the operating characteristics of the new aircraft and the new considerations an aircraft dispatcher should make as a result of the new aircraft. For example, when aircraft dispatchers are first learning to dispatch turbojet aircraft, training will be required in high altitude meteorology, clear air turbulence awareness, the tropopause, and jetstreams.

C. *Transition Training.* Operators must conduct transition training to qualify an aircraft dispatcher in a new type of aircraft of the same group. The aircraft dispatcher must be fully qualified as a dispatcher on an aircraft of the same group to be eligible for training in the transition category. Since qualified dispatchers may be assumed to possess a general familiarity with the characteristics of airplanes of the same group, the ground training curriculum segment consists almost exclusively of aircraft-specific training on the new aircraft.

1097. EVALUATION OF TRAINING HOURS.

A. *Initial New-Hire and Initial Equipment Ground Training Hours.* FAR 121.422(c) specifies that the minimum programmed hours of instruction required for the aircraft dispatcher initial-new hire and initial-equipment ground training curriculum segments are as follows:

- Group I reciprocating airplanes - 30 hours
- Group I turbopropeller airplanes - 40 hours
- Group II turbojet airplanes - 40 hours

B. *Transition Training Hours.* Programmed hours for transition training are not specified in the FAR's. The number of hours required for transition training varies widely depending on the similarity of the aircraft types involved and the experience of the aircraft dispatcher. With similar aircraft types, transition training may not have to be extensive. When differences between aircraft types are great, more extensive training is required.

C. *Determining General Ground Training Hours.* POI's must consider the complexity of both the operation and the aircraft when evaluating an operator's general ground training curriculum outline. Training for a complex type of operation may require more than the 40-hour minimum regulatory requirement. The proposed program hours should initially be at least the 40 hours specified in Part 121. Usually the required training can only be accomplished in the minimum 40 hours specified by regulation for simple operations of one or two types of aircraft. When complex operations and several different airplane types are involved, more hours are usually required. The actual required training hours can only be determined in the final approval process by the inspector's observing and assessing the effectiveness of the training provided. Reductions to the programmed hours are appropriate when the operator demonstrates that the training provided is sufficient.

1099. EVALUATION OF AN AIRCRAFT DISPATCHER GENERAL GROUND TRAINING CURRICULUM SEGMENT OUTLINE FOR INITIAL APPROVAL. POI's must determine whether an operator's proposed general ground training modules contain the information and training on skills required for aircraft dispatchers to become fully proficient in aircraft dispatcher duties and responsibilities. Inspectors should use the job aid in this section when evaluating the operator's proposed curriculum segment outline (see figure 3.5.4.1.).

A. *Aircraft Dispatcher Ground Training Segment Job Aid.* This job aid (figure 3.5.4.1.), is provided for guidance only and must not be construed to be an outline of mandatory rules or regulatory requirements. The job aid is intended to assist inspectors during the evaluation of individual aircraft dispatcher ground training curriculum segment modules for both initial and final approval.

B. *Use of Job Aid.* When using the job aid, inspectors should make a side-by-side comparison of the operator's proposal. The job aid is organized with training subjects listed in the left column and evaluation criteria or remarks listed across the top. Inspectors may use the spaces within the matrix for notes, comments, dates, or checkmarks. There are also blank columns and rows in each job aid for inspectors to indicate additional training modules or evaluation criteria.

1100. - 1110. RESERVED

FIGURE 3.5.4.1.

AIRCRAFT DISPATCHER GROUND TRAINING SEGMENT JOB AID

	EVALUATION CRITERIA				
TRAINING SUBJECTS	Adequacy of Element/Events	Adequacy of Courseware	Training Aids and Facilities		
GENERAL DISPATCH Communications					
Meteorology Reports & Forecast					
Weather Interpret. Winds and Temperature					
Terminal & Frontal Weather					
International Weather					
Upper Air Reports and Prog. Charts					
Adverse Weather					
NOTAM System					
Navigational Publications					
Flight Planning					
Organized Track Systems and Procedures					
Joint Pilot - Dispatcher Responsibility					
Dispatch Release Preparation					
Forecasting Terminal Temperatures					
Radio Telephone Procedures					

FIGURE 3.5.4.1. (Cont'd.)

AIRCRAFT DISPATCHER GROUND TRAINING SEGMENT JOB AID

	EVALUATION CRITERIA				
TRAINING SUBJECTS	Adequacy of Elements/Events	Adequacy of Courseware	Training Aids and Facilities		
Geographic Area					
Manual Flight Planning					
PIC Briefing					
Flight-Following					
Airports, Terrain Aids, Approaches					
Prevailing Weather Phenomena					
AIRCRAFT General Characteristics					
Description of Each Type					
Operating & Performance Characteristics					
Navigation and Communication Equipment and Cap.					
Emergency Equipment					
Use of Flight Manual					
Differences					

FIGURE 3.5.4.1. (Cont'd.)

AIRCRAFT DISPATCHER GROUND TRAINING SEGMENT JOB AID

	EVALUATION CRITERIA				
TRAINING SUBJECTS	Adequacy of Elements/Events	Adequacy of Courseware	Training Aids and Facilities		
PROCEDURES Weight and Balance					
Takeoff Performance Limits and Calculations					
En Route Performance Limits and Calculations					
Destination Limits and Calculations					
Flight Planning Tracks, Fuel, Alternates					
MEL and CDL					
ATC and Flow Control					
Release Preparation					
Flight Monitoring					
Redispatch In Flight					
Emergency Procedures and Notification					
Special Airports					

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SECTION 5. AIRCRAFT DISPATCHER QUALIFICATION CURRICULUM SEGMENTS AND RECURRENT AND REQUALIFICATION CURRICULUMS

1111. GENERAL. This section contains information, direction and guidance to be used by POI's for the evaluation of aircraft dispatcher qualification curriculum segments for all categories of training and for the content of aircraft dispatcher recurrent and requalification training curriculums.

A. *Initial Qualification.* FAR 121.422(b) requires that the aircraft dispatcher qualification curriculum segment of all initial qualification categories of training (initial new-hire, initial-equipment, and transition) must contain a competency check. Operating familiarization, however, is only required in the qualification curriculum segment of the initial new-hire or initial-equipment category of training. In addition, FAR 121.463(d) requires that an aircraft dispatcher be familiar with the essential operating procedures for each segment of the operation, such as area or desk, in which the aircraft dispatcher exercises jurisdiction. One means an operator may use to comply with this rule is to conduct a competency check on a representative area of the operation in which the aircraft dispatcher is qualified.

B. *Currency.* The FAR's require that aircraft dispatchers complete both an annual competency check and an operational familiarization flight and that they maintain a familiarity with the operating procedures for the operational segment over which they exercise jurisdiction.

(1) FAR 121.433(c)(ii) requires that each aircraft dispatcher complete recurrent training and a competency check every 12 calendar months.

(2) FAR 121.463(c) requires that each aircraft dispatcher complete recurrent operational familiarization every 12 calendar months in one type of aircraft from each aircraft group in which the aircraft dispatcher is qualified to dispatch.

NOTE: A competency check or operational familiarization completed in the calendar month before or in the calendar month after the "training/checking" month, is considered to have been completed in the training/checking month. This 3-month period is termed the "eligibility period" (see section 1 of this chapter for further definition).

(3) FAR 121.463(d) requires that each aircraft dispatcher be "familiar with all essential operating procedures for that segment of the operation over which he exercises dispatch jurisdiction."

C. *Requalification.* Part 121 does not specifically address dispatcher requalification. When aircraft dispatchers lose qualification in accordance with Part 121, they must requalify prior to operating as an aircraft dispatcher. FAR 121.415(g)(1) requires that, in addition to initial, transition, and recurrent categories of training, each aircraft dispatcher be provided with the necessary training for maintaining proficiency on each airplane and operation in which the dispatcher serves. It is the operator's responsibility to develop the requalification training curriculum to restore a previously qualified dispatcher to a qualified status. The direction and guidance of this section is provided to standardize POI approval of requalification training curriculums.

1113. COMPETENCY CHECKS. FAR 121.422(b) requires that an aircraft dispatcher demonstrate both knowledge and ability to a supervisor or ground instructor during a competency check. A supervisor is defined as any person that the operator has designated to conduct the competency check. A supervisor does not necessarily have to be a person with a management title. FAR 121.422(b) authorizes a ground school instructor to conduct a competency check. The instructor must, however, be currently qualified as an aircraft dispatcher for the operator. During the competency check, the candidate only has to demonstrate knowledge and ability concerning those geographic areas for which the candidate is qualifying.

A. *Conduct of Check.* The competency check must be a comprehensive evaluation in which the supervisor observes all aspects of the dispatch function. A portion of the competency check must consist of the aircraft dispatcher candidate releasing actual flights. If the candidate is not currently qualified, all required paperwork must be reviewed

and signed by a fully-qualified aircraft dispatcher. The remaining portion of the competency check may be conducted in a classroom or other environment that enables the candidate to demonstrate knowledge and ability in those areas that may not occur during a routine duty period.

NOTE: Flight releases under the special fuel reserves of OpSpecs paragraph B43 and planned inflight releases under OpSpecs paragraph B44 should be observed under actual conditions if possible.

B. *Differences in Competency Checks for Each Category.* Inspectors should use the following guidance when evaluating competency checks in the following training categories:

(1) *Initial New-Hire.* Aircraft dispatcher initial new-hire competency checks should include all of the types of airplanes the aircraft dispatcher will be qualified to dispatch. The POI may approve a competency check of representative types when, in the POI's judgment, a check including all types is impractical or unnecessary. Operators must make initial new-hire competency checks comprehensive enough to allow the aircraft dispatcher candidate to adequately demonstrate knowledge and ability in normal and abnormal situations.

(2) *Initial Equipment and Transition.* Aircraft dispatcher initial-equipment checks and transition checks may be limited solely to the dispatch of the types of airplanes on which the aircraft dispatcher is qualifying (unless the check is to simultaneously count as a recurrent check).

(3) *Recurrent and Requalification.* Aircraft dispatcher recurrent and requalification competency checks must encompass a representative sample of aircraft and routes for which the aircraft dispatcher maintains current qualification.

(4) *Special Operations.* When an aircraft dispatcher is qualified in extended, twin-engine, overwater procedures (ETOPS), or in operations conducted according to paragraphs B43 or B44 of the OpSpecs, these functions shall be observed and evaluated by an appropriately-qualified supervisor or inspector.

C. *Required Proficiency Level.* The aircraft dispatcher candidate must be able to successfully dispatch all flights in the time the operator normally allows a fully-qualified aircraft dispatcher candidate to accomplish the same amount of work. Evaluators must determine that the candidate's proficiency is of a level that the successful outcome of the dispatch work is never in doubt.

1115. OPERATIONAL FAMILIARIZATION FLIGHTS. The FAR's provide little guidance for the accomplishment of operational familiarization flights except for the establishment of a minimum hour requirement. An aircraft dispatcher must accomplish operational familiarization in one aircraft type of each group when initially qualifying in that group of airplanes and annually thereafter. FAR 121.463(a)(2) specifies that the 5 hours of operational familiarization may be reduced to 2 1/2 hours with the substitution of 1 hour of flight time for each additional takeoff and landing.

A. *Training Objectives.* POI's shall ensure that operators make effective use of initial and recurrent familiarization flights to achieve valid training objectives as follows.

(1) The flights selected should take the aircraft dispatcher candidate through the representative areas in which the candidate is to be qualified. The flights should transit a major terminal area within the region. For operational familiarization flights in succeeding years, the operator should have a plan to systematically expose an aircraft dispatcher to different routes and terminal areas in the aircraft dispatcher's area of responsibility.

(2) POI's should ensure that aircraft dispatchers responsible for extended overwater routes are provided operational familiarization with those routes and with flightcrew procedures, as well as with domestic routes. Aircraft dispatchers with responsibility for ETOPS and operations according to paragraphs B43 and B44 of the OpSpecs should observe these operations.

B. *Reduction of Hours.* POI's shall ensure that when operational familiarization hours are reduced, the operator's training objectives for aircraft dispatchers are not forfeited.

C. *Operational Familiarization in a Simulator.* The FAR's permit aircraft dispatchers to accomplish operational familiarization in a simulator. POI's should encourage operators to take advantage of this provision (after the aircraft dispatcher is qualified) to allow dispatchers to observe line-oriented flight training (LOFT) and cockpit resource management training of flight crewmembers. This

training relates directly to aircraft dispatcher duties. POI's shall ensure, however, that approval is not given for operational familiarization repeatedly conducted in a simulator in lieu of actual line flights. POI's must not approve use of a simulator in lieu of actual flights in the initial new-hire or initial equipment categories of training. The FAR's do not allow for the reduction of hours in a simulator.

NOTE: When an operator introduces a new group of aircraft into service, an aircraft dispatcher may serve for 90 days from that date without having completed the required operational familiarization.

1117. QUALIFICATION CURRICULUM SEGMENTS OF INITIAL NEW-HIRE AND INITIAL EQUIPMENT CATEGORIES OF TRAINING. The events of an aircraft dispatcher initial training qualification curriculum segment are clearly specified in the FAR's. Inspectors should ensure that the operator's course outline submitted for initial approval contains at least each required module and the regulatory citation. Before granting final approval, POI's shall ensure that supervisors are requiring adequate standards of proficiency on aircraft dispatcher competency checks and that valid training objectives are being met on aircraft dispatcher operational familiarization flights.

1119. QUALIFICATION CURRICULUM SEGMENTS IN THE TRANSITION CATEGORY OF TRAINING. The events of a transition training qualification curriculum segment are clearly specified in FAR 121.422. The operator's course outline submitted for initial approval only has to contain the specified aircraft dispatcher competency check. Operational familiarization is not required in the aircraft dispatcher transition category of training. If the competency check is to be simultaneously counted as a recurrent check, however, operational familiarization is required as a training module of the recurrent category of training. Before granting final approval, POI's shall ensure that supervisors are requiring an adequate standard of proficiency on aircraft dispatcher competency checks.

1121. RECURRENT TRAINING. FAR 121.427 and FAR 121.415 require that operators conduct aircraft dispatcher recurrent training to ensure that each dispatcher remains adequately trained and proficient in assigned duties and responsibilities in relation to each assigned airplane and type of operation. FAR 121.415(g)(2) also requires aircraft dispatcher training in new equipment, facilities, procedures, and techniques.

A. *Training Requirement.* FAR 121.433(c)(ii) requires that each aircraft dispatcher complete recurrent training every 12 calendar months. Operators are also required to conduct a competency check of each aircraft dispatcher and to ensure that each aircraft dispatcher completes 5 hours of operational familiarization flights every 12 calendar months, as required by FAR 121.463(c). The preferred procedure is for the operator to align the month in which the aircraft dispatcher training, the competency check, and the operational familiarization flight are due.

B. *Programmed Hours.* FAR 121.427(c)(4) specifies the minimum programmed hours of instruction for recurrent training curriculum segments. The objective of aircraft dispatcher recurrent training is to ensure that aircraft dispatchers remain proficient in assigned duties and responsibilities. This objective has been met when an aircraft dispatcher can perform at an acceptable level of proficiency immediately before entering the next cycle of recurrent training, which may require more training hours than specified by the regulation. The minimum required hours are as follows:

- Group I reciprocating airplanes - 8 hours
- Group I turbopropeller airplanes - 10 hours
- Group II turbojet airplanes - 20 hours

C. *Recurrent Training Course Content.* FAR 121.427 requires that recurrent training be given in each ground training subject required for initial qualification. This requirement does not mean that each training module required for initial training curriculum must be covered during each annual training cycle, but that sufficient training must be conducted to assure continual proficiency in each specified area of training. Operators may choose to provide indepth coverage of selected subjects on any one cycle of training. In such cases, the operator's training program must cover all of the subjects required for initial qualification within 3 years. Inspectors must ensure that operators have a means of surveying and detecting deficiencies in each aircraft dispatcher's knowledge and proficiency in each of the required areas.

(1) FAR 121.415(g)(2) requires training in new

equipment, facilities, procedures, and techniques. Operators should allot a block of time in recurrent or specialized training each year for such topics. Current problems and concerns should also be addressed. This block of recurrent training should be revised on an annual cycle.

(2) Recurrent training on each aircraft type, including differences training, must be conducted for aircraft dispatchers every year. This training must be directly and specifically related to aircraft dispatcher duties and may not be simply a repeat of the training given to flight crewmembers. The amount of training given to the aircraft dispatcher must ensure the aircraft dispatcher's continued proficiency in duties relative to each airplane. Airplane training, however, cannot be given to the exclusion of the other required training.

D. *Approval.* The operator should prepare a course outline for initial approval which contains details of the proposed training hours and an outline of the broad topic areas to be covered. The POI shall evaluate the course content by using the job aids in sections 3 and 4 of this chapter.

(1) The training hours proposed for each year in the course outline should initially meet or exceed regulatory specifications, when required. Usually, the required recurrent training must be accomplished in the minimum hours specified by regulation for simple operations of one or two types of aircraft. When complex operations and several different airplane types are involved, more hours are normally required. Operators and POI's can only determine the actual training hours required by observing and assessing the effectiveness of the training provided.

(2) After final approval, the operator may vary the content of the blocks of training which are designated for current topics.

1123. AREA FAMILIARIZATION. Operators typically assign aircraft dispatchers to exercise authority over a particular geographic area, but may require that the aircraft dispatcher maintain familiarity over additional areas. FAR 121.463(d) requires operators to ensure that each aircraft dispatcher is familiar with all essential operating procedures in a particular segment or geographic area before assigning the dispatcher jurisdiction over revenue flights through that area.

A. *Criteria.* Operators must develop the criteria that identifies when an aircraft dispatcher is not current to work a segment and to develop the necessary procedures for familiarization. The means the operator may use to identify when a dispatcher is not current depends on many factors. These factors can include the complexity of the particular segment's operation, the experience of the dispatcher, and the dispatcher's length of time away from the position.

B. *Refamiliarization.* Depending on the situation, the method the operator uses to re-establish familiarization may be as simple as a briefing by a qualified dispatcher or as involved as a competency check by a supervisor.

1125. REQUALIFICATION TRAINING. Aircraft dispatchers that fail to complete recurrent training, a competency check, or operating familiarization within the eligibility period must complete requalification training before they can perform unsupervised in revenue service. The content and length of the requalification curriculum depends on the length of time the aircraft dispatcher has been unqualified. POI's must ensure that requalification curriculum segment outlines contain specific program training hours and events for approval (see figure 3.5.5.1. for guidelines to be used by POI's for this purpose). Operators and POI's should understand that requalification is based on an aircraft dispatcher's demonstration of individual proficiency through a competency check and through the accomplishment of delinquent training and checking events. An aircraft dispatcher must be given the amount of training required to reach an acceptable state of proficiency. The amount of hours for requalification training can never be less than the time required for annual recurrent training. If an aircraft dispatcher reaches a state of proficiency in fewer hours than programmed, the aircraft dispatcher does not have to complete the remaining programmed hours.

1126. - 1144. RESERVED.

FIGURE 3.5.5.1.

REQUALIFICATION TRAINING

Time Past Month Due	Ground Training Segment	Qualification Segment
Up to 3 calendar months	Recurrent training (if not accomplished in eligibility period)	Any module not accomplished in eligibility: CC or OF
More than 3 and less than 6 months	8 hours remedial and (if not accomplished in eligibility period) recurrent training	CC and (if not accomplished in eligibility) OF
More than 6 and less than 12 months	8 hours remedial, recurrent training, and OJT to proficiency	CC and OF
More than 12 and less than 36 months	16 hours remedial, recurrent training, and OJT to proficiency	CC and OF
More than 36 months	Initial training	CC and OF
KEY: CC = Competency Check OF = Operational Familiarization		

[PAGES 3-578 THROUGH 3-584 RESERVED]

CHAPTER 6. OPERATIONAL CONTROL

SECTION 1. GENERAL TOPICS

1145. BACKGROUND AND DEFINITIONS. This chapter contains background information, a definition of terms, and direction and guidance to be used by inspectors concerning operational control. Inspectors should be thoroughly familiar with this information before reviewing those sections of an operator's general operations manuals (GOM's) concerning operational control, and before performing inspections of an operator's operational control facilities, or when conducting aircraft dispatcher certification. Principal operations inspectors (POI's) should be thoroughly familiar with this material when preparing those portions of an operator's operations specifications (OpSpecs) that relate to operational control.

A. *Chapter Contents.* Section 1 of this chapter contains general information on topics pertinent to the operational control of all air transport operations under Parts 121 and 135. Section 2 contains information and guidance specifically related to Part 121 dispatch systems and domestic operating rules. Section 3 contains information specifically related to Part 121 flight release systems and supplemental operating rules. Section 4 contains information specifically related to Part 121 flag, supplemental operations conducted outside the contiguous states, and extended overwater operations. Section 5 contains information specific to Part 135 flight-locating systems and operational rules.

B. *Regulatory Requirements.* FAR's 121.531 through 121.537 require that Part 121 operators exercise operational control over all air transportation flights the operator conducts. FAR 135.77 contains the same requirements for Part 135 operators. Operational control is defined in Part 1 as "the exercise of authority over initiating, conducting, and terminating a flight." Operators exercise operational control by direct action and supervisory means. An operator uses supervisory means of operational control when the operator develops and publishes policies and procedures for operational control personnel and flightcrews to follow in the performance of their duties. An operator is exercising operational control by direct action when an employee makes those decisions and performs those actions necessary to operate a specific flight, such as crew and aircraft scheduling, accepting charter flights from the public, reviewing weather and NOTAM's, and conducting flight planning.

(1) FAR 121.133(a) and FAR 135.21 require that operators publish and keep current a manual for the guidance of flight and ground personnel in the performance of their duties. The operator's general operations manual (GOM) must contain specific guidance on the conditions which must be met before a flight may be initiated or continued, or under which a flight must be diverted or terminated.

NOTE: Single pilot operators, single pilot-in-command (PIC) operators, or operators granted a deviation to the requirement by paragraph A16 of the OpSpecs are not required to publish a manual.

(2) The operator's supervisory responsibility includes ensuring that both its flightcrew and operational control employees comply with published policies and procedures.

C. *Functions.* Operational control includes, but is not limited to, the operator's performance of the following functions:

- Ensuring that only those operations authorized by the OpSpecs are conducted
- Ensuring that only crewmembers trained and qualified in accordance with the applicable regulations are assigned to conduct a flight
- Ensuring that crewmembers are in compliance with flight and duty time requirements when departing on a flight
- Designating a PIC for each flight
- Providing the PIC and flight control personnel with access to the necessary information for the safe conduct of the flight (such as weather, NOTAM's, and airport analysis)

- Specifying the conditions under which a flight may be dispatched or released (weather minimums, flight planning, airworthiness of aircraft, aircraft loading, and fuel requirements)

- Ensuring that each flight has complied with the conditions specified for release before it is allowed to depart

- Ensuring that when the conditions specified for a flight's release cannot be met, the flight is either cancelled, delayed, re-routed, or diverted

- Monitoring the progress of each flight and initiating timely actions when the flight cannot be completed as planned, including diverting or terminating a flight

D. *Operational Control Systems.* Operational control systems vary with the type of operation the operator is authorized to conduct, the complexity of the operation, and the means of communication available to the individual exercising operational control. Part 121 and Part 135 provide for three general types of operational control systems. In descending order of precision and sophistication, the systems are flight dispatch, flight release, and flight-locating systems.

NOTE: The operator's system for exercising operational control must be described in paragraph A8 of the operator's OpSpecs. Most operational control systems are too complex, however, to be adequately described in a single paragraph. In such cases, the operator's system may be described in the operator's GOM, and the POI may reference the GOM location of this system description in paragraph A8 of the operator's OpSpecs.

(1) *Flight Dispatch Systems.* FAR 121.533 and FAR 121.535 require that both flag and domestic operators employ certified aircraft dispatchers to exercise direct control of flights. FAR 121.99 requires that flag and domestic operators provide radio communication facilities capable of quickly and reliably contacting a flight at all points while en route. Except in an emergency, the PIC and the aircraft dispatcher must agree before a flight may be initiated, continued, or diverted.

(2) *Flight Release Systems.* FAR 121.537 places the major responsibility for the operational control of supplemental air carriers and commercial operators with the director of operations. The director of operations may delegate the direct control of flight to other employees; however, the director always retains full supervisory responsibility. For purposes of this handbook, the employees exercising direct operational control in a Part 121 flight release system are termed flight-followers. Inspectors should be aware that operators may apply different job titles to these employees. Operators are not required to be able to establish direct radio contact with supplemental flights while they are en route. The flight-follower must, however, concur with the PIC that a flight can be conducted safely before the flight may be initiated. This requirement necessitates a suitable means of communication between the flight-follower and the PIC at each point of departure.

(3) *Flight-Locating Systems.* While FAR 135.77 does not specify which operator employee is to be responsible for operational control, it does require that the name and title of each individual authorized to exercise operational control be listed in the operator's GOM. A Part 135 operator may delegate most of the responsibility for a specific flight to the PIC, but always retains full supervisory responsibility. If a flightplan is not filed with ATC, the individual exercising operational control must be able to establish the location of the flight to provide timely notification should an aircraft be overdue or missing. The individual exercising operational control is not required to be able to communicate with the aircraft during a flight.

E. *Organizational Structure.* An operator's operational control function may be centralized in one individual or widely diversified throughout the operator's organization. In practice, it is not feasible for an individual to exercise operational control without assistance in any but the simplest of flight operations. Most operators create specialized departments for crew scheduling, load control, and other functions. These functions may or may not be placed under the management and supervision of the "flight control" department. When these functions are delegated to specialized sections of the operator's organization, the operator is responsible for establishing a means to ensure that all functions have been accomplished before a flight can be authorized to depart. Operators must establish effective internal communications, operating procedures, and administrative controls to meet this obligation. These procedures must be published in the operator's GOM.

F. *Complex Operations.* Practical and economic considerations may motivate operators to install operational control systems which are more sophisticated than those required by the applicable regulation. Two operators that conduct operations under the same regulation may require operational control systems of differing degrees of sophistication. For example, a Part 135 on-demand operator moving hunters to and from remote locations in the bush, may find a simple flight-locating system to be adequate. A Part 135 commuter operator who conducts 100 flights a day to and from major terminal areas may find, however, that a dispatch-type operation is necessary to effectively control operations. The FAA may require that an operator establish a sophisticated operational control system as a condition of obtaining authorization to conduct specific operations, such as operation of an enhanced weather information system (EWINS).

(1) Inspectors must evaluate each operator's operational control system to ensure that the operator complies with the applicable regulations and that the system is effective and provides for an adequate level of safety in the operations actually being conducted.

(2) An inspector may find that an operator's operational control system provides an inadequate level of control to assure safety. In this case, the inspector should carefully document the facts and report them to the POI through the Program Tracking and Reporting Subsystem (PTRS). The POI shall evaluate the facts and, if required, negotiate an acceptable solution with the operator, ensuring that the changes are incorporated. Should the operator be unwilling to negotiate, the POI may find it necessary to amend the operator's OpSpecs.

G. *Operational Control by Contractors.* Certain operators may propose to contract with a party other than one of the operator's employees to conduct direct control of specific flights.

(1) There is no provision in the FAR's that permits an operator conducting domestic or flag operations to authorize any individual other than an employee to conduct operational control. Such an arrangement would be in violation of FAR 121.533(a) or FAR 121.535(a).

(2) Part 121 supplemental operators and all Part 135 operators may contract for individuals other than regular employees to conduct operational control. These operators may also merge operational control functions with another operator. For example, a commuter operator may find it advantageous to allow a domestic or flag operator to conduct direct control of specific flights for purposes of coordinating flight schedules. An operator is not relieved of the supervisory responsibility for complying with FAR 121.125(b) or FAR 135.77 or the provisions of the OpSpecs by entering into such an agreement. The operator is responsible for ensuring that the training and qualification of contract personnel is adequate, that contractor personnel are performing their duties diligently, and that the provisions of the operator's manual are being complied with. The operator must also have an effective means of disciplining contractor personnel when set guidance and policy is not complied with. Any contract arrangements must be clearly and completely defined in the operator's GOM and authorized by the POI in paragraph A8 of the operator's OpSpecs.

1147. AUTHORIZED OPERATIONS. The type of operations an operator is authorized to conduct are specified in paragraph A1.a of the operator's OpSpecs.

A. *Part 121 Air Carrier Operations.* There are four kinds of Part 121 air carrier operations that may be authorized in an operator's OpSpecs, paragraph A.1a:

- Domestic
- Domestic and flag
- Supplemental
- Supplemental, cargo-only

B. *Part 135 Airplane Operations.* There are three kinds of fixed-wing airplane, air carrier operations that may be authorized for Part 135 operators in an operator's OpSpecs, paragraph A.1a:

- Commuter airplane
- On-demand airplane
- On-demand, cargo-only airplane

C. *Part 135 Rotorcraft Operations.* There are three kinds of rotorcraft air carrier operations that may be authorized for Part 135 operators in an operator's OpSpecs, paragraph A.1a:

- Commuter rotorcraft
- On-demand rotorcraft
- On-demand, cargo-only rotorcraft

D. *Multiple Operations Authorizations.* Paragraph A.1a of the operator's OpSpecs may authorize the operator to conduct one of the types of operations defined in previous subparagraphs A, B, and C. An operator may, however, be authorized to conduct operations under all three paragraphs, with different types of operations authorized under each. For example, an operator could be authorized to conduct domestic and flag, commuter airplane, and on-demand rotorcraft operations.

E. *Scheduled and Unscheduled Operations.* An operator may be authorized to conduct scheduled and/or unscheduled operations.

(1) *Scheduled Operations.* Scheduled operations are defined by SFAR 38-2, paragraph 6(c)(4) as, "operations that are conducted in accordance with a published schedule for passenger operations, which includes dates or times (or both) that are openly advertised or otherwise made readily available to the general public." "Commuter operators" are air carriers which operate airplanes or rotorcraft with a seating configuration of 30 seats or less and a maximum payload capacity of 7500 pounds or less. The "commuter" air carrier must operate these aircraft carrying passengers with a frequency of at least five round trips per week between two or more points according to published flight schedules.

(2) *Unscheduled Operations.* Unscheduled operations can be any of the following:

- Passenger operations conducted on an irregular (on-demand) basis, whether or not these operations are advertised, are unscheduled operations
- Passenger operations which are conducted at scheduled times but which are not advertised or made known to the general public (For example, a travel agency may contract with an operator to operate a flight or series of flights at specified times. Another example consists of a series of flights an operator conducts for the Military Airlift Command (MAC). Since these flights are only available to specific individuals and not to the general public, they are "unscheduled" operations.)
- All cargo operations, whether conducted at scheduled times or not

F. *Supplemental Rules and Operations.* Supplemental operations include all unscheduled passenger operations and all cargo operations conducted under Part 121 pursuant to SFAR 38-2, paragraph 4(a)(3). Part 121 contains a set of rules which govern these operations and are commonly known as "supplemental rules." In accordance with FAR 121.3(e), an operator who holds an air carrier certificate and supplemental OpSpecs must conduct operations in accordance with these specifications, as follows:

(1) A supplemental operator may not conduct scheduled passenger operations.

(2) A supplemental operator may conduct cargo operations (all of which are considered unscheduled, even if the operator adheres to a schedule).

(3) A supplemental operator may conduct operations in any area authorized by paragraph B50 of the OpSpecs. POI's may authorize qualified operators to conduct operations beyond the contiguous U.S. and extended overwater operations.

G. *Domestic Rules and Operations.* Domestic operations are scheduled, passenger-carrying operations conducted under Part 121 within the 48 contiguous states and the District of Columbia in the U.S. (also referred to as the conterminous U.S.) pursuant to SFAR 38-2, paragraph 6(a)(1). Part 121 contains a set of rules which govern these operations commonly known as "domestic rules." In accordance with FAR 121.3(a), an operator who holds an air carrier certificate and domestic OpSpecs must conduct operations in accordance with these specifications, as follows:

(1) Operators may be authorized by a POI to conduct operations to destinations outside the contiguous states under domestic rules (see volume 3, paragraph 85). These routes and destinations must be specified in paragraph A12 of the operator's OpSpecs.

(2) Domestic operators may conduct domestic operations under domestic rules within the contiguous states and supplemental operations under supplemental rules in any area as authorized by paragraph B50 of the OpSpecs.

(3) A domestic operator may not conduct flag operations.

H. *Flag Rules and Operations*. Flag operations are scheduled passenger-carrying operations conducted to or from points beyond the contiguous states (other than those operations conducted under domestic rules by authorization of paragraph A12 of the OpSpecs). Part 121 contains a set of rules which govern flag operations and are commonly known as "flag rules." In accordance with FAR 121.3(c), an operator who holds an air carrier certificate and flag OpSpecs must conduct operations in accordance with these specifications, as follows:

(1) Since the advent of SFAR 38-2 and deregulation, an operator authorized to conduct flag operations is not prohibited from conducting domestic operations; therefore, "flag and domestic" OpSpecs are issued to all flag operators.

(2) An operator issued "flag and domestic operations specifications" is authorized to conduct flag operations under flag rules, domestic operations under domestic rules, and supplemental operations under supplemental rules in any area authorized by paragraph B50 of the OpSpecs.

I. *On-Demand Operations*. On-demand operations are unscheduled passenger or cargo operations conducted under Part 135. An on-demand operator may not conduct commuter operations. An on-demand operator may conduct operations within any area authorized by paragraph B50 of the OpSpecs. POI's may approve qualified Part 135 operators to conduct extended overwater operations and operations beyond the contiguous states.

J. *Commuter Operations*. A commuter operator may conduct scheduled passenger operations, scheduled cargo operations, and on-demand passenger and cargo operations under Part 135. Commuter operators may conduct operations within any area authorized by paragraph B50 of their OpSpecs, including extended overwater operations, and operations beyond the contiguous states.

K. *Commercial Operations*. A commercial operator holds an operating certificate for conducting intrastate common carriage. Operations with airplanes of over 30 passenger seats or 7500 pounds useful load must be conducted under Part 121 supplemental rules. Operations of smaller capacity airplanes and helicopters are conducted according to Part 135.

L. *Overwater Operations*. Overwater operations are those flights conducted over any body of water beyond that point at which an aircraft is unable to glide to the shoreline of land when all engines fail.

M. *Extended Overwater Operations*. Extended overwater operations are those operations conducted at a horizontal distance of more than 50 nautical miles from the nearest shoreline. Helicopters conduct extended overwater operations if they operate at a horizontal distance of more than 50 nautical miles from the nearest shoreline and more than 50 nautical miles from an offshore heliport structure.

N. *Extended-Range Operations (ETOPS)*. FAR 121.161 prohibits any Part 121 operator from operating any two- or three- engine (except three-engine turbojet) aircraft over a route (over water or over land) that contains a point farther than 1 hour flying time from an adequate airport *unless authorization to do so is obtained from the administrator*. When an operator is authorized to conduct these operations, they are termed extended range operations (ETOPS.) Inspectors should refer to AC 120-42A, "Extended Range Operation With Two-Engine Airplanes, ETOPS" and to AFS-400 for direction and guidance in approving these operations. This chapter does not contain any further information or guidance specifically related to ETOPS.

1149. AIRCRAFT DISPATCHERS. An aircraft dispatcher is an airman who holds an aircraft dispatcher certificate. Part 121 flag and domestic operators must employ certified aircraft dispatchers to exercise direct operational control. Part 121 supplemental and Part 135 operators are not required to use certified aircraft dispatchers to exercise direct control. POI's may encourage supplemental operators to do so as one means of ensuring that operational control personnel have achieved a minimum level of training and qualification. A Part 121 or Part 135 operator using an enhanced weather information system (EWINS) must employ either an aviation meteorologist or a certified aircraft dispatcher who has been specifically trained to issue

flight movement forecasts (see volume 3, chapter 7, section 4).

1151. FLIGHT INFORMATION. Operators must supply or ensure that the information necessary to plan, conduct, and control operations is available to operational control and flightcrew personnel. Most of this data can be obtained through a number of different sources. Subscriptions are available through a standard government service or through a commercial aeronautical information and charting service. POI's should evaluate each source based on its individual quality. Operators should be expected to supplement services if necessary, and in all cases are responsible for ensuring that the information used is accurate and complete. Operators must also supply other data, such as notices to airmen (NOTAM's), track messages, and airport obstruction data, when applicable. The operator's system to obtain and distribute airport data must be described in paragraph A9 of the OpSpecs. The operator's system may also be described in a section of the GOM and referenced in paragraph A9 of the operator's OpSpecs. The operator's GOM must contain the guidance and procedures by which flightcrew and flight control personnel can acquire and apply this information.

A. *NOTAM's.* TBD ("To be developed" in a later change to the 8400.10 handbook).

B. *Track Messages.* Messages containing the coordinates of routes to be followed on flexible track systems such as the North Atlantic organized track structure, the Western Pacific flexible track structure, or the Pacific organized structure, are transmitted approximately every 12 hours. Flightcrews operating over these routes are required to have the currently valid track coordinates available in the cockpit to verify flightplan coordinates. Inspectors must ensure that an operator's operational control personnel have this information for flight planning and flight monitoring purposes.

C. *Aircraft Performance and Airport Obstacle Data.* Inspectors must ensure that operators of all types of airplanes comply with the performance requirements of Subpart I of Part 121 or Part 135, as applicable, before a flight departs. Operators of large transport category and commuter category airplanes must obtain and use airport obstacle data for takeoff performance calculations (see volume 4, chapter 3). Operators of all categories of aircraft must comply with en route obstacle clearance requirements, including contingency planning for engine failure. Inspectors should refer to volume 4, chapter 3 of this handbook for direction and guidance on aircraft performance requirements.

1153. WEATHER INFORMATION FOR CONTROL OF FLIGHT OPERATIONS. Inspectors must ensure that the system the operator uses to obtain and disseminate aeronautical weather data is either described in paragraph A10 of the operator's OpSpecs or that the system description, if in the operator's GOM instead, is referenced in paragraph A10.

A. *Sources of Weather Reports.* Weather reports used to control IFR flight operations under either Part 121, Part 135, or VFR Part 121 operations must be issued by either: the U.S. National Weather Service (NWS); a source approved by the NWS; or, for operations outside the U.S., by a source approved by the FAA Administrator. Part 135 VFR operations may be conducted using pilot or other authorized observations when other reports are not available (see chapter 7, section 3 of this volume).

B. *Sources of Forecasts.* All weather forecasts must be based on data obtained from an approved source as listed in previous subparagraph A. POI's should ensure that operators obtain forecasts from qualified sources.

C. *Weather Reports for Takeoffs and Landings.* Operators must obtain and use a current weather report before taking off, landing, or beginning an instrument approach. The visibility and ceiling values (when applicable) in the body of the report are controlling for these operations. A reported observation of RVR, RVV, or RVO on the runway to be used is controlling when such reports are available. For definitions of "current weather" and "latest weather report," see chapter 7, paragraph 1409 of this volume.

D. *Weather for Flight Release.* Part 121 and Part 135 contain a number of rules which require operators to use "appropriate weather reports or forecasts or any combination thereof, (which) indicate the weather conditions at the estimated time of arrival." The FAA General Council (GC) has interpreted this language to mean that the critical time period is the estimated time of arrival (ETA). Inspectors must ensure that operators use either weather reports or forecasts, as applicable, to cover this time period.

(1) Clearly, current weather reports are of lesser

value than forecasts for long-range operations. Under the GC's interpretation, a flight may be released to a destination which is currently below minimums but which is forecast to be above minimums at the ETA. The GC goes on to comment, however, that the use of hourly reports to monitor trends is prudent and may be required to meet the intent of the rule. In the opposite case, operators may base the release of a flight of less than 1 hour on current reports.

(2) Operators may be required to release flights without complete weather information. For example, a transcontinental flight from the east coast to the west coast must depart several hours before the destination airport opens and the first surface observations (SA's) of the day are taken. A similar situation occurs when a station SA is missing from the hourly sequence reports. An operator, aircraft dispatcher, or PIC who operates a flight under such conditions would be considered to be in compliance with the FAR's under the following conditions:

(a) Those weather reports and forecasts which are available have been obtained and used.

(b) Should later information show the situation to be unfavorable, adequate contingency plans (such as additional contingency fuel) have been made to deal with the situation.

(3) The term "available" reports includes pilot reports.

E. *Conditional Phrases in Weather Forecasts.* A General Council (GC) opinion has been given concerning conditional phrases contained in the remarks section of a forecast. In the GC's opinion, these remarks (in addition to the information contained in the main body of the forecast) are controlling for purposes of a flight dispatch or flight release (see chapter 7, paragraph 1407 of this volume).

(1) Under an EWINS, an EWINS-qualified meteorologist or aircraft dispatcher may issue a flight movement forecast (FMF) based on a detailed analysis of the specific flight without including conditional phrases. A flight movement forecast may be used for operational control purposes (see chapter 7, section 4 of this volume). It is an acceptable practice for an aircraft dispatcher to release a flight to a destination at which conditional remarks of an NWS forecast indicate the possibility of the destination being below minimums when the FMF for that specific flight indicates the airport will be at or above minimums.

(2) Exemption 3585, as amended, allows flag and domestic operators to dispatch to a destination at which the forecast remarks contain conditions below minimums. Inspectors and POI's should be aware that this exemption requires that those operators who use it must exercise a number of additional precautions. Among these precautions are the designation of a second alternate airport and a requirement that the aircraft dispatcher monitor and advise the flightcrew of conditions while the flight is en route. POI's of operators using this exemption should ensure that the operator's GOM contains adequate guidance for using this exemption.

F. *Adverse Weather.* FAR 121.101 requires flag and domestic operators to have a system for obtaining reports and forecasts of adverse weather for each route and airport used. FAR 121.601 requires that the aircraft dispatcher provide this information to the PIC.

1155. FLIGHT PLANNING. Inspectors must ensure that operators conduct preflight planning so that flights are conducted: to the standards of navigational accuracy required in the airspace traversed, to meet regulatory fuel requirements, to satisfy ATC information and reporting requirements, and to ensure that flights are operated safely. The degree of sophistication and accuracy required in flight planning depends on the type of navigation conducted and the airspace traversed. Operators may assign flight planning duties to either flightcrew or flight control personnel. It is a common and acceptable practice for operators to contract for flight planning from specialized services. The operator, however, is responsible for the accuracy of any information the contractor uses and for the accuracy of the results.

A. *Flightplans.* The term "flightplan" means a paper document or a file of electronic data prepared for purposes of flight planning, flight control, and navigation. Flight planning consists of selecting an appropriate aircraft cruise schedule and applying forecast wind, temperature, and aircraft performance data to a planned route to predict estimated time en route (ETE) and estimated fuel consumption. The term "ATC flightplan" is used in this chapter to mean the subset of information extracted from the flightplan, which is filed with ATC for purposes of obtaining an ATC clearance.

B. *Computation and Verification.* A flightplan may be computed manually or with computer aids. In either case, inspectors must ensure that the operator's GOM contains the specified procedures, formats, and forms to be used. The operator is responsible for establishing "reasonableness" tests and for ensuring that flightcrew and operational control personnel verify the accuracy of planning. Computer-generated flightplans are subject to input error. POI's shall ensure that the operator's GOM contains adequate procedures for operational control personnel and flightcrews to use to verify all flightplans, for both computer-generated as well as manually-generated ones.

C. *Part 121 Requirements.* Part 121 operators are required by FAR 121.695(a) and FAR 121.697(a) to carry a flightplan to destination on all flights. Operators typically require that flightcrews record the flight progress on the flightplan. POI's may require such procedures as a condition of authorizing extended overwater navigation. When the flightcrew is required to record the flight progress, the annotated flightplan becomes a record of the flight. After completion of the flight, the flightplan is a record that must be retained by the operator for a period of 3 months.

D. *Part 135 Requirements.* Part 135 operators are not specifically required by regulation to carry a flightplan on all flights. POI's of Part 135 operators, however, should ensure that the operator's GOM contains procedures that include the following:

- Informing the PIC of the required information contained in center-stored flightplans that ensure compliance with FAR 91.153(a)
- Ensuring compliance with FAR 135.209 or FAR 135.223 fuel supply requirements
- Ensuring compliance with FAR 135.181, FAR 135.211(b)(1), and applicable Part 135, Subpart I performance requirements
- Ensuring compliance with FAR 135.211, FAR 135.217, and FAR 135.221 alternate requirements
- Familiarization of PIC's with all available information required by FAR 91.103

(1) *Load Manifests.* FAR 135.63(c) requires that a load manifest be kept on board all multiengine aircraft flights. The load manifest requirement must contain the following:

- Number of passengers
- Total weight
- Maximum allowable takeoff weight
- Center of gravity limits
- Center of gravity or entry from approved schedule
- Flight or registration number
- Origin and destination of flight
- All crewmembers and their position assignments

(2) *Valid Track Coordinates.* Flightcrews must carry the valid track coordinates in the cockpit during flights over flexible track systems.

E. *Navigation Methods and Flightplans.* Inspectors should keep in mind that the primary concerns in choosing navigation methods and procedures are the degree of precision required for the separation of air traffic and obstacle avoidance. Class I station reference navigation is VFR or IFR navigation within the standard service volume of ICAO, ground-based, electronic navigation aids. Courses and distances are published on standard IFR charts or may be determined by plotting courses on an IFR or VFR chart. To be acceptable for Class I navigation, a simple flightplan should include at least the following:

- Fix or intersection identifiers, segment distances, ETE's for each segment, and an estimate of fuel consumption for each segment (A segment or zone is the distance between two check points.)
- A summation of distance, time, and fuel to show regulatory compliance

(1) *Long-Range, Class II Navigation.* Long-range, Class II navigation is navigation conducted more than 1 hour

beyond the operational service volume of standard ICAO navigation aids. Long-range, Class II navigation normally requires specialized long-range navigation systems such as LORAN, OMEGA/VLF, INS, GPS, or DOPPLER. In some cases, dead reckoning, pilotage, or celestial navigation may be used.

(2) *Long-Range, Class II Flightplan.* An acceptable flightplan for long-range, Class II navigation should contain the following elements:

- Waypoints (Fixes for the portion of the route conducted by Class I navigation)
- The waypoint coordinates identifier (located next to the waypoint or on the line below)
- The track leaving the waypoint
- Forecast segment wind, drift, or drift correction
- Forecast temperature (or temperature deviation) and TAS
- Segment distances, estimated ground speed, and segment ETE
- Estimate of fuel consumption for each segment
- Indication of equal time points (ETP's), if they are used for compliance with engine-out fuel or oxygen requirements
- A summation of distance, time, and fuel to indicate regulatory compliance
- Indication of the height of the tropopause or maximum wind level at each waypoint for turbojet operations, when possible

(3) *Celestial Navigation.* When navigation is conducted by celestial means, flight planning requires current navigation charts, a current air almanac, and sight reduction tables. The operator's GOM must contain specific procedures to be used for flight planning, the required forms, and the procedures for checking the validity of the planning conducted.

(4) *Organized Track Systems.* When operations are conducted over an organized track system, the flightplan coordinates must be checked against the track message. The operator's GOM must specify the individual responsible for the check and the procedures to be used during it.

NOTE: Advisory Circulars 91-49 and 120-33 contain guidance for approving operations in minimum navigation performance specification (MNPS) airspace.

(5) *OMEGA/LORAN Systems.* When OMEGA or LORAN is used, appropriate NOTAM's must be checked to ensure that adequate signal coverage is available.

F. *Pilotage.* Pilotage is navigation conducted solely by reference to visually-distinguishable checkpoints. Pilotage may be either Class I or Class II navigation but may only be approved over areas where checkpoints are readily distinguishable and in airspace where such operations are authorized. Other operations must be conducted by Class I, station reference navigation or by Class II, long-range navigation. VFR navigation by pilotage may only be conducted by operators as follows:

(1) Part 121 operators may conduct VFR navigation only when specifically authorized to do so by the OpSpecs.

(2) Part 135 operators may conduct VFR navigation by pilotage in airplanes (other than turbojets) and helicopters without specific authorization by OpSpecs.

(3) Turbojet airplane operations may be conducted by VFR navigation by pilotage only according to paragraph B33 of the OpSpecs.

(4) Flight planning for VFR pilotage requires current VFR navigation charts. Inspectors must evaluate an operator's flightplan to ensure that it includes, but is not limited to, the following elements as applicable to the operation:

- Checkpoints, segment distances, ETE's for each segment, and an estimate of fuel consumption for each segment
- A summation of distance, time, and fuel planning to show regulatory compliance (departure point to destination, required reserve, and contingencies)

(5) Flight planning and navigation for Class II, VFR operations may require additional precautions, depending on the area of operations. For example, in a polar or wilderness area, aircraft should always have adequate fuel to fly to the nearest fueling point, along with a reserve of fuel. Helicopters operating offshore should at all times have at least enough fuel to reach land, and thereafter fly for a specified time.

G. *Dead Reckoning.* Dead reckoning is navigation conducted solely by the pilot flying a calculated heading without a means of obtaining a position. The pilot computes such headings by applying estimated wind information to the measured track. Navigation by dead reckoning is only acceptable under certain limited circumstances. For example, operators may be approved by the OpSpecs to conduct either IFR or VFR flights between the service volumes of two standard navigational aids on a direct course between the aids. Such operations must be limited to periods of less than 1 hour and to areas where ATC separation standards do not preclude such operations. POI's must evaluate other dead reckoning operations on a case-by-case basis.

1157. SELECTION OF ALTERNATE AIRPORTS. A critical element of preflight planning is the selection of alternate, takeoff, en route, and destination airports. PIC's and operational control personnel have a range of latitude to accommodate individual circumstances. This latitude must be carefully exercised. Operators must provide specific direction and guidance to PIC's and aircraft dispatchers for the selection of takeoff, en route, and destination alternate airports.

A. *Terrain.* FAR 91.103 requires that PIC's familiarize themselves with "all available alternatives if the planned flight cannot be completed." FAR 121.565(a) requires the PIC to land at the "nearest suitable airport" in case of an engine failure or shutdown. FAR 121.565(b), however, does allow a PIC operating an airplane of three or more engines, to proceed to an airport other than the nearest suitable available airport, when this course of action is as safe as landing at the nearest suitable airport. While these rules apply specifically to PIC's, operational control personnel should be aware of, and be guided by, these requirements when selecting alternate airports. A PIC, aircraft dispatcher, or flight follower who plans to overfly high terrain after an engine failure to reach a remote alternate airport may not be in compliance with the intent of FAR 121.565(b)(5) or FAR 91.13 when a closer alternate airport with clear approaches is available. POI's shall ensure that operators and PIC's take particular care in the selection of alternate airports in the mountainous areas. POI's should ensure that the operator would be in compliance with Subpart I of Part 121 or Part 135 (in normal and engine-out configurations) while en route to the alternate airport.

B. *Weather and Navigation Aids.* Aircraft dispatchers, flight-followers, and PIC's must be aware of the effect of weather and inoperative navigation aids when selecting alternate airports. For example, when the winds switch from easterly to strong westerly at Boseman, Montana, the alternate minimums increase from 600/1+1/2 to 1200/3+1/2. Inoperative navigational aids, runway conditions, or closures can render an airport unacceptable as an alternate airport.

1159. LOAD CONTROL. Very few aircraft can be released with both a full payload and a full fuel load. When heavy payloads are carried, the fuel load may have to be limited. In addition, the weight at which an aircraft can be released is limited by takeoff, en route terrain clearance, and landing performance limitations (see volume 4, chapter 3).

A. *Loading Assumptions.* Operational control personnel must have either actual loading information or they must make assumptions about aircraft loading before they can release a flight. For flights released using loading assumptions, inspectors must ensure that the operator has established a means for ensuring that flights actually do depart at, or below, the maximum weight used for planning.

B. *GOM.* Inspectors must ensure that the operator's GOM contains information and procedures for the control of fuel load, payloads, takeoff weights, and center of gravity. The operator's GOM must clearly delineate: the category of employee responsible for making these computations, adequate information and procedures for performing such calculations, and the procedures by which the flightcrew and operational control personnel can ensure that these functions have been accomplished before the aircraft departs.

1161. AIRWORTHINESS OF AIRCRAFT. FAR 121.605 prohibits the dispatch or release of an aircraft unless it is airworthy and has all required equipment installed. FAR 121.709 and FAR 135.443 require that before an aircraft can be operated it must have an airworthiness release or

appropriate logbook entry deferring any discrepancies in accordance with the minimum equipment list (MEL) or the configuration deviation list (CDL).

A. *Compliance with Minimum Equipment List (MEL) or Configuration Deviation List (CDL) Provisions*. When an aircraft is released according to an MEL or CDL provision, the operator is responsible for ensuring that the MEL or CDL provision is fully complied with before the dispatch or flight release is issued. The PIC is responsible for ensuring that the MEL or CDL provision can be fully complied with before accepting the release. Inspectors must ensure that an operator has adequately supplied information to both the PIC and the operational control personnel for making this determination.

B. *MEL or CDL Limitations in Dispatch or Flight Releases*. When MEL or CDL restrictions impose aircraft performance or weight limitations, the aircraft dispatcher or the person exercising operational control must be notified of these limitations before the flight is dispatched or released. The release is normally prepared well in advance of the scheduled departure time. In hub-and-spoke operations, a dispatch release may be prepared before the aircraft and flightcrew have arrived from a previous flight. It is not unusual for additional discrepancies to arise after a release has been prepared and transmitted. When a decision has been reached to operate the aircraft with an additional deferred discrepancy after the release has been prepared, the operator must have procedures for notifying the aircraft dispatcher or the individual exercising operational control. If the flight cannot be operated as originally released, a new release must be prepared or the original release must be amended.

C. *Discrepancies After Departure*. A flight is considered to have departed when it moves under its own power (forward or backward) for purposes of flight. After this time, any discrepancy which arises must be handled according to the flight manual. If the flight manual has procedures for that particular discrepancy which allow for the continuation of the flight, and the PIC determines that the flight can safely depart with those procedures, then the flight may continue. If the flight manual does not permit continuation of the flight, or if the PIC determines that the flight cannot safely depart, the discrepancy must be entered in the maintenance log in accordance with FAR 121.563 or FAR 135.65(b) and maintenance action must be taken in accordance with FAR 121.709 or FAR 135.65(c) before the aircraft takes off. A new or amended release is required when the flight cannot be operated as originally planned. For example, the anti-skid could fail during the taxi for takeoff. If the flight manual contains procedures for adjusting performance computations which indicate that the flight can operate within the required limits at the departure point, destination, and alternate airport, the flight could continue. Conversely, if the flight handbook does not contain any such procedures, the flight must return for maintenance action.

1163. CREW QUALIFICATION AND CREW DUTY TIME. The operator is responsible for assigning specific personnel to operate each flight, including the designation of a PIC. Crewmembers and the operator are jointly responsible for ensuring that crewmembers are qualified in accordance with the regulations (including special airport qualifications) and are in compliance with duty time regulations before the flight departs. Operators may delegate these responsibilities to departments other than the operational control department but must establish procedures by which operational control personnel can verify that these requirements have been accomplished.

1164. - 1174. RESERVED.

[PAGES 3-596 THROUGH 3-602 RESERVED]

SECTION 2. FLIGHT DISPATCH SYSTEMS AND DOMESTIC OPERATING RULES

1175. GENERAL. This section contains information and guidance to be used by inspectors concerning flight dispatch systems and operations conducted by Part 121 operators under domestic operating rules. The operational control system required by Part 121 for domestic and flag operations is commonly termed a dispatch system. Domestic and flag operators must use certified aircraft dispatchers to directly control flight operations. A pilot-in-command (PIC) may not initiate or continue a flight unless both the PIC and the aircraft dispatcher agree that the flight can be conducted safely *as planned* under the existing and forecast conditions. Once a flight is initiated, the aircraft dispatcher must continually monitor the flight's progress and inform the PIC of conditions that could affect the safe operation of that flight.

A. *Signature on a Dispatch Release.* The FAR's require that both the aircraft dispatcher and the PIC sign the dispatch release. The dispatcher's and PIC's signatures certify that, in the judgment of each, the flight can be made safely as planned. Some further guidance follows for inspectors to use regarding signatures on dispatch releases.

(1) The conditions under which a flight is dispatched may make it impractical for both the aircraft dispatcher and the PIC to sign on the same form. For example, the operator may maintain a centralized dispatch center and transmit dispatch releases to each point of departure rather than maintain individual dispatch facilities at each airport. Operators may establish procedures that comply with the intent of the rule, but accommodate the necessities of contemporary operations. One acceptable practice is for an aircraft dispatcher to sign a duty roster at the beginning of the dispatcher's shift, thus indicating the time the aircraft dispatcher came on duty and the desk or geographic area the dispatcher is working. The aircraft dispatcher's name and a date-time group printed on each dispatch release may be considered the aircraft dispatcher's signature in combination with the duty roster. Another acceptable practice is for the aircraft dispatcher to sign and retain for the record a copy of each dispatch release which is transmitted.

(2) Inspectors, operators, and aircraft dispatchers should be aware of the significance of an individual's signature under law, being that the individual who signs has consented to be bound by, and held responsible for, the act.

(3) An aircraft dispatcher may conduct an inflight re-release by recording the re-release message on oral tape or in writing. A system of appending the aircraft dispatcher's signature, such as that described in previous subparagraph (1), may be used. The PIC may accept an inflight re-release over a radio by reading back the dispatch release message, recording the message in writing (including the dispatcher's name), noting the date and time, and signing the entry. The preferred procedure is for the message to be copied on a designated master flightplan. These same procedures may be used for releases delivered over the telephone. The signed dispatch releases, duty rosters, and the master flightplan are company records that must be retained (see volume 3, chapter 11, section 3).

B. *Preflight Briefing.* Before dispatching any flight, an aircraft dispatcher must be thoroughly familiar with the reported weather conditions and the forecast weather conditions (including adverse weather) and the status of communications, navigation, and airport facilities. FAR's 121.601(a) and (b) require that the aircraft dispatcher provide the PIC with a preflight briefing on each of these items.

(1) The preflight briefing may be delivered verbally or in writing. In the latter case, communications facilities must be available for the aircraft dispatcher and the PIC to communicate directly by voice if direct communication is required or desired.

(2) The intent of FAR's 121.601(a) and (b) is that the aircraft dispatcher and the PIC have adequate and identical information for planning. The PIC and the aircraft dispatcher must be thoroughly familiar with, and consider all aspects of, the situation. For example, inoperative navigation aids and shortened runways as well as weather conditions can affect the selection of alternate airports. For this reason the briefing by the aircraft dispatcher is not optional for either the dispatcher or the PIC under these rules.

C. *Flight-Monitoring.* An aircraft dispatcher must monitor the progress of each flight under that dispatcher's control

until the flight has landed, passed beyond the dispatcher's area of control, or until the dispatcher is properly relieved by another aircraft dispatcher. Flight-monitoring, as a minimum, must consist of the monitoring of each flight's fuel state, flight time remaining, destination and alternate airport weather trends, en route winds and weather (including pilot reports), and the status of airport and navigational facilities.

(1) FAR 121.601(c) requires that the aircraft dispatcher report to the PIC any additional information that could affect the safety of the flight. This information may be delivered by voice message or by other means, such as air-ground passive communication systems (ACARS).

(2) FAR 121.99 requires that rapid and reliable two-way radio communications between each flight and the aircraft dispatcher be available at any point in the flight, including overwater portions of international flights. While the aircraft is over the conterminous U.S., this system must be independent of any system operated by the U.S. government.

D. *General Operations Manual (GOM).* Inspectors must ensure that the operator's general operations manual (GOM) contains policies and procedures for releasing flights and subsequent inflight monitoring. FAR 121.137(a) requires that the manual or applicable parts be available to aircraft dispatchers during the performance of their duties. Inspectors must ensure that the operator's GOM includes the information that follows.

(1) The operator's GOM must contain flightcrew reporting requirements and the actions that aircraft dispatchers should take if reports from the flightcrew are not received.

(2) Once initiated, a flight must continue to destination as planned and in accordance with the conditions of the dispatch release. A PIC may not continue to destination, however, when in the opinion of either the PIC or the aircraft dispatcher, it is unsafe to do so. In such case, the PIC must take action to obtain the aircraft dispatcher's concurrence on a new course of action and then amend the dispatch release.

(3) ATC frequently delays, re-routes, or assigns altitudes to flights other than those planned by the operator. The ATC system requires this flexibility to re-route traffic flow around adverse weather and to function effectively. The operator's policies and procedures for operational control should accommodate these demands while maintaining the duality of responsibility shared by the aircraft dispatcher and the PIC. One acceptable means operators may use to comply with the regulatory requirement is to publish notification requirements in the GOM for flightcrews to follow in these circumstances. For example, the operator might specify maximum amounts that the ETE, assigned altitude, estimated fuel remaining when overhead destination, and distance from planned course may deviate, without reporting to the aircraft dispatcher and obtaining an amended release (see paragraph 1187 of this section). The operator may also place remarks on the dispatch release to alert the PIC to the fact that a routing has been chosen for a specific reason and give instructions to contact the aircraft dispatcher if ATC needs to re-route the flight.

NOTE: FAR 121.557(a) authorizes the PIC to deviate from the conditions of the dispatch release to the extent necessary for safety in an emergency. When the PIC exercises this authority, FAR 121.557(c) requires that the PIC keep both ATC and the aircraft dispatcher fully informed of the progress of the flight. FAR 121.557(c) requires that when emergency authority is exercised, a written report be forwarded to the administrator (POI), through the director of operations, within 10 working days.

1177. FACILITIES AND STAFFING. FAR 121.107 and FAR 121.395 require that each domestic and flag operator provide enough dispatch centers and qualified aircraft dispatchers to ensure adequate operational control of each flight.

A. *Facilities.* FAR 121.107 requires that each domestic and flag operator provide enough dispatch centers for adequate control of the operations conducted.

(1) Operators have wide latitude in meeting this requirement. With modern communications, many operators exercise worldwide operational control from a single center. Any number and placement of centers is acceptable, provided the operator can show that organizational and communications arrangements are effective.

(2) Many operators have chosen to automate some dispatch duties and routines. A few operators have introduced a high degree of automation. Many functions which were previously performed manually by human beings are

now handled automatically by machine. For example, flight routes are automatically generated and flightplans are filed by computer. While these systems may be labor saving, they introduce special problems and specific hazards. POI's must ensure that the operator has designed adequate safeguards into the system. For example, the operator must be able to ensure that a flightplan with a routing identical to the one filed with ATC is delivered to the PIC.

B. *Staffing.* FAR 121.395 requires that operators provide enough qualified aircraft dispatchers to ensure the adequate operational control of all flights as follows.

(1) FAR 121.463(d) requires that each aircraft dispatcher be "familiar with all essential operating procedures for that segment of the operation over which he exercises dispatch jurisdiction." This requirement applies to all aircraft dispatchers the operator assigns to revenue flights (including the management personnel who occasionally work a position to relieve personnel), and to those aircraft dispatchers who trade assignments for personal reasons. Inspectors must ensure that operators have established a means of qualification to satisfy this rule. The rule also allows aircraft dispatchers to dispatch flights over segments on which they are not qualified after coordinating with a qualified aircraft dispatcher. Operators who use this provision must show that the supervising aircraft dispatcher has adequate time to oversee the aircraft dispatcher unfamiliar with the area without undue distraction from other assigned duties.

(2) Aircraft dispatchers commonly dispatch and monitor flights simultaneously. Inspectors must ensure that operators provide enough dispatch personnel to fully accomplish both tasks. POI's should ensure that the operator's dispatchers are not neglecting flight monitoring duties due to the pressure of their duties for originating flights.

(3) The time required for an aircraft dispatcher to prepare a dispatch release or to monitor the progress of a flight varies according to the geographical area the aircraft dispatcher is working, the complexity of the operation, and the degree to which the process is automated. An aircraft dispatcher employed by a small operator may do all of these tasks manually without assistance and may take several hours to dispatch a single flight. On the other hand, an aircraft dispatcher for a major air carrier may be able to adequately dispatch a flight in a few minutes by using a computerized system.

(4) With all operators, workloads tend to be cyclical with peaks and valleys. Operators should continually monitor aircraft dispatcher workloads at peak periods to ensure that the dispatchers are not overloaded. One acceptable means of controlling routine workloads is for operators to assign aircraft dispatchers to specific geographical areas and to regulate the number of flights an aircraft dispatcher is scheduled to work in each hour and in each shift.

(5) The operator must have adequate contingency plans for dealing with foreseeable non-routine operations. For example, when a major storm system moves across an area and ATC central flow control begins re-routing traffic, an aircraft dispatcher's workload can increase to several times the routine level. One acceptable means of dealing with this problem is for the operator to add more aircraft dispatchers during periods of non-routine operations. The contingency plan may require the re-assignment of flight monitoring responsibilities to reduce the number of flights being handled by the affected aircraft dispatcher.

(6) Operators conducting "hub operations" have special problems complying with the combined requirements of FAR 121.107 or FAR 121.395, FAR 121.99, and FAR 121.601(c). For example, if weather conditions unexpectedly restrict operations or close a hub while flights are inbound, the operator must demonstrate the capability to communicate with, and effectively control, a large number of flights in a short period of time.

(7) POI'S shall ensure that operators using automated systems have published procedures for maintaining operational control after an unexpected loss of an automated system. These procedures should be published in the operator's GOM.

1179. AIRCRAFT DISPATCHER DUTY TIME LIMITATIONS. Inspectors must ensure that operators place the following limitations on aircraft dispatcher duty time, except in cases of circumstances or emergency conditions that are beyond the control of the operator in accordance with FAR 121.465(b)(3).

A. An aircraft dispatcher may not be scheduled for more

than 10 consecutive hours of duty.

B. When an aircraft dispatcher is scheduled for more than 10 hours of duty in 24 consecutive hours, a rest period of at least 8 hours must be provided at, or before, the end of 10 hours of duty.

C. Each aircraft dispatcher must be relieved of all duty for at least 24 consecutive hours during any 7 consecutive days or the equivalent thereof during any calendar month.

D. An aircraft dispatcher's shift must be scheduled to begin at a time that allows the dispatcher to become thoroughly familiar with existing and anticipated weather conditions along the route before dispatching any flight. The aircraft dispatcher must remain on duty until each flight under the aircraft dispatcher's control has either landed, or gone beyond the dispatcher's jurisdiction, or until the aircraft dispatcher is relieved by another qualified aircraft dispatcher. These requirements necessitate a change-over procedure between the oncoming aircraft dispatcher and the aircraft dispatcher being relieved.

E. A flag operator, when authorized by the POI and by the operator's OpSpecs, may schedule an aircraft dispatcher at a duty station outside of the 48 contiguous states or the District of Columbia for more than 10 consecutive hours of duty in a 24-hour period. The aircraft dispatcher must be relieved of all duties for at least 8 hours during each 24-hour period. POI's shall ensure that this provision is used to comply with local work customs and that it does not provide for less personnel than required to maintain adequate operational control.

1181. WEATHER REQUIREMENTS FOR DISPATCH UNDER DOMESTIC RULES. Inspectors must be informed about the weather requirements for the dispatch of domestic Part 121 flights (see section 4 of this chapter for a discussion of dispatch under flag rules).

A. *Dispatch Under VFR.* FAR 121.611 prohibits an aircraft dispatcher from releasing a domestic flight for VFR operations unless the ceiling and visibility en route and at the destination is VFR and will remain above applicable VFR minimums, until the aircraft arrives at the airport or airports specified in the dispatch release.

NOTE: Part 121 flights may not be dispatched under VFR rules unless they are specifically authorized by paragraph B33(d) of the OpSpecs (see volume 3, section 4, paragraph 125).

B. *IFR Takeoff Weather Minimums.* An aircraft dispatcher may not release a flight when the weather at the departure point is reported to be less than the takeoff minimums specified in paragraph C56 of the operator's OpSpecs. The weather conditions may, however, be below the landing minimums specified in the operator's OpSpecs for the airport. In this case the aircraft dispatcher may not release the flight unless the following conditions exist:

(1) For a two-engine airplane, an alternate airport is available which is not more than 1 hour from the departure airport at normal cruising speed, in still air, with one engine inoperative.

(2) For an airplane with three or more engines, an alternate airport is available which is not more than 2 hours from the departure airport at normal cruising speed, in still air, with one engine inoperative.

(3) The alternate airport required by subparagraph (1) or subparagraph (2) is listed on the dispatch release.

(4) The weather conditions at the designated takeoff alternate at the estimated time of arrival (ETA) meet the requirements of paragraph C55 of the operator's OpSpecs.

C. *Destination Weather - IFR Operations.* FAR 121.613 prohibits an aircraft dispatcher from releasing a domestic flight under IFR or over-the-top rules unless weather reports and/or forecasts indicate that the weather will be at, or above, minimums required in the OpSpecs at the destination airport at the ETA. Category I minimums are given in OpSpecs paragraphs C53 and C54. Category II and III minimums are given in OpSpecs paragraphs C59 and C60 respectively.

D. *Alternate Weather.* FAR 121.619 prohibits an aircraft dispatcher from releasing a domestic flight under IFR or over-the-top rules unless at least one alternate airport is listed for each destination airport in the dispatch release and at which the weather exceeds the alternate airport requirements of the table in paragraph C55 of the OpSpecs. An alternate airport does not have to be designated, however, when for a least 1 hour before to 1 hour after the ETA, the appropriate weather reports or forecasts, or any combination thereof, indicate the following:

- The ceiling will be at least 2,000 feet above the airport elevation
- The visibility at that airport will be at least 3 miles (see FAR 121.619(a))

E. *Designation of Two Alternate Airports.* When weather conditions at the destination airport and the first alternate airport are marginal, FAR 121.619(a) requires that at least one additional alternate airport be designated. The term "marginal" as applied to domestic alternate minimums, is not defined by regulation. To some extent this is because the definition of what constitutes "marginal" depends on the nature of the weather phenomena, the operation conducted, and the equipment used. POI's should ensure that the definition of marginal and of the conditions under which a second alternate airport must be designated are clearly stated in the operator's GOM.

1183. FUEL SUPPLY - DOMESTIC OPERATIONS. Inspectors need to be aware of the fuel requirements for dispatch under domestic rules (see section 4 of this chapter for fuel requirements in extended overwater operations). The fuel planning provisions of FAR 121.639 and FAR 121.647 apply to all domestic flights - whether turbojet-, turbopropeller-, or reciprocating-powered.

A. *Required Fuel Supply.* An operator may not dispatch a domestic flight, and a flight, may not take off unless, considering winds and forecast weather conditions, the flight carries all of the following increments of fuel:

(1) *En Route Fuel:* That fuel necessary for the flight to reach the airport to which it is dispatched and to conduct one instrument approach.

(2) *Alternate Fuel:* That fuel necessary for the flight to make a missed approach at the destination airport, fly from the destination to the most distant alternate airport, make an IFR approach (if available forecasts indicate conditions will be below VFR minimums), and to make a landing.

NOTE: POI's should ensure that operators use realistic routings between destination and alternate airports.

(3) *Domestic Reserve Fuel:* That increment of fuel necessary for a flight to continue for 45 minutes at normal cruising fuel consumption.

(4) *Contingency Fuel:* That increment of fuel necessary for the flight to compensate for any known traffic delays and to compensate for any other condition that may delay the landing of the flight.

NOTE: The operator's GOM should contain policies and instructions to aircraft dispatchers and PIC's for computing the amount of contingency fuel to be carried under the circumstances likely to be encountered in the operator's specific operation.

NOTE: When computing fuel requirements, all fuel must be in addition to unusable fuel.

B. *Departure Fuel.* FAR 121.639 requires the fuel listed in previous subparagraph A be on board the aircraft at takeoff. The dispatch release must display this amount. The operator's GOM should contain a clear statement of this point for pilots, aircraft dispatchers, and load planners. An additional increment of fuel for start-up, taxi, and predeparture delays must be included in the fuel load on board the aircraft at engine start.

1185. ORIGINAL DISPATCH. A flight conducted under Part 121 domestic or flag rules may not depart from the point of origin unless a dispatch release contains specific authorization for the flight between specified points. The dispatch release may be for a single flight or for a series of flights with intermediate stops.

A. *Required Dispatch Release Elements.* Inspectors must ensure that operators require that dispatch releases be recorded in writing and contain at least the following information:

- Aircraft identification number
- Flight number
- Departure airport, intermediate stops, destination airports, and alternate airports
- The type of operation (IFR or VFR)
- Minimum fuel quantity required by regulation at the start of each takeoff (does not include taxi fuel)

B. *Required Dispatch Release Attachments.* The FAR's require that a dispatch release contain or have attached: available weather reports, weather forecasts (or a combination thereof) for the destination airport, intermediate stops, and alternate airports that are the latest available at the time the release is signed by the pilot.

(1) The term "available" reports includes pilot reports.

(2) Any additional weather reports or forecasts that the PIC or the aircraft dispatcher considers necessary or desirable must be included.

(3) The operator must establish procedures to ensure, when a flight has been dispatched but is unable to depart as scheduled, that the weather information is updated and is the latest available at the time of actual departure (takeoff). The operator may include procedures in the GOM to have the aircraft dispatcher forward to the flightcrew any new weather information which may be operationally significant as soon as practical after the aircraft departs.

(4) To ensure that the weather information is updated, the aircraft dispatcher must prepare a new dispatch when a flight takes off and then returns to the point of departure.

C. *Dispatch Release - Additional Information and Conditions.* While a dispatch release must contain the information specified in previous subparagraphs A and B, it is not limited to that information. Additional information and conditions should be placed on or attached to the release. For example, when an inflight re-release is planned, a statement to that effect should appear on the release. When a flight is planned under conditions which could limit the PIC's discretion, those conditions should be indicated. For example, when a flight can be legally and safely conducted over the most direct route between two points, but not over possible alternate routings that ATC might assign, that statement should be noted on the release. The FAR's require that the aircraft dispatcher report adverse weather to the PIC. FAR 121.687(b) authorizes this notification to be attached to the dispatch release. When an operator chooses this option, the operator should have a means for the PIC to assure that all attachments are in the PIC's possession. One acceptable means an operator may use to inform the PIC that there are or are not attachments is to place a statement to this effect on the release.

D. *Dispatch Release Time Limits.* When an aircraft is released for a series of domestic flights, the aircraft may only remain on the ground for 1 hour at the intermediate stop. If the ground time exceeds 1 hour, a new dispatch release is required regardless of the scheduled ground time.

E. *Destination.* An aircraft dispatcher may designate any airport that is listed in paragraph C70 of the OpSpecs for the type of aircraft, as the destination for the purpose of the original dispatch. The distinctions between regular, alternate, refueling, and provisional airports have become operationally insignificant since deregulation. Until Part 119 is published, the terms will not be removed from Part 121 or the OpSpecs. When a flight is dispatched to or from a refueling, alternate, or provisional airport, the requirements applicable to dispatch from regular airports apply.

F. *Airports Not Listed in Paragraph C70 of the OpSpecs.* An aircraft dispatcher may not release a flight from an airport that is not listed in paragraph C70 of the OpSpecs, unless the following criteria are met:

(1) The airport and related facilities are adequate for the operation of the airplane.

(2) The operation is in compliance with the limitations of the flight manual and OpSpecs.

(3) The airplane has been dispatched according to those rules applicable to dispatch from an approved airport.

(4) The weather conditions for takeoff are equal to or exceed that prescribed in Part 97. Where minimums are not prescribed for the airport, one of the following is required: a ceiling of 800 feet and 2 miles visibility, a ceiling of 900 feet and 1 and 1/2 miles visibility, or a ceiling of 1,000 feet and 1 mile visibility.

1187. AMENDMENT OF A DISPATCH RELEASE. In the absence of an emergency, a flight may only proceed to the destination to which it was originally dispatched, and if the flight is unable to land at the original destination, it may only proceed to the designated alternate airport. FAR 121.631 allows, however, for a dispatch release to be amended while the flight is en route. An amendment may become necessary or desirable because the conditions under which

the flight was released have changed (unplanned re-release) or because it may have been planned before departure (a pre-planned, re-release).

A. *Destination Weather Requirements While En Route.* FAR 121.601(c) requires that aircraft dispatchers notify PIC's of any information on weather and facilities that may affect the safety of flight while flights are airborne. Part 121 does not prohibit a flight from continuing toward a destination which has gone below landing minimums or one which is forecast to be below landing minimums at the ETA by a forecast issued after the flight has departed. For example, there may be enough fuel on board to hold overhead the destination until the weather is forecast to improve. FAR 121.627(a) does, however, prohibit the PIC from continuing to the destination when, in the opinion of either the PIC or the aircraft dispatcher, it is unsafe to do so. POI's should ensure that the operator's GOM provides guidance to both PIC's and aircraft dispatchers for dealing with these circumstances.

B. *Alternate Weather Requirements While En Route.* FAR 121.631(b) prohibits the flight from continuing to a destination airport unless the weather conditions at the alternate airport (specified in the dispatch release) are forecast to be at or above the required alternate minimums at the ETA at the alternate airport.

(1) An alternate airport may be named which is below alternate minimums at the time of release, but which is forecast to be above minimums at the ETA. POI's should ensure that the operator's GOM contains specific procedures, however, for notifying the PIC and monitoring the weather at the alternate airport when the selected alternate airport is below minimums at departure. These procedures may require the designation of a second alternate airport or that contingency fuel must be carried on the flight.

(2) Conditions other than ceiling and visibility can affect minimums, such as navigational aids, runway lighting, and snow removal operations. Aircraft dispatchers must monitor these factors at designated alternate airports as well as ceiling and visibility.

(3) When weather conditions permit, many operators release flights without an alternate airport. In some instances while the flight is en route, the destination weather may deteriorate to below what was used to release the flight and to the point that an alternate airport would have been required. The operator's GOM should contain direction and guidance to PIC's and aircraft dispatchers on how to manage such a situation.

(4) The dispatch release may be amended while the aircraft is en route to include any airport as an alternate that has the following:

- Authorization for that type of aircraft
- Is within the fuel range of the aircraft
- Alternate airport landing weather minimums

C. *Requirements to Amend a Dispatch Release.* FAR 121.631(c) requires that before a destination airport or an alternate airport may be changed, the following requirements must be met:

(1) The change must be jointly approved by the PIC and the aircraft dispatcher.

(2) The aircraft dispatcher must be thoroughly familiar with reported and forecast weather conditions (including adverse weather) and the status of communications, navigation, and airport facilities.

(3) The aircraft dispatcher must provide the information specified in previous subparagraph (2) to the PIC.

(4) The destination and alternate airports specified in the amended release must be forecast to be above the weather minimums required in the operator's OpSpecs for the destination and alternate airports, respectively, at the ETA.

(5) The aircraft must have sufficient fuel on board at the time and point that the release was amended to complete the flight in compliance with the applicable fuel requirements (see FAR's 121.593 through 121.661(n) and the aircraft performance requirements of FAR 121.173).

(6) The transmission of the redispatch message must be recorded by the aircraft dispatcher, and its receipt must be recorded by the PIC.

D. *Planned Re-Release.* Planned re-release operations are

conducted to conserve fuel, to complete flights at ranges which would otherwise be beyond the aircraft's fuel capacity, and to solve weather-related operational problems. A Part 121 operator may only conduct planned re-dispatch in extended overwater operations when authorized by paragraph B44 of the operator's OpSpecs. Section 4 of this chapter contains a discussion of planned re-release procedures.

NOTE: Paragraph B44 of the OpSpecs does not apply to the amendment of flightplans for domestic operations.

1189. LOAD MANIFESTS. Before each flight, a load manifest must be completed as follows:

A. *Content of the Manifest.* A domestic operator must prepare a load manifest containing the following:

- Weight of the aircraft, fuel and oil, cargo, baggage, passengers, and crewmembers
- Maximum allowable weight at which the flight can comply with the requirements of both FAR 121. 693(b)(i) and Subpart I of Part 121 (see volume 4, chapter 3)
- Actual weight at takeoff
- Evidence that the aircraft is loaded within weight and balance limitations
- Passenger names (unless this information is maintained by other means)

B. *Disposition of Flight Records.* The PIC must carry the following flight records to the destination airport. The operator must retain these flight records for at least 3 months. The POI must ensure that the operator's storage methods and location provide reasonable access for inspections. These flight records are as follows:

- Load manifest
- Dispatch release (including required attachments)
- Flightplan

1191. EN ROUTE TERRAIN CLEARANCE. Subpart I of Part 121 contains limitations on weights at which aircraft may be dispatched due to terrain clearance requirements. While these limitations apply to all types of aircraft operated under Part 121, they are particularly restrictive to two-engine aircraft operated in the western part of the U.S. Inspectors should be aware that to meet the limitations of Subpart I, operators may be required to limit takeoff weights or list en route alternate airports on the dispatch release (see volume 4, chapter 3).

1192. - 1202. RESERVED.

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SECTION 3. PART 121 FLIGHT RELEASE SYSTEMS AND SUPPLEMENTAL OPERATING RULES

1203. GENERAL. This section contains information for inspectors about Part 121 flight release systems and about the release of flights under the Part 121 requirements applicable to supplemental air carriers and commercial operators within the contiguous U.S.

A. *Flight Followers.* Under FAR 121.537, the pilot-in-command (PIC) and the operator's director of operations are jointly responsible for the initiation, continuation, diversion, and termination of a flight. While the director of operations may delegate the authority to perform operational control functions to other persons, the director retains the responsibility. For purposes of this handbook, these persons are termed flight followers.

(1) FAR 121.537(a)(2) requires that the name of each flight follower the operator uses be listed in the operator's general operations manual (GOM).

(2) Supplemental operators may contract with other operators or organizations to provide certain elements of an operational control system, such as communications, flight following. In such a case, the name of each employee of the contracting organization authorized to provide such elements of operational control must be listed in the operator's GOM.

B. *Release Authority.* PIC's are responsible for preflight planning and for the safe conduct of the flight. FAR 121.597 prohibits a supplemental flight from departing, however, without the specific concurrence of the flight follower. A flight release containing the specific conditions under which the flight will be conducted must be prepared. The PIC must sign the flight release before the flight may depart. FAR 121.597(b) prohibits the PIC from signing until the flight follower concurs that the flight can be safely conducted as planned. Inspectors must ensure that the operator's GOM contains specific procedures to ensure that the operator, the PIC's, and the flight followers are in compliance with this requirement. Unless the PIC decides it is unsafe to do so, the PIC must conduct the flight in accordance with the flight release.

C. *Flight-Monitoring.* The operator's director of operations is responsible for monitoring the progress of each flight from its point of origin to its arrival at the destination, including its arrival and departure from intermediate stops. FAR 121.537(c) requires that the director of operations take action to delay, divert, or cancel a flight when, in the opinion of the director of operations or the PIC, the flight cannot be operated safely as scheduled. The director of operations or a flight follower acting in behalf of the director of operations must actively review the conditions surrounding each flight to comply with this requirement. In the case of an emergency arising during flight, known to a flight follower, the PIC must be contacted and advised of the situation. The PIC's decision on a course of action must be obtained and the PIC's decision recorded. If a flight follower cannot contact the PIC, the flight follower shall declare an emergency and take any action the flight follower considers to be necessary under the circumstances.

D. *Demonstration of Flight Follower Competence.* FAR 121.127(b) requires that the operator show that each individual authorized to conduct operational control is able to perform the required duties. This rule applies to both employees of the operator and to contract personnel the operator authorizes to perform required duties. The preferred means an operator may use to meet this requirement is to establish a flight follower training and qualification program, which includes competency checks, and which meets the requirements of chapter 5 of this volume.

1205. FAMILIARITY WITH WEATHER CONDITIONS, FACILITIES, AND SERVICES. Under supplemental rules, a PIC may not begin a flight unless the PIC is thoroughly familiar with reported and forecasted weather conditions on the route to be flown and until the PIC has obtained all available reports on airport conditions and irregularities of navigation facilities that may affect the safety of the flight. During the flight, the PIC must obtain any additional available information on meteorological conditions and facilities that may affect the safety of the flight. The operator is responsible for ensuring that the PIC has the means to obtain this information. The operator is not required to be able to establish inflight radio communications with the flight to deliver this information. One acceptable means an operator may use to comply with this require-

ment is to contract with a commercial radio service to provide this information.

1207. FLIGHT RELEASE SYSTEM FACILITIES. Each supplemental operator must have an approved flight release system. The flight release system the operator uses must be described or referenced in paragraph A8 of the operator's OpSpecs. Most flight release systems are too complex to be described in a single paragraph; therefore, the preferred practice is for the system to be described in the operator's GOM, and referenced in paragraph A8 of the operator's OpSpecs.

A. The operator must provide one or more flight release centers to control and monitor the progress of each flight. Each flight release facility must be equipped with communications for monitoring the departure of each flight from the point of origin to its arrival at destination (including intermediate stops, diversions, and delays). Communications may be made by means of private facilities (such as company radio) or commercial facilities (such as telephone, telex, or radio). Operators are not required to provide the capability to contact flights en route by radio. Communications are normally considered adequate when the flight follower can transmit a message to a PIC who is on the ground at the departure, destination, or intermediate point and can then receive confirmation of receipt of that message within 15 minutes.

B. FAR 121.125(b) authorizes supplemental operators to contract with other organizations to provide operational control functions. The operator is responsible for ensuring the adequacy of all facilities, access to communications and information sources, the adequacy of policies and procedures, and the competency of flight followers (whether or not they are provided by the operator or a contracting party).

C. Flight followers are not required to be certified aircraft dispatchers; however, POI's should strongly encourage operators to employ certified personnel in this capacity.

D. Inspectors must ensure that the operator's GOM contains adequate policy, guidance, and procedures for operational control personnel to perform their assigned duties, comply with regulatory requirements, and to ensure safe operations in normal, abnormal, and emergency circumstances. Flight followers must be familiar with, and have access to, the operator's GOM when on duty.

1209. FLIGHT RELEASE FORM. A flight release form must be completed before each flight. FAR 121.689(c) requires that each flag or domestic air carrier conducting operations under supplemental rules must use flight dispatch forms required for scheduled operations. FAR 121.689(a) specifies that a flight release must contain at least the following information:

- Company or organization name
- Make, model, and registration number of the aircraft being used
- Flight or trip number
- Date of flight
- Name of each flight crewmember, flight attendant, and the pilot designated as PIC
- Departure airport, destination airport, and alternate airports
- Route of flight
- Minimum fuel supply (in gallons or pounds)
- Type of operation (such as IFR and VFR)
- Weather reports, available weather forecasts (or a combination thereof) for the destination airport and alternate airports that are the latest available at the time the flight release is signed (These must be printed on, or attached to, the flight release.)

1211. WEATHER REQUIREMENTS FOR FLIGHT RELEASE WITHIN THE CONTIGUOUS STATES. Inspectors must ensure that operators are aware of the weather requirements for the release of supplemental flights within the contiguous states. Section 4 of this chapter contains a discussion of flight release requirements for the release of flights to, from, or outside the contiguous states.

A. *Flight Release under VFR.* A supplemental flight may not be released for VFR operations unless the ceiling and

visibility en route and at the destination airport are VFR and will remain above applicable VFR minimums until the aircraft arrives at the airport or airports specified in the flight release (see chapter 6, section 2, paragraph 1283).

NOTE: Part 121 flights may not be released under VFR rules unless specifically authorized by paragraph B33d of the OpSpecs (see volume 3, section 4, paragraph 125).

B. *IFR Takeoff Weather Minimums.* FAR 121.651(a) prohibits the release of a flight when the weather at the departure airport is reported to be less than the takeoff minimums specified in paragraph C56 of the operator's OpSpecs. The weather conditions may, however, be below the landing minimums specified in the operator's OpSpecs at the departure airport, in which case the flight may not be released unless the following conditions exist:

(1) For a two-engine airplane, an alternate airport is available which is not more than 1 hour from the departure airport at normal cruising speed, in still air, and with one engine inoperative.

(2) For an airplane with three or more engines, an alternate airport is available which is not more than 2 hours from the departure airport at normal cruising speed, in still air, and with one engine inoperative.

(3) The takeoff alternate airport is listed on the flight release.

(4) The weather conditions at the designated takeoff alternate airport meet the requirements of paragraph C55 of the operator's OpSpecs.

C. *Destination Weather - IFR Operations.* FAR 121.613 prohibits an operator from releasing a supplemental flight under IFR or over-the-top rules unless the weather reports and forecasts indicate that the weather will be at or above minimums required by the OpSpecs at the destination airport at the estimated time of arrival. Category I minimums are given in paragraphs C53 and C54 of the OpSpecs. Category II and III minimums are given in paragraphs C59 and C60 of the OpSpecs, respectively.

D. *Alternate Weather.* FAR 121.623(a) prohibits an operator from releasing a supplemental flight within the contiguous states under IFR or over-the-top rules unless at least one alternate airport is listed in the flight release for each destination airport.

1213. FUEL SUPPLY - OPERATIONS IN THE CONTIGUOUS STATES. Inspectors must be aware of the fuel requirements for a flight release under supplemental rules within the contiguous states (see section 4 of this chapter for fuel requirements in extended overwater operations and for operations to, from, or outside the contiguous states). The fuel planning provisions of FAR 121.643 apply to all nonturbine and turbopropeller supplemental flights. FAR 121.645 applies to turbojet-powered supplemental flights. The provisions of FAR 121.643 and FAR 121.645 are identical in reference to operations within the contiguous states.

NOTE: FAR 121.647 applies to all operations conducted under Part 121.

A. *Required Fuel Supply.* An operator may not release a flight or takeoff unless, considering winds and forecast weather conditions, the flight carries all of the following types of fuel:

(1) *En Route Fuel:* That fuel necessary for a flight to reach the airport to which it is released and then to conduct one instrument approach and a possible missed approach.

(2) *Alternate Fuel:* That fuel necessary for a flight to fly from the point of completion of the missed approach at the destination airport to the most distant alternate airport, make an IFR approach (if the forecast indicates such conditions will exist), and then complete a landing.

(3) *Domestic Reserve Fuel:* That fuel necessary for a flight to fly for 45 minutes at normal cruising fuel consumption.

(4) *Contingency Fuel:* That fuel necessary for a flight to compensate for any known traffic delays and to compensate for any other condition that may delay the landing of the flight.

NOTE: The operator's GOM should contain specific policies and instructions to both flight followers and PIC's for computing the amount of contingency fuel to be carried under the circumstances likely to be encountered in the operator's specific operation.

B. *Departure Fuel.* FAR 121.643 and FAR 121.645 require that the fuel listed in previous subparagraph A be on board the aircraft at takeoff. The flight release must include this amount. The operator's GOM should clearly state this point to pilots, flight followers, and load planners. An additional increment of fuel for start-up, taxi, and predeparture delays must be included in the fuel load on board the aircraft at engine start.

1215. AMENDMENT OF A FLIGHT RELEASE. In the absence of an emergency, a flight may only proceed to the destination to which it was originally released. If the flight is unable to land at the original destination, it may only proceed to the designated alternate airport. FAR 121.631 allows, however, for an original flight release to be amended while the flight is en route. An amendment may become necessary or desirable because the conditions under which the flight was released have changed (unplanned re-release) or because it may have been planned before departure.

A. *Destination Weather Requirements While En Route.* FAR 121.603(b) requires that PIC's shall obtain any information on weather and facilities that may affect the safety of flight while flights are airborne. Part 121 does not prohibit a flight from continuing toward a destination which has gone below landing minimums or one which is forecast to be below landing minimums at the ETA by a forecast issued after the flight has departed. For example, there may be enough fuel on board to hold overhead the destination until the weather is forecast to improve. FAR 121.627(a) does, however, prohibit the flight from continuing to the destination when, in the opinion of the PIC, it is unsafe to do so. POI's should ensure that the operator's GOM provides guidance to both PIC's and flight followers for dealing with these circumstances.

B. *Alternate Weather Requirements While En Route.* FAR 121.631(b) prohibits the flight from continuing to a destination airport unless the weather conditions at the alternate airport (specified in the flight release) are forecast to be at or above the required alternate minimums at the ETA at the alternate airport.

(1) An alternate airport may be named which is below alternate minimums at the time of release, but which is forecast to be above minimums at the ETA. POI's should ensure that the operator's GOM contains specific procedures, however, for notifying the PIC and for monitoring the weather at the alternate airport when the selected alternate airport is below minimums at departure. These procedures may require the designation of a second alternate airport or that contingency fuel must be carried on the flight.

(2) Conditions other than ceiling and visibility can affect minimums, such as navigational aids, runway lighting, and snow removal operations. PIC's and flight followers must monitor these factors, as well as ceiling and visibility, at designated alternate airports.

(3) When weather conditions permit, many operators release flights without an alternate airport. In some instances, while the flight is en route, destination weather may deteriorate to below what was used to release the flight and to the point that an alternate airport would have been required. The operator's GOM must contain direction and guidance to PIC's and flight followers on how to manage such a situation.

(4) The flight release may be amended while the aircraft is en route to include any airport as an alternate that has the following:

- Authorization for that type of aircraft
- Is within the fuel range of the aircraft
- Alternate airport landing weather minimums

C. *Requirements to Amend a Flight Release.* FAR 121.631(c) requires that before a destination airport or an alternate airport may be changed, the following requirements must be met:

(1) The change must be jointly approved by the PIC and the flight follower.

(2) The PIC must be thoroughly familiar with reported and forecast weather conditions (including adverse weather) and the status of communications, navigation, and airport facilities.

(3) The destination and alternate airports specified in the amended release must be forecast to be above the

weather minimums required in the operator's OpSpecs for the destination and alternate airports, respectively, at the ETA.

(4) The aircraft must have sufficient fuel on board at the time and point that the release was amended to complete the flight in compliance with the applicable fuel requirements.

(5) Each person who amends a flight release must record that amendment.

D. *Pre-Planned Amendment of a Flight Release.* A Part 121 operator may only conduct planned re-release operations when authorized by paragraph B44 of the operator's OpSpecs. Section 4 of this chapter contains a discussion of planned re-release procedures. In domestic operations within the contiguous states, any operator can conduct a pre-planned amendment of a flight release. Only operators authorized to conduct extended overwater operations under paragraph B44 of the OpSpecs, however, can conduct a pre-planned, re-release operation.

NOTE: Paragraph B44 does not apply to the amendment of flightplans for domestic operations within the contiguous states.

1217. EN ROUTE TERRAIN CLEARANCE. Subpart I of Part 121 contains the limitations on weights at which aircraft may be released due to terrain clearance requirements. While these limitations apply to all types of aircraft operated under Part 121, they are particularly restrictive to two-engine aircraft operated in the western part of the U.S. Inspectors should be aware that to meet the limitations of Subpart I, operators may be required to limit takeoff weights or to list en route alternate airports on the flight release (see volume 4, chapter 3 of this handbook).

1218. - 1228. RESERVED.

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weather minimums required in the operator's OpSpecs for the destination and alternate airports, respectively, at the ETA.

(4) The aircraft must have sufficient fuel on board at the time and point that the release was amended to complete the flight in compliance with the applicable fuel requirements.

(5) Each person who amends a flight release must record that amendment.

D. *Pre-Planned Amendment of a Flight Release.* A Part 121 operator may only conduct planned re-release operations when authorized by paragraph B44 of the operator's OpSpecs. Section 4 of this chapter contains a discussion of planned re-release procedures. In domestic operations within the contiguous states, any operator can conduct a pre-planned amendment of a flight release. Only operators authorized to conduct extended overwater operations under paragraph B44 of the OpSpecs, however, can conduct a pre-planned, re-release operation.

NOTE: Paragraph B44 does not apply to the amendment of flightplans for domestic operations within the contiguous states.

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1218. - 1228. RESERVED.

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SECTION 4. PART 121 FLAG OPERATIONS, SUPPLEMENTAL OPERATIONS OUTSIDE THE CONTIGUOUS STATES, AND EXTENDED OVERWATER OPERATIONS

1229. GENERAL. This section contains information and guidance to be used by inspectors concerning the following Part 121 operations: flag operations, supplemental operations outside the contiguous United States, and extended overwater operations. The following general provisions apply to Part 121 operators conducting extended overwater operations.

A. *IFR and VFR Authorizations.* Part 121 operators must conduct extended overwater operations under IFR unless they show that operating under IFR is not necessary for safety. An authorization to conduct extended overwater operations under VFR rules is seldom granted. When granted, such an authorization is contained in paragraph B33d of the operator's operations specifications (OpSpecs) (see volume 3, section 3, paragraph 125).

B. *Land Airplanes.* A Part 121 operator may not operate a land airplane (except certain two-engine reciprocating aircraft listed in FAR 121.161(b)) in extended overwater operations unless the aircraft is certified for ditching under Part 25. When an aircraft is certified for extended overwater operations, these operations will appear as authorized operations in the limitations section of the approved airplane flight manual (AFM) or approved rotorcraft flight manual (RFM), as appropriate.

1231. DESTINATION WEATHER MINIMUMS. FAR 121.615(a) states the following: "No person may dispatch or release an aircraft for a flight that involves extended overwater operation unless appropriate weather reports or forecasts, or any combination thereof, indicate that the weather conditions will be at or above the authorized minimums at the estimated time of arrival (ETA) at any airport to which dispatched or released or to any required alternate." This regulation has been interpreted by the FAA General Council (GC) to mean that weather conditions must be forecasted to be above the required minimums at the ETA, but the weather conditions do not necessarily have to be above the required minimums at the time of dispatch or release.

A. *Category I, Category II, and Category III Weather Minimums.* Category I (CAT I) weather minimums are stated in paragraph C53 and C54 of the operations specifications (OpSpecs). CAT II and CAT III minimums are listed in paragraphs C59 and C60 of the OpSpecs, respectively.

B. *Weather Forecasting for Extended Flight Operations.* Extended overwater operations may require flight times of 10 or more hours. Since the certainty of weather forecasts deteriorates as the period of the forecast lengthens, meteorologists usually add conditional phrases to the remarks of these forecasts to alert the users to this uncertainty. Operators may, as a result of these conditional remarks, find it difficult to dispatch or release to the desired destination and to find acceptable alternate airports. Aircraft dispatchers and flight followers have a number of methods at their disposal, however, to overcome these limitations.

(1) The installation of CAT II and CAT III approach aids have resulted in destination weather minimums as low as a ceiling of zero and a runway visual range of 600 feet. Modern facilities have also resulted in alternate weather minimums authorized by OpSpecs being reduced to as low as 400 feet and 1 mile.

(2) Operators may release a flight to an intermediate destination and then redispatch or re-release the flight to the actual destination while the flight is en route. The redispatch or re-release can be based on current weather reports and short-term forecasts.

(3) Under an approved enhanced weather information system (EWINS), a meteorologist or a qualified aircraft dispatcher employed by an operator may issue a flight movement forecast (FMF) based on a detailed analysis of the conditions surrounding the specific flight. An FMF may be used for operational control of the specific flight (see chapter 7, section 4 of this volume).

1233. DESIGNATION OF DESTINATION ALTERNATE AIRPORTS. The limitations of OpSpecs paragraph B43 (special fuel reserves) prohibit operators from releasing flights under the provisions of these paragraphs without

designating an alternate airport. The following provisions apply to the designation of destination alternate airports in Part 121 flag or extended overwater supplemental operations:

A. *Destinations Without an Alternate Airport.* FAR 121.621 and FAR 121.623(b) authorize an operator to dispatch flag and release supplemental flights to a destination for which no alternate airport is available. These provisions were originally provided for reciprocating aircraft operations en route to island destinations. The introduction of turbojet aircraft has largely negated the need for the rule; however, there are still some destinations (such as Easter Island) for which the rule is still required. Before an operator can dispatch or release under this rule, the specific route must be authorized by the OpSpecs. Inspectors must ensure that operators have applied the following limitations to their requirements:

(1) FAR 121.641(b) and FAR 121.643(c) require that turbopropeller and reciprocating-powered airplanes have enough fuel remaining upon arrival over the destination for the flight to continue for an additional 3 hours under normal cruise conditions.

(2) FAR 121.645(c) requires that turbojet-powered airplanes have enough fuel remaining upon arrival over the destination for the flight to continue for an additional 2 hours under normal cruise conditions.

(3) The routes must be specified in the operator's General Operations Manual (GOM).

B. *All Other Supplemental Operations.* FAR 121.623 requires that operators designate an alternate airport for all supplemental operations other than those described in previous subparagraph A.

C. *Flag Flights of 6 Hours or Less.* FAR 121.621 permits operators operating under flag rules to dispatch flights of up to 6 hours' duration without designating an alternate airport. For 1 hour before, to 1 hour after the ETA, the weather must be forecasted as follows:

(1) The ceiling will be at least 1,500 feet above the lowest circling minimum descent altitude (MDA), if a circling approach is required and authorized for the airport; or

(2) The ceiling will be at least 1,500 feet above the lowest published instrument approach minimum or 2,000 feet above the airport elevation, whichever is greater; and

(3) The visibility at that airport will be at least 3 miles, or 2 miles more than the lowest applicable visibility minimums, whichever is greater, for the instrument approach procedures to be used at the destination airport.

D. *Flag Flights of More Than 6 Hours.* FAR 121.621(a) requires that operators list an alternate airport for all flag flights of more than 6 hours' duration, except those operations described in previous subparagraph A.

E. *Listing of Alternate Airports.* FAR 121.621 and FAR 121.623 require that operators list each required alternate airport on the dispatch or flight release.

F. *Weather Requirements for Designated Alternate Airports.* FAR 121.625 requires that weather reports and forecasts, or any combination thereof, must indicate that the weather at the time the aircraft is to arrive at the alternate airport will be at or above the minimums stated in paragraph C55 of the OpSpecs.

1235. REQUIRED FUEL SUPPLY: NON-TURBINE AND TURBOPROPELLER AIRPLANES. A Part 121 operator must dispatch a reciprocating or turbopropeller-powered airplane in flag operations under FAR 121.641 and FAR 121.647. An operator must release these airplanes in supplemental operations under the provisions of FAR 121.643 and FAR 121.647.

A. *Required Fuel Supplies for Flights with Alternate Airports.* When the FAR's require an alternate airport for the destination to be designated on the release, the aircraft must have the following types and increments of fuel on board at takeoff:

(1) *En Route Fuel:* That fuel necessary for a flight to reach the airport to which it is released and then to conduct one instrument approach and a possible missed approach.

(2) *Alternate Fuel:* That fuel necessary for a flight to fly from the point of completion of the missed approach at the destination airport to the most distant alternate airport, make an IFR approach (if the forecast indicates

such conditions will exist), and then complete a landing.

(3) *International Reserve Fuel:* That fuel necessary in addition the en route and alternate fuel increments for the flight thereafter to fly for 30 minutes.

(4) *En Route Reserve:* The additional fuel necessary for the flight thereafter, to fly 15% of the total time required to fly at normal cruising fuel consumption to the airports specified in previous subparagraphs (1) and (2) or to fly for 90 minutes at normal cruising fuel consumption (whichever is less).

(5) *Contingency Fuel:* That increment of fuel necessary for the flight to compensate for any known traffic delays and to compensate for any other condition that may delay the landing of the flight.

NOTE: The operator's GOM should contain policies and instructions to aircraft dispatchers, flight followers, and PIC's for computing the amount of contingency fuel to be carried under the circumstances likely to be encountered in the operator's specific operation.

NOTE: When computing fuel requirements, all fuel must be in addition to unusable fuel.

B. *Flights to Airports for Which An Alternate Airport is Not Available Within the Fuel Range of the Aircraft.* A non-turbine or turbopropeller-powered airplane dispatched to an airport for which an alternate airport is not available must have enough fuel on board at takeoff to fly to that airport, make an approach and missed approach, and thereafter to fly for 3 hours at normal cruising fuel consumption.

C. *Takeoff Fuel.* FAR 121.641 and 121.643 clearly require that the fuel listed in previous subparagraph A be on board the aircraft at takeoff. The dispatch or flight release must include this amount. The operator's GOM should contain a clear statement of this point to pilots, aircraft dispatchers, flight followers, and to load planners.

1237. REQUIRED FUEL SUPPLY: TURBOJET-POWERED AIRPLANES. Unless otherwise authorized by the operator's OpSpecs paragraph B43, a Part 121 operator must dispatch or release a turbojet-powered airplane in operations beyond the contiguous states in compliance with FAR 121.645 and FAR 121.647. Inspectors must ensure that the operator has covered the provisions that follow.

NOTE: FAR 121.647 applies to all operations conducted under Part 121.

A. *Required Fuel Supplies for Flights with Alternate Airports.* When an alternate airport is designated in the release, the flight must have the following types and increments of fuel on board at takeoff:

(1) *En Route Fuel:* That fuel necessary for a flight to reach the airport to which it is released and then to conduct one instrument approach and a possible missed approach.

(2) *Alternate Fuel:* That fuel necessary for a flight to fly from the point of completion of the missed approach at the destination airport to the most distant alternate airport, make an IFR approach (if the forecast indicates such conditions will exist), and then complete a landing.

(3) *En Route Reserve:* That fuel necessary for the flight to fly for a period of time equal to 10 percent of the en route time, which includes and approach and landing. This fuel requirement is computed at the weight at which the flight is expected to arrive over the destination airport.

(4) *International Reserve Fuel:* That fuel necessary thereafter, for the flight to fly for 30 minutes at holding speed at 1,500 feet above the alternate airport, or the destination airport if no alternate is required under FAR 121.621(a)(1). International fuel reserves are computed under standard temperature conditions.

(5) *Contingency Fuel:* That fuel necessary for a flight to compensate for any known traffic delays and to compensate for any other condition that may delay the landing of the flight.

NOTE: The operator's GOM should contain policies and instructions to aircraft dispatchers, flight followers, and PIC's for computing the amount of contingency fuel to be carried under the circumstances likely to be encountered in the operator's specific operation.

NOTE: When computing fuel requirements, all fuel must be in addition to unusable fuel.

B. *Required Fuel Supplies for Flights for which An Alternate Airport is Not Available Within the Fuel Range of the Aircraft.* A turbojet-powered airplane released according to FAR 121.621(a)(1) or FAR 121.623(b) to an airport for which an alternate airport is not available must have enough fuel on board at takeoff to fly to that airport, to make an approach and to land, along with 2 hours flight time at normal cruising fuel consumption.

C. *Takeoff Fuel.* FAR's 121.641, 121.643, and 121.645 clearly require that the fuel listed in previous subparagraph A be on board the aircraft at takeoff. The dispatch or flight release must include this amount. The operator's GOM should contain a clear statement of this point to pilots, dispatchers, flight followers, and load planners.

1239. SPECIAL FUEL RESERVES. POI's, as representatives of the FAA Administrator, may grant flag and supplemental operators a deviation from FAR 121.645(b)(2) for the dispatch or release of turbojet aircraft in extended overwater operations by issuing paragraph B43 of the OpSpecs. Inspectors reviewing flights released under the provisions of paragraph B43 should carefully review this paragraph, along with paragraph 145 of volume 3 in this handbook, and should note the method by which en route reserve fuel is computed, the method by which reserve fuel is computed, and the special limitations and provisions being imposed. Inspectors should also be aware that FAR 121.647 applies to all flights conducted under Part 121, including those conducted under the provisions of paragraph B43 of the OpSpecs. For example, if anticipated traffic delays or other anticipated conditions are expected to result in an increase in the amount of fuel planned for the flight, an appropriate quantity of contingency fuel must be added.

A. When an operator dispatches or releases a flight under OpSpecs paragraph B43, the required en route reserve fuel is not computed for the entire time required to fly from departure point to destination. The en route reserve fuel is only applied to that portion of the flight in which the aircraft's position cannot be determined once each hour by a Class I ICAO airways navigational facility. For example, a flight from New York to Frankfurt, Germany takes approximately 7 hours. The flight is conducted over airways by Class 1 station reference navigation from New York to the point at which the flight departs the standard service volume off the coast of northern Canada. The flight then proceeds by Class II navigation until again reaching the standard service volume of the Class I ICAO airways navigational facility serving the standard entry point of the European airways system. The flight then proceeds over airways by Class I station reference navigation to Frankfurt, Germany. The portion of the flight conducted by Class II navigation is approximately 3 hours.

ILLUSTRATION OF OPSPECS PARAGRAPH B43
OPERATIONAL ANALYSIS

	FAR 121.645		Paragraph B43	
FUEL INCREMENT	TIME	POUNDS	TIME	POUNDS
En Route	7:00	126,000	7:00	124,000
En Route Reserve	:42	11,200	:18	4,800
Alternate	:10	2,700	:10	2,700
Int.l Reserve	:30	10,000	:45	12,000
Required Fuel		149,900		143,500

(1) Under FAR 121.645, 42 minutes of en route reserve fuel is required (7 hours x 60 minutes = 420 minutes x 10% = 42 minutes.) For the 7-hour flight the average fuel burn was 18,000 pounds per hour. At the end of the flight, however, the hourly fuel burn is 16,000 pounds per hour (42 minutes at 16,000 pounds per hour is 11,200

pounds [{42/60} x 16,000]). The reserve fuel is computed at 1,500 over the alternate. Since low-altitude holding results in a relatively high fuel consumption, for the purpose of this illustration 20,000 pounds per hour is used.

(2) When the same flight is conducted under OpSpecs paragraph B43, a somewhat smaller fuel load is required. Even though the time en route is equal for both flights, the lower takeoff weight of the B43 flight results in a lower en route fuel burn. The en route reserve fuel is 18 minutes (3 hours x 60 minutes = 180 minutes x 10% = 18 minutes). At 16,000 pounds per hour, 18 minutes is 4,800 pounds [18/60 x 16,000]. The reserve fuel for the paragraph B43 flight is 45 minutes at normal cruising fuel consumption (for the weight and altitude at which the flight reaches the alternate); therefore, 45 minutes at 16,000 pounds per hour is 12,000 pounds.

B. The special limitations of OpSpecs paragraph B43(b) prohibit the flight from being dispatched or released under the provisions of FAR 121.621 or FAR 121.623 (international destination and alternate requirements) and require that the provisions of FAR 121.619 be observed (domestic destination alternate requirements). Paragraph B43(b) also requires that the weather at both the destination and alternate airport be forecasted to be above the applicable minimums at the estimated time of arrival. In addition, OpSpecs paragraph B43 prohibits a certificate holder, who releases a flight according to B43 from simultaneously using paragraph B44.

1241. PLANNED REDISPATCH AND RE-RELEASE. FAR 121.631(c) permits the redispatch (flag) and re-release (supplemental) of extended range flights. These operations must be conducted in accordance with paragraph B44 of the OpSpecs. Paragraph B44 prohibits the operator from conducting any other planned re-release or redispatch operations.

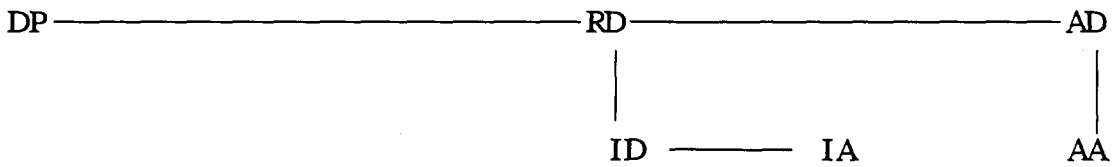
A. *En Route Reserve Fuel Requirements.* The relatively long en route times involved in international operations, as compared to domestic operations, increase the probability that actual winds aloft and terminal weather conditions will differ significantly from those forecasted. For this reason, Part 121 requires that an additional increment of fuel be carried in operations outside the contiguous states, which is often referred to as en route reserve fuel. The en route reserve fuel is specified in terms of the fuel quantity required to fly for a specified time. En route reserve fuel is computed at the weight at which the aircraft is planned to arrive over the alternate airport or the destination airport when no alternate is required. The en route reserve fuel requirement has been shown to be necessary for safety, but it increases the cost and reduces the range at which extended range operations can be conducted. The planned redispatch or re-release procedures of OpSpecs paragraph B44 are designed to reduce these penalties while maintaining an adequate level of safety. FAR 121.645(b)(2) requires that flights beyond the contiguous states have on board at the time of a flight release, an increment of fuel (in addition to en route, alternate, reserve, and contingency fuels) which allows the airplane to fly for a period of time equal to 10% of the en route time. Under most circumstances, the en route reserve fuel is not consumed. Therefore, two flights arriving at the same destination from different departure points will arrive overhead the destination with different amounts of fuel remaining. The longer flights will arrive with proportionately more fuel.

ILLUSTRATION OF EN ROUTE FUEL RESERVE

	5-HOUR FLIGHT		10-HOUR FLIGHT	
Fuel Increment	Time	Pounds	Time	Pounds
En Route	5:00	70,000	10:00	160,000
En Route Reserve (1)	:30	7,200	1:00	14,000
Alternate (2)	:10	2,700	:10	2,700
Int.l Reserve (3)	:30	10,000	:30	10,000
Required Fuel		89,900		186,700
Normal Fuel On Board				
Overhead Destination (1) + (2) + (3)		19,900		26,700

ILLUSTRATION OF PLANNED EN ROUTE RE-RELEASE OPERATIONAL ANALYSIS

In this illustration, a flight is planned to operate from the departure point (DP) to the actual destination (AD). The flight is originally released to an intermediate destination (ID) via a redispatch point (RD). Point IA is the alternate airport for the intermediate destination and AA is the alternate airport for the actual destination. RD must be a common point on routes DP to ID and DP to AD.



Fuel Increment	DP to ID Time	DP to ID Pounds	DP to AD Time	DP to AD Pounds
En Route				
[DP to RD] (1)	6:00	84,000		
[RD to ID] (2)	1:00	14,000		
[RD to AD] (3)	4:00	64,000		
En Route Res.				
[10% DP to ID] (4)	:42	15,400		
[10% RD to AD] (5)	:24	5,600		
Alternate (6)	:10	2,700	:10	2,700
Int.l Res. (7)	:30	10,000	:30	10,000
Required [DP to ID] (1,2,4,6,& 7)		126,000		
Required at RD point (3,5,6, & 7)				82,300
Total Planned Fuel Load with Redispatch (1,3,5,6, & 7)				166,300
Total Required Fuel Load without Redispatch (see previous illustration)				186,700

B. *Fuel Requirements of Part 121, Subparts U and I.* Before a flight can be released from the departure point to the intermediate destination, all the fuel and weather requirements of Subparts U and performance requirements of Subpart I of Part 121 must be met. The redispatch or re-release from the planned point to the actual destination is in an entirely separate dispatch or flight release and all the fuel and weather provisions of Subpart U and performance requirements of Subpart I must again be complied with at the time of the re-release, including the fuel requirements of FAR 121.645(b)(1) through (4). The minimum equipment list (MEL) requirements do not apply, however, since the aircraft is airborne.

C. *Special Conditions for Fuel Requirements.* Paragraph B44(b) of the OpSpecs contains a number of special conditions which must also be observed by operators conducting planned redispatch or re-release operations, including the following:

(1) The redispatch or re-release point must be a point common to the flight route from the original departure point to the intermediate destination and to the flight route from the original departure point to the final destination.

This point must be specified on the original dispatch or flight release.

(2) A separate operational analysis must be prepared from the original departure point to the intermediate destination and from the redispatch or re-release point to the actual destination (see the preceding illustration, "Planned En Route Re-Release Operational Analysis"). A copy of the flight route analysis must be provided to the PIC and to the aircraft dispatcher or to the individual exercising operational control for a supplemental operator.

(3) Paragraph B44 requires that the aircraft dispatcher or flight follower transmit a message to the PIC authorizing the PIC to proceed to the actual destination. This change must be jointly approved by the PIC and the aircraft dispatcher or flight follower. The transmission of the redispatch or re-release message must be recorded by the aircraft dispatcher or flight follower and its receipt must then be recorded by the PIC. The flight must proceed to the intermediate destination in accordance with the original release unless the redispatch or re-release message is received by the PIC and the PIC's concurrence is forwarded back to the operational control center.

(4) If at the time of redispatch or re-release, the route of flight is different from the one planned before takeoff, the new route must be included in the redispatch or re-release message.

(5) Fuel planning for redispatch or re-release must be in accordance with FAR 121.645 (the provisions of paragraph B43 of the OpSpecs may not be used).

NOTE: Supplemental operators are not required by Part 121 to be capable of contacting flights while they are en route. This capacity is required, however, as a condition for operators conducting operations under OpSpecs paragraph B44.

NOTE: A flight may not be released under OpSpecs paragraph B44 when the operator or PIC knows two-way communications will not be available at the re-release point. Unforeseen circumstances may preclude communications, however, after the flight is en route. In such cases, the PIC must land at the interim destination, unless the operator's GOM provides procedures for the PIC to follow which ensure the safe conduct of the flight to the intended destination.

D. *Performance Limitations of Part 121, Subpart I.* Inspectors must ensure that operators have complied with the performance limitations of Subpart I of Part 121, both original and re-release. Some performance limitations follow:

(1) The flight must be planned so that the aircraft is not too heavy to land at the intermediate destination or alternate airport, in accordance with FAR 121.185 and FAR 121.187 or FAR 121.195 and FAR 121.197, as applicable. The operator may select a redispatch or re-release point beyond the intermediate destination to meet this requirement rather than selecting a point short of the intermediate destination, as is usually done when aircraft weight is not a factor.

(2) The operator must comply with the applicable en route, engine-out performance requirements of FAR 121.181 and FAR 121.183, or FAR 121.191 and FAR 121.193, or FAR 121.201, which can limit the dispatch or release weight of the aircraft.

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This point must be specified on the original dispatch or flight release.

(2) A separate operational analysis must be prepared from the original departure point to the intermediate destination and from the redispatch or re-release point to the actual destination (see the preceding illustration, "Planned En Route Re-Release Operational Analysis"). A copy of the flight route analysis must be provided to the PIC and to the aircraft dispatcher or to the individual exercising operational control for a supplemental operator.

(3) Paragraph B44 requires that the aircraft dispatcher or flight follower transmit a message to the PIC authorizing the PIC to proceed to the actual destination. This change must be jointly approved by the PIC and the aircraft dispatcher or flight follower. The transmission of the redispatch or re-release message must be recorded by the aircraft dispatcher or flight follower and its receipt must then be recorded by the PIC. The flight must proceed to the intermediate destination in accordance with the original release unless the redispatch or re-release message is received by the PIC and the PIC's concurrence is forwarded back to the operational control center.

(4) If at the time of redispatch or re-release, the route of flight is different from the one planned before takeoff, the new route must be included in the redispatch or re-release message.

(5) Fuel planning for redispatch or re-release must be in accordance with FAR 121.645 (the provisions of paragraph B43 of the OpSpecs may not be used).

NOTE: Supplemental operators are not required by Part 121 to be capable of contacting flights while they are en route. This capacity is required, however, as a condition for operators conducting operations under OpSpecs paragraph B44.

NOTE: A flight may not be released under OpSpecs paragraph B44 when the operator or PIC knows two-way communications will not be available at the re-release point. Unforeseen circumstances may preclude communications, however, after the flight is en route. In such cases, the PIC must land at the interim destination, unless the operator's GOM provides procedures for the PIC to follow which ensure the safe conduct of the flight to the intended destination.

D. *Performance Limitations of Part 121, Subpart I.* Inspectors must ensure that operators have complied with the performance limitations of Subpart I of Part 121, both original and re-release. Some performance limitations follow:

(1) The flight must be planned so that the aircraft is not too heavy to land at the intermediate destination or alternate airport, in accordance with FAR 121.185 and FAR 121.187 or FAR 121.195 and FAR 121.197, as applicable. The operator may select a redispatch or re-release point beyond the intermediate destination to meet this requirement rather than selecting a point short of the intermediate destination, as is usually done when aircraft weight is not a factor.

(2) The operator must comply with the applicable en route, engine-out performance requirements of FAR 121.181 and FAR 121.183, or FAR 121.191 and FAR 121.193, or FAR 121.201, which can limit the dispatch or release weight of the aircraft.

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SECTION 5. PART 135 FLIGHT-LOCATING SYSTEMS AND OPERATING RULES

1253. GENERAL. This section contains direction and guidance to be used by inspectors concerning Part 135 flight-locating systems and operating rules. Inspectors should use this section with section 1 of this chapter when reviewing an operator's general operations manual (GOM) and when conducting inspections of Part 135 operators.

1255. GENERAL REQUIREMENTS. Although FAR 135.77 explicitly requires that each operator exercise operational control, the method by which an operator does so is not closely defined by the FAR's. Part 135 operations range from VFR operations in simple aircraft to extended overwater operations in highly sophisticated jet transports. FAR 135.77 provides operators with the latitude necessary to design systems that fit the conditions surrounding the operations they conduct. Operators and principal operations inspectors (POI's) must ensure, however, that each operator's system provides adequate control of the operation being conducted. Inspectors should be aware of the following requirements regarding operational functions:

A. *Formal Releases.* Part 135 does not require operators to prepare a formal release authorizing a specific flight. FAR 135.69 does require that the operator restrict or suspend operations when either the pilot-in-command (PIC) or the operator becomes aware of a hazardous condition. One acceptable means an operator may use to comply with this requirement is to use a formal release system.

B. *GOM Requirements.* The operator's GOM must contain adequate briefing and trip planning procedures to ensure that all safety requirements are fulfilled. POI's shall ensure that each operator's GOM contains detailed policies, conditions, and specific procedures for each category of employee responsible for the authorization or planning of a flight.

C. *Delegation of Authority.* Part 135 operators commonly delegate the authority to PIC's for initiating flights. Such delegation has generally proven to be adequate for the operation of general purpose, single-engine and multiengine airplanes and helicopters in on-demand operations. Such systems may be inappropriate, however, for commuter operations, air ambulance services, jet transport operations, operations conducted beyond the contiguous states, extended overwater operations, and complex operations requiring extensive planning or coordination. POI's should strongly recommend that operators establish operational control systems that require the concurrence of an individual authorized to exercise operational control and the PIC for all flight release decisions. NASA statistics show that police and air ambulance service operators who have adopted such systems have had significantly better safety records than operators of the same type who have not had such systems.

1257. FLIGHT-LOCATING SYSTEMS. FAR 135.79 requires that each operator maintain a flight-locating system. The system must provide for the timely notification of an FAA facility or a search-and-rescue facility if an aircraft is overdue or missing. The operator's notification must be at least as prompt as notifications provided by FAA procedures and facilities.

A. *Flightplans Filed by PIC's.* Part 135 operators may require PIC's to file and activate ATC flightplans as one means of complying with FAR 135.79. In this case, the operator's GOM must prohibit the PIC from operating without an activated flightplan until arrival at the destination airport. Operators may find that requiring the PIC to file a flightplan to satisfy the requirements of FAR 135.79 precludes certain operations. For example, it is impractical for a PIC to conduct a flight to a non-controlled field by cancelling IFR at the last radio navigation fix and then proceeding under VFR to destination on a VFR flightplan. ATC does not accept composite IFR/VFR flightplans. Normally, ATC will not activate a VFR flight on an air traffic control frequency. A PIC who cancels IFR and then changes to a flight-watch frequency to activate a VFR flightplan is not in compliance with FAR 135.79. One acceptable means an operator may use to comply with FAR 135.79 is to require the PIC to telephone the person exercising operational control upon arrival at a destination not served by an ATC facility.

B. *Procedures in Lieu of Flightplans.* When an FAA flightplan is not filed, operators must have established procedures for following and locating each flight. The

individual authorized to conduct operational control must be provided with at least the information required in a VFR flightplan.

C. *Flight-Locating Information When Radio Contact Cannot Be Maintained.* Part 135 operators are not required to maintain the capability to contact flights while they are airborne. When operations are conducted in an area in which radio contact cannot be maintained with ATC, the individual authorized to exercise operational control must be provided with the location, date, and estimated time at which the PIC will re-establish radio or telephone communications. Flight-locating information must be retained at the operator's principal base of operations, or at other places designated by the operator, until the completion of the flight. Operators should maintain sufficient records to show compliance with these requirements.

D. *Flight Followers.* Part 135 does not specify the qualifications or titles of individuals authorized to authorize or follow flights. FAR 135.77 does, however, require the operator to list the name of each individual authorized to perform these duties in the GOM.

E. *Contractors.* Part 135 operators may contract with other operators or organizations to perform direct operational control functions. The operator remains fully responsible for ensuring that the operations conducted comply with the FAR's, the operator's GOM, and with safe operating practices. The name of each employee of the contractor authorized to perform operational control functions for the operator must be placed in the operator's GOM.

F. *Training.* Operators are responsible for ensuring that individuals authorized to exercise operational control are adequately trained to perform their assigned duties. One acceptable means an operator may use to meet this requirement is to establish a training and qualification program such as that described in chapter 5 of this volume.

NOTE: Individuals exercising operational control must be knowledgeable of, and have access to, appropriate sections of the operator's GOM while performing their assigned duties.

1259. PART 135 FUEL-PLANNING REQUIREMENTS. The fuel-planning requirements of Parts 91 and 135 are based on IFR and VFR Class I navigation within the contiguous states. Other types of operations or operations outside of the contiguous states may require additional or special planning.

A. *VFR Operations in Airplanes.* FAR 135.209(a) prohibits takeoff in an airplane under VFR rules unless the airplane has enough fuel to first fly to the airport of intended landing. Thereafter the airplane must have enough fuel (computed at normal cruise) to either fly for 30 minutes during the day or to fly for 45 minutes at night.

B. *VFR Operations in Helicopters.* FAR 135.209(b) prohibits takeoff in a helicopter under VFR rules unless the helicopter has enough fuel to fly to the airport of first intended landing, and then to fly for 20 minutes at normal cruising fuel consumption.

C. *IFR Operations in Airplanes.* FAR 135.223 prohibits takeoff in an airplane in IFR conditions or on an IFR flightplan unless the airplane has enough fuel to first complete the flight to the airport of first intended landing. Thereafter, the airplane must have enough fuel to fly to the alternate airport, and then to fly for 45 minutes at normal cruise fuel consumption.

D. *IFR Operations in Helicopters.* FAR 135.223 prohibits takeoff in a helicopter in IFR conditions or on an IFR flightplan unless the helicopter has enough fuel to first complete the flight to the airport of first intended landing. Thereafter, the helicopter must have enough fuel to fly to the designated alternate airport, and then to fly for 30 minutes at normal cruise fuel consumption.

E. *Contingency Fuel.* Part 135 does not specifically require a specific increment of contingency fuel. FAR 91.103, however, does require that such contingencies be considered in preflight planning. Therefore, an increment of fuel to compensate for foreseeable contingencies must be on board for takeoff. One such contingency would be a delay in receiving takeoff clearance at major terminals. The operator's GOM should contain specific policies and instructions for computing the amount of contingency fuel to be carried under the circumstances likely to be encountered in the operator's specific operation.

F. *En Route Requirements.* The fuel planning requirements discussed in subparagraphs A through E apply for takeoff. Part 135 does not specify the action the PIC must

take if an alternate airport goes below minimums when the flight is en route, or how much fuel must be on board when the flight arrives overhead a destination or alternate airport. FAR 135.69(b) allows a PIC to continue toward a destination when a hazard to safe operations may reasonably be expected to be corrected before arrival. FAR 135.69(b) does prohibit a PIC from continuing a flight toward a destination, however, when the operator or the PIC knows of conditions that make continuation of the flight hazardous. The operator's GOM should contain specific policies and instructions to PIC's on how the PIC is to proceed in foreseeable circumstances that may be encountered in the operator's specific operation.

1261. WEATHER REQUIREMENTS. FAR 135.213 requires that weather reports and forecasts used in Part 135 operations be prepared by the NWS, a source approved by the NWS, or a source approved by the FAA (see section 1 of this chapter). Inspectors should ensure that Part 135 operators are conducting operations in compliance with FAR weather provisions, as follows:

A. *VFR Operations.* A flight may not depart under VFR rules unless the ceiling and visibility en route are forecast to be above the applicable VFR minimums until the aircraft arrives at the destination airport.

(1) All available reports and forecasts must show that the flight can be completed in visual meteorological conditions. Available reports include pilot reports (PIREP's), which must be obtained and used when available.

(2) When there is no information available from an approved source, FAR 135.213(a) authorizes PIC's to use their own observations or those of another competent person for operations under VFR. This authority is limited to only those situations in which a report from an approved source is not available. For example, these procedures might be appropriate for floatplane operations at remote lakes where no weather observer is stationed. This provision does not relieve PIC's and operational control personnel from obtaining and using the information that is available, such as area forecasts and PIREP's.

(3) The operator's GOM must specify the circumstances under which PIC's may use the provision of FAR 135.213(a). If observers other than PIC's are used, operators must specify the training and qualifications of these observers.

B. *Point of Departure - IFR Operations.* A flight may not be originated when the weather at the departure point is below that specified in paragraph C57 or paragraph H106 of the operator's OpSpecs.

(1) Takeoff weather minimums may be below the authorized landing minimums. For takeoff in such conditions, an alternate airport must be available within 1 hour of flying time from the departure airport at normal cruise speed.

(2) Operators may be authorized to use "lower-than-standard" takeoff minimums by paragraph C57(e)(1) of the OpSpecs. POI's, operators, and PIC's must be aware of the limitations associated with this authority. The operator must have an approved "lower-than-standard takeoff" training program and qualification module. The PIC (and second-in-command (SIC), when applicable) must have satisfactorily demonstrated competency on their last competency check (FAR 135.293) or instrument proficiency check (FAR 135.297). A single pilot may not conduct lower-than-standard takeoffs in weather conditions below Category I (CAT I) landing minimums.

C. *Destination Weather - IFR.* A flight may not depart under IFR or over-the-top rules unless appropriate weather reports or forecasts indicate that conditions will be at or above the minimums required by the OpSpecs at the destination airport at the estimated time of arrival (ETA). The reports or forecasts used must be the most currently available at the time of takeoff. CAT I weather minimums are contained in paragraphs C53, C54, and H103 of the OpSpecs. CAT II and CAT III minimums are listed in paragraphs C59, C60, H108, and H109.

D. *Designation of Alternate Airports.* FAR 135.223 specifies when an alternate airport is required for IFR operations or over-the-top operations. An alternate airport does not have to be designated when, for at least 1 hour before and 1 hour after the ETA at the destination airport, the appropriate weather reports or forecasts (or any combination of them), show the ceiling will be as follows:

(1) At least 1,500 feet above the lowest circling MDA, if a circling approach is authorized for the airport; or

(2) If a circling approach is not authorized, at least 1,500 feet above the lowest published instrument approach minimum or 2,000 feet above the airport elevation, whichever is greater; and

(3) The visibility at that airport will be at least 3 miles, or 2 miles more than the lowest applicable visibility minimums, whichever is greater, for the instrument approach procedures to be used.

E. *Alternate Airport Weather.* The forecast weather at the designated alternate airport must exceed the requirements of the table in either paragraph C55 or paragraph H105 of the OpSpecs, as applicable.

1263. IFR PASSENGER-CARRYING, OVER-THE-TOP OPERATIONS. Part 135 contains a set of rules that limit IFR passenger-carrying, over-the-top flights. These limitations do not apply to cargo-only Part 135 flights.

A. *Operation of Single-Engine Airplane and Helicopter Operations in IFR Conditions.* In general, FAR 135.181 prohibits the operation of single-engine aircraft (either airplanes or helicopters) while carrying passengers in IFR conditions. FAR 135.181(c)(2) only allows the following limited exceptions:

(1) A flight may depart in IFR conditions if VFR conditions can be reached within 15 minutes of departure. The flight may climb through an overcast to reach VFR on top conditions.

(2) An aircraft may be operated in IFR conditions and conduct an instrument approach when unforecasted IFR conditions are encountered and it is more prudent to continue in IFR conditions rather than remain in VFR conditions. POI's shall investigate reports of these incidents to ensure that IFR operations were more prudent.

NOTE: FAR 135.181 does not prohibit a pilot from operating an aircraft in VFR conditions on an IFR clearance. An aircraft must be IFR-equipped and the pilot or pilots must be qualified according to Part 135 before an IFR clearance may be requested or IFR weather conditions are entered.

B. *Operation of Single-Engine Aircraft in Over-The-Top Operations.* FAR 135.181 prohibits the operation of single-engine aircraft (airplanes and helicopters) in over-the-top operations unless the following conditions can be met:

(1) The flight may be planned to climb to VFR over-the-top conditions as described in previous subparagraph A.

(2) If a ceiling exists, VFR conditions must be forecast to exist under the ceiling along the planned route from the time the flight begins operating over-the-top until 1 hour after the flight is estimated to reach the destination.

(3) At all points along the route, upon reaching destination, and for 1 hour thereafter, the forecast must show that the flight will be able to descend in VFR conditions (clear of clouds), should an engine fail.

C. *Operation of Multiengine Aircraft in IFR, Over-The-Top, Passenger-Carrying Operations.* A multiengine aircraft (airplane or helicopter) may be released for IFR or VFR over-the-top, passenger-carrying operations under the following circumstances:

(1) The flight may be operated under the conditions described in subparagraphs A and B, or;

(2) The operator may limit the takeoff weight so that the aircraft can climb at 50 feet per minute at the MEA of the route to be flown or at 5,000 feet MSL, whichever is higher, with the critical engine inoperative. Passenger-carrying, multiengine helicopters flying offshore may be started when the helicopter can climb at 50 feet per minute at the MEA or at 1,500 feet MSL, whichever is higher, with the critical engine inoperative.

(3) A flight may start when weather forecasts and reports indicate that the flight will be able to operate in VFR conditions until it reaches the destination and then descend in VFR conditions to beneath the ceiling. Conditions at the destination must allow a VFR descent for the period of the ETA to 1 hour after ETA. While operating over-the-top, the flight must be able to comply with subparagraphs (1) or (2).

(4) A flight may start when it can be operated clear of the clouds until it reaches the final approach fix at the initial approach altitude under VFR conditions and then conduct an instrument approach.

1265. OVERWATER, PASSENGER-CARRYING OPERATIONS. Except for takeoffs, landings, and operations within gliding distance of land, all passenger-carrying flights operated over water must be operated as follows:

A. *Airplanes.* Operators must limit the takeoff weight of an airplane so that it can climb at 50 feet per minute at an altitude of 1,000 feet above the surface with the critical engine inoperative.

B. *Helicopters.* Helicopters must be equipped with flotation devices.

1267. PART 135 EXTENDED OVERWATER OPERATIONS. Although Part 135 does not specifically address the requirements for extended overwater operations, FAR 135.21(a) requires that each operator develop a manual establishing the policies and procedures for operations that are acceptable to the FAA Administrator. One means, but not the only means, that a Part 135 operator may use to develop acceptable extended overwater operations procedures is to show compliance with those portions of Part 121 that correspond to the operation conducted.

A. *Flight Planning and Navigation.* Flight planning and navigational requirements do not differ from those of Part 121 operators conducting operations in the same airspace (see sections 1 and 4 of this chapter and section 8 of chapter 8 in this volume).

B. *Fuel Planning.* The operator must provide adequate procedures for compensating with the limitations of forecast winds. One acceptable means an operator may use is to comply with the requirements of FAR 121.641 for reciprocating or turbopropeller aircraft and with the requirements of FAR 121.645 for turbojet aircraft. These FAR's provide for appropriate en route reserves.

C. *Engine-Out En Route Performance Limits.* The operator must develop procedures to comply with the engine-out performance limitations of Part 135, Subpart I. The operator's analysis must show compliance at the most critical point on the route. Under most conditions, engine-out operations require driftdown procedures. Inspectors must ensure that the operator's analysis considers how oxygen and aircraft systems are affected by engine loss (see volume 4, section 3).

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1265. OVERWATER, PASSENGER-CARRYING OPERATIONS. Except for takeoffs, landings, and operations within gliding distance of land, all passenger-carrying flights operated over water must be operated as follows:

A. *Airplanes.* Operators must limit the takeoff weight of an airplane so that it can climb at 50 feet per minute at an altitude of 1,000 feet above the surface with the critical engine inoperative.

B. *Helicopters.* Helicopters must be equipped with flotation devices.

1267. PART 135 EXTENDED OVERWATER OPERATIONS. Although Part 135 does not specifically address the requirements for extended overwater operations, FAR 135.21(a) requires that each operator develop a manual establishing the policies and procedures for operations that are acceptable to the FAA Administrator. One means, but not the only means, that a Part 135 operator may use to develop acceptable extended overwater operations procedures is to show compliance with those portions of Part 121 that correspond to the operation conducted.

A. *Flight Planning and Navigation.* Flight planning and navigational requirements do not differ from those of Part 121 operators conducting operations in the same airspace (see sections 1 and 4 of this chapter and section 8 of chapter 8 in this volume).

B. *Fuel Planning.* The operator must provide adequate procedures for compensating with the limitations of forecast winds. One acceptable means an operator may use is to comply with the requirements of FAR 121.641 for reciprocating or turbopropeller aircraft and with the requirements of FAR 121.645 for turbojet aircraft. These FAR's provide for appropriate en route reserves.

C. *Engine-Out En Route Performance Limits.* The operator must develop procedures to comply with the engine-out performance limitations of Part 135, Subpart I. The operator's analysis must show compliance at the most critical point on the route. Under most conditions, engine-out operations require driftdown procedures. Inspectors must ensure that the operator's analysis considers how oxygen and aircraft systems are affected by engine loss (see volume 4, section 3).

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CHAPTER 5. AIR AMBULANCE OPERATIONS

SECTION 1. BACKGROUND AND DEFINITIONS

1335. INTRODUCTION. This chapter contains background information on air ambulance operations (previously known as "emergency medical services"). It also contains information, direction, and guidance to be used by inspectors and principal operations inspectors (POI's) when evaluating an operator's air ambulance procedures, general operations manual (GOM), or the unique requirements an operator must meet prior to being issued operations specifications (OpSpecs) paragraph A21, "Air Ambulance-Helicopter" or OpSpecs paragraph A22 "Air Ambulance-Airplane." This chapter also contains specific crew training requirements and operational procedures for both airplane and helicopter air ambulance operations. A sequential breakdown of this chapter follows:

A. Section 1 contains general background information, such as air ambulance operations specifications (OpSpecs), and definitions of the terms used in this chapter.

B. Section 2 contains guidance for inspectors when evaluating an operator's request to be issued Part 135 air ambulance service OpSpecs.

C. Section 3 contains special operational procedures pertaining to Part 135 air ambulance helicopter or airplane services.

D. Section 4 contains guidance to be used by inspectors when evaluating a Part 135 operator's air ambulance training program.

1337. OPERATORS REQUIRING AIR AMBULANCE OPSPECS PARAGRAPHS. The unique association of the aviation and medical professions has formed a technically sophisticated system of life-sustaining care for ill or injured passengers during air transportation. Air ambulance operators have met the public need and demand for such services by equipping and dedicating aircraft specifically for this purpose. Flight Standards Service, in consultation with pioneering air ambulance operators, has created specific OpSpecs paragraphs to clarify the means these operators will use to comply with safety and regulatory requirements while conducting air ambulance operations.

A. *Regulatory Requirements.* An air ambulance operator must comply with all requirements of the FAR Part under which the operator is certified. Air ambulance operators are not exempted from any requirement of the FAR's by reason of conducting air ambulance operations. To ensure industry standardization and a clear understanding between the FAA and air ambulance operators, OpSpecs paragraphs A21 and A22 contain the specific means by which air ambulance operators can comply with the FAR's. Some of these rules are as follows:

(1) *Certification Under a FAR Part.* An air ambulance operator must be certified under either Part 121 or Part 135 and comply with all provisions of the Part under which the operator is certified. SFAR 38-2 specifies the FAR Part under which an operator must be certified on the basis of the type and size of aircraft the certificate holder operates (see volume 3, chapter 6, section 1, paragraph 1247 for details).

(2) *Certification Under Part 121.* All helicopter operations must be conducted under Part 135. At the time of this writing, all air ambulance operations with airplanes are being conducted under Part 135. The information, direction, and guidance contained in this chapter applies to operations under Part 135. In the future, an operator may request to conduct air ambulance operations with an airplane requiring operations under Part 121. In such cases, the POI of a Part 121 operator who receives the request from the assigned operator for issuance of the air ambulance OpSpecs paragraph should contact AFS-200 through the applicable regional flight standards division (RFSD) for direction and guidance.

B. *Advertising.* According to FAR 135.31, an operator may not advertise or conduct an operation unless authorized to do so by the operator's operating certificate and OpSpecs. After January 1, 1993, an operator may not conduct air ambulance operations unless the operator has an OpSpecs authorization.

C. *Operators Requiring Air Ambulance OpSpecs Paragraphs.* An operator who holds out to the public to provide basic or advanced inflight life support services during air transport must have been issued the appropriate air ambulance OpSpecs paragraph before conducting such operations. Operators may or may not overtly advertise their services. For example, hospital-based air ambulance services must also hold air ambulance OpSpecs even though they do not advertise. Operators holding Part 135 OpSpecs without paragraphs A21 or A22 may transport medical personnel as passengers who are accompanying a sick or injured person, but must meet the following requirements:

- They may not advertise air ambulance or inflight patient care services
- Any inflight patient care equipment and medical personnel that accompany the passenger must be provided by the passenger
- The patient-care equipment must not require modification to the aircraft, such as the removal of seats
- The patient-care equipment must not be required for basic or advanced life support

NOTE: Air ambulance operations are not conducted under emergency authority. When a life-threatening situation exists, a PIC may declare an emergency in accordance with FAR's 91.3, 121.557, or 135.19 and transport a sick or injured person. The PIC who takes such actions must report the actions to the FAA. The inspector investigating such a report should determine whether the information available to the operator and PIC at the time the flight began indicated that a life-threatening emergency existed and that a suitably equipped air ambulance was not available within the time acceptable to the best medically-qualified person available.

D. *Terminology.* Standardized terminology has become necessary due to the growth of helicopter and airplane air ambulance services. The term "aeromedical operations" as associated with OpSpecs has been replaced with the term "air ambulance-helicopter" or "air ambulance-airplane," as applicable. POI's whose operator's OpSpecs paragraphs contain the term "aeromedical operations" should amend their operator's OpSpecs before January 1, 1993.

1339. DEFINITIONS. The following terms are defined according to their use in this handbook:

- *Medical Personnel*: Those persons trained in air-medical environment, who perform medical duties in an air ambulance operation.
- *Basic Life Support (BLS) System*: The medical personnel and equipment required to provide basic life support to patients (such as oxygen, suction, electrical supply, lighting and climate control) and equipment which provides for air-to-ground medical communications when applicable.
- *Air Ambulance*: An aircraft equipped with at least a basic life support (BLS) system.
- *Air Ambulance Service*: The operation of an aircraft equipped as an air ambulance in air transportation service.
- *Local Flying Area*: An area designated by the operator in which air ambulance services will be conducted. Each local flying area should be defined in a manner acceptable to both the operator and the POI, taking into account the operating environment and geographic terrain features and capabilities of the aircraft.
- *Emergency Medical Service (EMS):* The term Emergency Medical Service (EMS) has been replaced with the term air ambulance.
- *Response Scene:* The location to which an air ambulance has been dispatched for an air ambulance flight.

1341. OVERVIEW OF HELICOPTER AIR AMBULANCE SERVICES. OpSpecs paragraph A21 authorizes air ambulance-helicopter service for hospital-to-hospital patient transfer work, accident scene work, offsite (unimproved site) work, or, emergency evacuation facility patient pick-ups. A trend of weather-related accidents during aeromedical operations resulted in the inclusion of weather limitations for VFR flight with these OpSpecs (see volume 3, chapter 1, section 1 of this handbook for additional background information on OpSpecs).

A. *Paragraph A-21 Authorizations.* Paragraph A-21 of the OpSpecs grants latitude to a helicopter operator for landing site selection as well as the authority to land on appropriate sites during both day and night in air ambulance operations.

(1) *Higher Minimums.* The authorization to conduct helicopter air ambulance operations is based on the operator's using higher ceiling and visibility minimums in uncontrolled airspace than is required for conventional Part 135 operations.

(2) *Night Landings.* Night landings at unimproved sites are permitted with adequate lighting for the pilot to identify the landing site and surrounding hazards.

NOTE: "Adequate" lighting is that lighting which allows a helicopter pilot to conduct a safe terrain and obstacle collision avoidance approach and landing during conditions of darkness. The source of this lighting may be on the helicopter or on the surface, and includes the possibility of automobile lights being used to illuminate the landing site. Pyrotechnic road hazard flares are not recommended for marking the touchdown area.

(3) *Local Flying Area.* The operator must define a local flying area for each base of operation and the description of the area must be entered in OpSpecs paragraph A21.

NOTE: The dimensions of the local area should be that which an operator could service adequately with a helicopter taking into account the terrain features and capabilities of the helicopter. The descriptions in an operator's OpSpecs should be easy to understand and define, for example a part of a state or a dimensional distance such as 100-mile radius of base.

B. *IFR and VFR Requirements.* Operators of helicopter air ambulance operations must comply with the following requirements for IFR and VFR:

(1) *IFR Operations.* POI's of helicopter-air ambulance operators conducting IFR operations should carefully evaluate the operator's procedures, training and qualification program, and the operating environment before granting the operator the authority to conduct single pilot IFR operations with an autopilot.

(2) *VFR Operations.* When conducting VFR flight, the operator must comply with the weather minimums as specified in paragraph A-21. Operator requests for lower VFR minimums than specified in paragraph A-21 must be coordinated with AFS-250 through the regional flight standards division (RFSD).

(3) *Training for Stress-Related Issues.* Flightcrews may experience high stress levels in air ambulance service operations due to the potential urgency for responding to emergencies related to preserving human life. POI's should ensure that operators give adequate attention to cockpit resource management (CRM) training to prevent inappropriate actions and decisions during periods of stress. One acceptable means operators may use to guard against inappropriate decisions is to require that both the individual exercising operational control and the PIC agree that the flight can be safely initiated and continued under the present conditions.

C. *Flight and Rest Time.* Operators may choose to schedule crews under one of several rules. In some cases, operators may conduct operations at different locations under different rules. The operator's GOM must contain the specific method to be used and how records are to be kept to show compliance with the rule used. POI's shall add a statement to paragraph A21 of the operator's OpSpecs that contains the specific section of the operator's GOM which contains these procedures.

1343. OVERVIEW OF AIRPLANE AIR AMBULANCE SERVICES. OpSpecs paragraph A22 specifies operational requirements and grants the operator authorization of air ambulance-airplane service. The major requirement of paragraph A22 is that the operator's flight crewmembers must be adequately trained in the special requirements of air ambulance operations.

A. *Flightcrew Training.* POI's must ensure that an air ambulance-airplane operator trains the flightcrew in the following areas:

- To be capable of interfacing effectively with medical personnel
- To be cognizant of potential stress placed the patient in various realms of flight, such as unpressurized flight, extreme temperature gradients, or turbulence

- To be able to respond well when under high levels of stress when emergencies related to preserving human life create urgent situations (In response to such stresses, operators must train flightcrews not to jeopardize the safety of either themselves, inflight medical personnel, or the public.)

- In cockpit resource management (CRM) and operational control procedures to prevent the flightcrew from inappropriate actions and decisions during periods of stress

- In the special communication capabilities for accommodating medical care during flight and/or to coordinate with destination medical personnel

B. *IFR and VFR Training.* POI's should encourage air ambulance operators to qualify flightcrews to conduct both IFR and VFR operations. POI's of air ambulance operators conducting IFR operations should carefully evaluate the operator's procedures, training and qualification program, and the operating environment before granting the operator the authority to conduct single pilot IFR operations with an autopilot.

1344. - 1354. RESERVED.

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SECTION 2. AUTHORIZATIONS FOR PART 135 AIR AMBULANCE SERVICES

1355. GENERAL. This section contains guidance to be used by principal operations inspectors (POI's) when evaluating a Part 135 operator's request to be issued OpSpecs paragraph A21, "Air Ambulance-Helicopter" or OpSpecs paragraph A22, "Air Ambulance-Airplane."

A. *Certification of New Operators.* A district office may receive a request from an individual who does not currently hold a certificate to be certified as an air ambulance operator. In this case, inspectors must follow the policies, direction, and guidance in volume 2, chapter 2 of this handbook. Inspectors should refer to sections 3 and 4 of this chapter to obtain policies, direction, and guidance for evaluating an air ambulance operator during phases II, III, and IV of the certification process.

B. *Existing Operators Initiating Air Ambulance Operations.* Existing operators may request that POI's issue OpSpecs paragraph A21 or paragraph A22. POI's should consider a request to conduct air ambulance operations a potentially significant change in the certificate holder's operation. POI's of such operators shall conduct a partial recertification of the operator in accordance with paragraph 3 of this section.

C. *Relevant Documents.* The inspector conducting a certification or recertification of an air ambulance operator should become familiar with the contents of the following documents and should bring these documents to the attention of the operator:

- Volume 2, of this handbook, "Air Operator Certification"
- Volume 3, chapter 1, section 7 of this handbook, "Amendment, Surrender, and Suspension of Operations Specifications"
- Advisory Circulars 135.14 and 135.15, "Emergency Medical Services /Airplane or Helicopter"
- "Air Ambulance Guidelines" published by both the U.S. Department of Transportation, National Highway Traffic Safety Administration and the American Medical Association, Commission on Emergency Medical Services
- Advisory Circular 120.49, "Certification of Air Carriers"
- Volume 3, chapter 2 of this handbook, "Flightcrew Training and Qualification Programs"
- Volume 3, chapter 15 of this handbook, "Manuals, Procedures, and Checklists"

1357. EXISTING OPERATORS INITIATING AIR AMBULANCE OPERATIONS. POI's shall use the following direction and guidance when issuing paragraphs A21 or A22 of the OpSpecs to existing operators.

A. *Initial Phase.* In the initial phase, the POI and the operator should meet to decide what documents the operator must create or modify and what proving or verification tests the operator must conduct. The POI must coordinate with the principal maintenance and avionics inspectors when scheduling this meeting.

(1) The POI shall inform the operator of the requirement to prepare a new compliance statement. The operator should review each rule of Part 135 and indicate those rules under which changes in the operator's compliance procedures will be required while conducting air ambulance operations. For those rules requiring no change, the POI may accept a simple statement such as, "No change."

(2) The POI shall review the applicable air carrier certification job aids (see figures 2.1.1.1. through 2.1.1.3.), to determine the actions required. The "Date item accomplished/ ready for FAA insp." column of the job aid should be marked "N/A" for those items that will not be required. The POI should retain a copy of the job aid, and one should be given to the operator. The principal inspectors should coordinate informally with the regional flight standards division (RFSD) at this stage to ensure that all requirements have been identified. The RFSD should coordinate with

AFS-500 for additional guidance, if required.

(3) The POI and the operator should come to a mutual agreement on the documents listed in volume 2, paragraph 85 that the operator will be required to provide or modify.

(4) Specific areas that should be reviewed include the following:

- Development of the air ambulance procedures section of the operator's GOM
- Development of a flight manual and checklists appropriate to air ambulance operations
- Development of the air ambulance section of the operator's training and qualification program
- Exploration of the requirement for OST Form 4507, "Air Taxi Operator and Commuter Air Carrier Registration and Amendments Under Part 298 of the Regulations of the Department of Transportation"

B. *Formal Application Phase.* The operator must submit a letter requesting issuance of the appropriate OpSpecs paragraphs, the new compliance statement, and those attachments listed in volume 2, paragraph 85, which have been determined to be applicable in the previous phase.

C. *Document Compliance Phase.* Prior to conducting the document compliance phase, inspectors should review the contents of volume 2, section 3. Inspectors should also refer to the direction and guidance of sections 3 and 4 of this chapter while conducting the required evaluations.

D. *Demonstration and Inspection Phase.* In the demonstration and inspection phase, only the applicable events of the job aid have to be accomplished. Inspectors should review volume 2, section 4 of this handbook for guidance when accomplishing this phase. Since unique circumstances surround each recertification, the POI shall informally coordinate with the RFSD before closing this phase. Specific criteria and procedures for inspectors to use when evaluating an operator's demonstrated ability are located in sections 3 and 4 of this chapter. These demonstrations include but are not limited to the following:

- Training in air ambulance procedures
- Emergency evacuations
- Air navigation under air ambulance operating procedures
- Operational control procedures

E. *Certification Phase.* Inspectors should review the contents of volume 2, section 5 before concluding the certification phase.

1358. - 1368. RESERVED.

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SECTION 3. AIR AMBULANCE SERVICE OPERATIONAL PROCEDURES

1369. GENERAL. This section contains information and guidance to be used by inspectors when evaluating a Part 135 operator's special operational procedures for air ambulance-helicopter services or air ambulance-airplane services. This section covers the evaluation of an operator's administrative, preflight, inflight, emergency, and post-flight procedures. To conduct an air ambulance service, an operator must comply with all of the pertinent requirements of Part 135 as well as meet certain requirements for the issuance of air ambulance operations specifications (OpSpecs).

1371. ADMINISTRATIVE PROCEDURES. When evaluating an operator's administrative procedures for an air ambulance service, inspectors should consider the following:

A. *Operational Control Procedures.* Inspectors should ensure that an operator's procedures for operational control are adequate for the operator's base of operations and for each satellite location (see FAR 135.77). According to the definition in Subchapter A of Part 1 of the FAR's, operational control, with respect to a flight, means the exercise of authority over initiating, conducting, or terminating a flight. In an air ambulance service flight, the PIC exercises final authority to initiate, conduct, or terminate an assigned flight.

B. *Flight Time and Rest Requirements.* Inspectors should ensure that an operator maintains well-defined records showing the difference of flight time, rest time, and off-duty or unassigned time, in accordance with Part 135, "Subpart F--Flight Crewmember Flight and Rest Requirements." Air ambulance operators will normally operate under either one of the following regulations:

(1) *FAR 135.267, "Flight Time Limitations and Rest Requirements: Unscheduled One- and Two-Pilot Crews."* According to this FAR, the flight crewmembers are allowed to conduct any flight or other duties as assigned, such as training, testing, routine transport missions, while on duty/assignment. For an assignment conducted under this FAR, flight crewmembers must receive at least 10 consecutive hours of rest during the 24-hour period that precedes the planned completion of the assignment.

(2) *FAR 135.271, "Helicopter Hospital Emergency Medical Evacuation Service (HEMES)."* The rest requirements for HEMES differ from the requirements for flights conducted under FAR 135.267. During operations in accordance with FAR 135.271, provisions must be made for 8 consecutive hours of rest during any 24-hour period, and that 8-hour rest period must be declared in advance. If the flight crewmember does not receive the required rest period, that person must be relieved of the assignment. The operator should establish recordkeeping to show that only emergency medical evacuation flights are conducted during these assignments. While a flight crewmember is assigned to HEMES under FAR 135.271, that person may not be assigned to any other duties. Prohibited duties during a HEMES assignment include, but are not limited to, maintenance test flights, public relations flights, and administrative duties.

NOTE: Inspectors should ensure that operators scheduling under FAR 135.271, have identified those procedures and policies in their operations manual.

C. *Flight-Locating Procedures.* To ensure the safe and orderly accomplishment of an air ambulance service mission, each operator should develop a flight-locating system. Air ambulance operations should be conducted using IFR and VFR flightplans and procedures, when feasible. The requirements for conducting flights that do not have flightplans filed are in FAR 135.79. There must be flight-locating procedures for making the determination of when an aircraft is overdue. The operator's procedures must contain specific actions that are necessary when an aircraft is overdue in the situation. Elements that must be considered by inspectors when evaluating flight-locating procedures include the following:

- Procedures which provide the operator with all the information required to be included in a VFR flightplan

- Procedures which provide for the timely notification of an FAA facility or search-and-rescue facility, if an aircraft is overdue or missing

- Procedures which provide the operator with the location, date, and estimated time for re-establishing radio or telephone communications if the flight will operate in an area where communications cannot be maintained

- Communication procedures which ensure that actual departure times are transmitted to the flight-locating facility

- Procedures which ensure that position reports are made at specified intervals and are received by the flight-locating facility

- Adequate training on the operator's flight-locating procedures for persons assigned flight-following duties at the operator's flight-locating facility

D. *Shift Change Briefing.* Inspectors must ensure that the operator has a procedure to ensure that the pilots coming on duty have received information concerning the following:

- Aircraft status (such as fuel, maintenance discrepancies)

- Anticipated flights

- Hazard updates

- Schedule changes

- Name and location of relief pilot

- Any other special circumstances

E. *Potential Hazard Information.* Inspectors should ensure that helicopter operators have developed a means at each base and satellite location for depicting uncharted hazards in the local flying area that may impair low flight or offsite landings. Operators should have established procedures for keeping this information current.

F. *Landing Site Depiction.* Inspectors should encourage operators to provide a portfolio, notebook, or other media containing photographs, video, drawings, or diagrams of each of the heliports used routinely by the operator. Operators should update this information regularly and keep it available as preflight information.

G. *Protection and Control of Infectious Conditions.* Operators should have a policy in their operations manual for the disposal and decontamination of medical or hazardous wastes. Procedures for infection control and for aircraft cleaning might be provided by an associated medical service or hospital or could be contracted to a service company. Inspectors should ensure that precautions for all of the operator's employees are emphasized in the operations manual.

1373. PRE-FLIGHT PLANNING. When evaluating an operator's pre-flight planning procedures for an air ambulance service, inspectors should consider the following:

A. *Use of Local Flying Area Maps for Helicopter Operations.* In addition to the items normally accomplished during pre-flight planning, the PIC should become familiar with the current map of the local flying area and the uncharted hazards for the area.

B. *Weather Considerations.* Weather considerations include the capability for obtaining current weather information for the area of operation at the time of the planned flight.

C. *Landing Site Update Information.* The PIC should review the operator's updated landing site portfolio for current operational information.

1375. INFLIGHT PROCEDURES. When evaluating an operator's inflight procedures for an air ambulance service, inspectors should consider the following:

A. *Passenger Briefing Procedures.* The passenger briefing required by FAR 135.117 may be conducted by a person designated and trained by the operator and approved by the FAA Administrator. If passenger briefing duties are delegated to a medical crewmember, the procedure must be covered in the operator's operations and training manuals. As in all Part 135 passenger-carrying operations, passenger briefing cards are required for air ambulance operations.

B. *Passenger Restraint Procedures.* It is the responsibility of the pilot-in-command (PIC) to ensure that passengers who may pose a hazard to the aircraft or to its occupants are properly restrained before takeoff (such as hystericalpatients or combative passengers).

C. *Air-to-Ground Communications.* The aircraft used in

air ambulance services must have air-to-ground communication systems that ensure the safe and satisfactory completion of the flight. These systems must ensure that the flightcrew can coordinate with emergency personnel on the scene (such as the state and local police, and fire departments, when applicable).

D. *Scene Response Operations.* Inspectors and operators normally associate the term "scene response" with helicopter operations; however, scene response operations are not limited to helicopters as they may be airplane operations. Inspectors should consider the following operational procedures regarding scene response operations:

(1) Operators should have established procedures for inflight coordination with local authorities. The PIC should establish communication with scene personnel (such as the state and local police, and fire departments, when applicable) as soon as possible after takeoff.

(2) The operations manual should have procedures for determining the suitability of the landing site, which should include the following:

- Obstacles
- Crowd control
- Security
- Wind direction and velocity
- Restrictions to visibility
- Illumination of obstacles by ground personnel at night

(3) The PIC must be aware that personnel on the ground may not have been trained to provide the PIC with accurate information from which the PIC can determine the suitability of a landing site. The final responsibility for the determination of the suitability of the landing site remains with the PIC.

(4) After a scene response landing, the PIC should refrain from getting involved with patient care. If the aircraft's engines are not shut down, the PIC should remain at the designated aircraft station. The PIC should observe the takeoff area to predetermine a safe departure.

NOTE: Aircraft station would be the assigned area of responsibility in or around the aircraft during a scene response that would allow the pilot to keep the public and emergency personnel from straying into a danger zone.

(5) The PIC is responsible during scene response operations for ensuring that the operator's safety procedures are complied with for movement in and around the aircraft, including loading and unloading.

(6) The operations manual should have specific policy guidance for coordination procedures between flightcrew and medical personnel. Medical personnel responsibilities during scene response operations should include only those tasks associated with patient care.

1377. EMERGENCY PROCEDURES. When evaluating an operator's emergency procedures for an air ambulance service, inspectors should consider the following:

A. *Inadvertent Instrument Meteorological Conditions (IMC).* Operators must have emergency operational procedures for recovery from inadvertent IMC. These procedures must be in the operator's training manual.

B. *Inflight Medical Emergencies.* For inflight medical emergency situations, operators need procedures for the flightcrew coordination with medical personnel. The PIC must be able to exclude himself from the medical emergency. The PIC should use the "Lifeguard" prefix when communicating with air traffic control (ATC).

NOTE: Inspectors should encourage operators to include in their training programs a course for pilots on exercising good judgment in crisis situations.

C. *Emergency Evacuation Procedures.* Operators must develop emergency evacuation procedures for each make and model of aircraft and aircraft configuration. This should include any additional duties assigned to the medical crew.

1379. SERVICING OF AIRCRAFT WITH PATIENTS ON BOARD. Inspectors should consider the following requirements when evaluating an operator's procedures for servicing aircraft when passengers (patients) are on board:

A. *Refueling Procedures.* Air ambulance operators may need to conduct operations which are not necessary in conventional Part 135 operations, such as the refueling of an

air ambulance services must have air-to-ground communication systems that ensure the safe and satisfactory completion of the flight. These systems must ensure that the flightcrew can coordinate with emergency personnel on the scene (such as the state and local police, and fire departments, when applicable).

D. *Scene Response Operations.* Inspectors and operators normally associate the term "scene response" with helicopter operations; however, scene response operations are not limited to helicopters as they may be airplane operations. Inspectors should consider the following operational procedures regarding scene response operations:

(1) Operators should have established procedures for inflight coordination with local authorities. The PIC should establish communication with scene personnel (such as the state and local police, and fire departments, when applicable) as soon as possible after takeoff.

(2) The operations manual should have procedures for determining the suitability of the landing site, which should include the following:

- Obstacles
- Crowd control
- Security
- Wind direction and velocity
- Restrictions to visibility
- Illumination of obstacles by ground personnel at night

(3) The PIC must be aware that personnel on the ground may not have been trained to provide the PIC with accurate information from which the PIC can determine the suitability of a landing site. The final responsibility for the determination of the suitability of the landing site remains with the PIC.

(4) After a scene response landing, the PIC should refrain from getting involved with patient care. If the aircraft's engines are not shut down, the PIC should remain at the designated aircraft station. The PIC should observe the takeoff area to predetermine a safe departure.

NOTE: Aircraft station would be the assigned area of responsibility in or around the aircraft during a scene response that would allow the pilot to keep the public and emergency personnel from straying into a danger zone.

(5) The PIC is responsible during scene response operations for ensuring that the operator's safety procedures are complied with for movement in and around the aircraft, including loading and unloading.

(6) The operations manual should have specific policy guidance for coordination procedures between flightcrew and medical personnel. Medical personnel responsibilities during scene response operations should include only those tasks associated with patient care.

1377. EMERGENCY PROCEDURES. When evaluating an operator's emergency procedures for an air ambulance service, inspectors should consider the following:

A. *Inadvertent Instrument Meteorological Conditions (IMC).* Operators must have emergency operational procedures for recovery from inadvertent IMC. These procedures must be in the operator's training manual.

B. *Inflight Medical Emergencies.* For inflight medical emergency situations, operators need procedures for the flightcrew coordination with medical personnel. The PIC must be able to exclude himself from the medical emergency. The PIC should use the "Lifeguard" prefix when communicating with air traffic control (ATC).

NOTE: Inspectors should encourage operators to include in their training programs a course for pilots on exercising good judgment in crisis situations.

C. *Emergency Evacuation Procedures.* Operators must develop emergency evacuation procedures for each make and model of aircraft and aircraft configuration. This should include any additional duties assigned to the medical crew.

1379. SERVICING OF AIRCRAFT WITH PATIENTS ON BOARD. Inspectors should consider the following requirements when evaluating an operator's procedures for servicing aircraft when passengers (patients) are on board:

A. *Refueling Procedures.* Air ambulance operators may need to conduct operations which are not necessary in conventional Part 135 operations, such as the refueling of an

SECTION 4. AIR AMBULANCE SERVICE TRAINING PROGRAMS

1393. GENERAL. This section contains guidance to be used by principal operations inspectors (POI's) and inspectors when evaluating a Part 135 operator's training program for flightcrew and medical personnel in air ambulance services. This section also contains elements that inspectors should consider when making such evaluations, as appropriate to the operator's operations (see volume 3, chapter 2 in this handbook for the types of training categories that operators must use in training curriculums in general). Operators must still comply with all other Part 135 requirements and with other applicable guidance. The section covers the specifications for air ambulance-helicopter training programs, air ambulance-airplane training programs, and coordination training for medical personnel and flightcrew in an air ambulance service operation.

NOTE: For the purposes of this training, a "response scene" refers to a site where an air ambulance service flight operation is conducted, which involves non-routine, hazardous situations.

1395. HELICOPTER TRAINING PROGRAMS. Inspectors should consider the following elements when evaluating an operator's helicopter flight training program and helicopter ground training program.

A. *Helicopter Flight Training Program.* Cockpit resource management (CRM) and crew coordination procedures are an integral part of each of the flight maneuvers that follow. Inspectors should ensure that each of these maneuvers is included in the operator's flight training curriculum:

- Unimproved takeoff/landing area operations
- Night cross-country
- Night cockpit lighting considerations
- Night forced landing
- Communications, air-to-ground and flight crew/medical crew
- Inadvertent instrument meteorological conditions (IMC) (should include demonstrated control of the aircraft in simulated or actual instrument meteorological conditions)
- Techniques used with lighting equipment

B. *Helicopter Ground Training Program.* Inspectors should ensure that the following areas are included in the operator's ground training curriculum:

- Day-response scene operations
- Night-response scene operations
- Obstacle recognition
- Use of local area maps
- Aircraft systems variations (such as special electrical generation)
- Passenger restraining methods in flight
- Local flying area orientation (day/night) (helicopter only)
- Handling problem passengers
- Adequacy of landing sites
- Flightcrew functions and responsibilities
- Foreign operations (if appropriate)
- Prevention and control of infectious conditions (to include knowledge of infectious and communicable diseases and diseases recently identified as occupational health risks, such as hepatitis B, herpes simplex, herpes zoster, and AIDS)

1397. AIRPLANE TRAINING PROGRAMS. Inspectors should consider the following elements when evaluating an operator's airplane flight training program and airplane ground training program.

A. *Airplane Flight Training Program.* There are no airplane flight training maneuvers which are unique to air ambulance services.

B. *Airplane Ground Training Program.* Inspectors should ensure that the following areas are included in the operator's ground training curriculum:

- Aircraft systems variations
- Passenger restraining methods in flight
- Handling problem passengers
- Flightcrew functions and responsibilities
- Prevention and control of infectious conditions (to include knowledge of infectious and communicable diseases, diseases recently identified as occupational health risks such as hepatitis B, herpes simplex, herpes zoster, and AIDS)

1399. MEDICAL PERSONNEL AND FLIGHTCREW COORDINATION TRAINING. In air ambulance service operations, the medical personnel and the flightcrew are involved in two distinct operations. While flight crewmembers are generally not required to be trained in any medical subject areas, and medical personnel are not required to be trained in any flight operational procedures, training is permitted in some specific areas that the operator deems necessary. Operators must have training in coordination procedures to be used between flight crewmembers and medical personnel in specified situations. These specific situations must include, but are not limited to, the following:

- Physiological aspects of flight
- Patient loading and unloading
- Safety in and around the aircraft
- Passenger briefing (when appropriate)
- Appropriate inflight emergency procedures
- Emergency landing procedures
- Emergency evacuation procedures

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inspectors to effectively act as evaluators rather than as participants.

D. *Inspector, Examiner, and Safety Pilot Duty Positions.* A qualified and current pilot must occupy a pilot seat and act as safety pilot on all flight tests conducted in an aircraft. The preferred procedure is for the operator to provide a qualified instructor pilot or check airman to act as the safety pilot and pilot-in-command. Onaircraft equipped with jump seats, inspectors will usually occupy a jump seat so that they can evaluate the crew's interaction. However, when necessary a qualified and current inspector may act as a safety pilot and occupy a pilot's position on pilot flight tests. This provision will normally be limited to those families of aircraft in which it is not possible for the inspector to evaluate from a jump seat. On other occasions, an inspector may be the only qualified individual to act as the safety pilot. This may be appropriate when an operator is introducing a new aircraft type or when the aircraft is a type not typically used in Part 121 or Part 135 operations. In such circumstances, an inspector may act as safety pilot and occupy a pilot position during the flight test. When an examiner conducts a pilot flight test in an aircraft, the examiner will usually act as the safety pilot.

15. AIRCRAFT OPERATING MANUALS. The FAR's frequently reference the FAA Approved Flight Manual (AFM) in matters pertaining to the certification of aircrew members. Many operators use the AFM as an operating manual. Most Part 121 operators and many Part 135 operators, however, extract the information from the approved sections of the AFM and place it in a company aircraft operating manual. Operators may modify AFM procedures with the approval of the POI. Under these circumstances operators do not normally provide their crewmembers access to the AFM. Inspectors and examiners shall use the company-prepared aircraft operating manual instead of the AFM for airman certification purposes. Inspectors should be alert to deficiencies in the operator's manuals and procedures and for conflicts between company manuals and the AFM. When conflicts or deficiencies are observed, they shall be reported to the POI.

17. TESTING SEQUENCE AND TIME LIMITS.

A. *Test Sequence.* For all flight crewmembers, the phases of the certification process must be completed in the following sequence:

(1) Written test
(2) Oral test
(3) Flight test

B. Multiple Segment Flight Tests. When a combination of a flight simulator and aircraft is used for a flight test, the flight simulator segment must be completed before the airplane segment.

C. *Completion of Training Before the Oral Test.* Applicants must be adequately prepared for each phase of the testing process. The applicant must complete ground training including systems integration training before the oral test is administered. Systems integration training may be conducted using a flight simulator or a flight training device, however, it is not considered to be flight training. When flight training is conducted entirely in an aircraft, all training must be completed before the oral test. When circumstances make literal compliance with these policies impractical, the POI may approve alternate provisions.

D. *Completion of Training Before the Flight Test.* When a flight test is conducted either entirely in a flight simulator or in an aircraft, all flight training must be completed before the flight test is conducted. When a flight test is conducted with a combination of flight simulator and aircraft segments, only the simulator training must be completed before the simulator segment of the flight test is conducted. The aircraft portion of the flight training does not need to be conducted until after the simulator segment of the flight test has been completed.

E. *Time Limits.* The flight test phase must be completed within 60 days of completion of the oral test. If a flight test is conducted with a combination of flight simulator and aircraft segments, the aircraft segment must be completed within 30 days of the simulator segment.

F. *Extending Time Limits.* If an unplanned delay beyond the control of the operator occurs, the oral test may be repeated to extend the 60-day limit between the oral and flight test phases. The 30-day limit between the simulator segment and the aircraft segment may not be extended. For example, an applicant completed the oral test on July 1 and the simulator portion of a two-segment flight test on August 10. The aircraft portion of the flight test, however, could not be scheduled until September 5. In this case, a repeated oral test conducted between August 10 and September 5 would extend the time limits and both the 30- and 60-day limits would be satisfied.

18. - 26. RESERVED.

[PAGES 5-4 THROUGH 5-6 RESERVED]

SECTION 2. PHASES OF CERTIFICATION

27. APPLICATION PHASE. This paragraph contains general direction and guidance for completing the application forms required for the certificates covered in this volume. Some application forms contain detailed guidance and others do not. Inspectors and examiners should follow the directions on those forms which contain instructions.

A. *Completion of Application.* The applicant is responsible for completing the information on the application form above the applicant's signature block. The applicant's signature certifies that the information on the application is accurate and that the applicant meets the eligibility requirements for the certificate. It is the applicant's responsibility to present an application for each phase of the testing process (see figures 5.1.2.1. and 5.1.2.2. for examples of the application forms).

B. *Eligibility.* The purpose of the application phase is to verify that the applicant is eligible and has met all of the prerequisites for the airman certificate or rating. Eligibility requirements for specific certificates and ratings are discussed in applicable chapters of this volume and are listed on the appropriate job aids.

C. *Instructor Recommendations.* For all certificates except the ATP certificate and additional category, class and type ratings at the ATP level, the "Recommendations" block of the certificate application form must be signed by an instructor. According to Part 121 and Part 135, the instructor and the operator are equally responsible for ensuring that the applicant has been adequately trained before the applicant is tested.

28. VERIFICATION OF APPLICANT'S IDENTITY. This paragraph contains information and guidance for inspectors, examiners, and paratechnical personnel for verifying the identity of applicants for airman certificates. The following information and procedures will reduce the possibility of the incorrect issuance of an airman certificate.

A. *Acceptable Identification Documentation.* Acceptable identification (ID) documentation includes, but is not limited to, the following:

- A valid driver's license
- A government ID card
- A passport
- Any identification documents that meet the requirements of the following subparagraphs

B. *Procedures For Proper Identification.* The inspector shall ensure that applicants applying for airman certificates are properly identified by observing the following procedures:

(1) Applicants for airman certificates must present positive identification at the time of application. The identification must include a photograph of the applicant, the applicant's signature, and the applicant's current residential address. This information may be presented in more than one document.

(2) Inspectors, examiners, and paratechnical personnel shall not accept a post office box address on an application unless the applicant has no street address. For example, an applicant may reside on a rural route, a military base, a boat, or at some location that has no street address. In such cases, the applicant must make a written statement of where the applicant resides on a separate piece of paper, attest to the circumstances by signature, and attach the statement to the application.

(3) FAA Form 8710-1, "Airman Certificate and/or Rating Application" contains a space in the "Attachments" block on the back of the form for the inspector to record the type, number, and expiration date of the identification submitted by the applicant. For example, if the applicant submits a valid driver's license, the inspector would enter "Washington driver's license" on the "Form of ID" line, the license number on the "Number" line, and the expiration date on the "Expiration Date" line.

(4) Examiners shall refer any applicant to a flight standards district office (FSDO) if the applicant does not provide identification in accordance with this subparagraph (B).

C. *Alternative Methods of Identification.* An alternate means of identification may be used by individuals who have not yet established other forms of acceptable identification. The identification procedures used must positively identify the applicant. In such cases, the identification procedures employed must be disclosed by the inspector or paratechnical employee on the application or, if necessary, in a separate statement. Questions on acceptable identification should be referred to the Civil Aviation Security Field Office (CASFO) or the Regional Civil Aviation Security Division (RCASD).

D. *Identification (ID) Irregularities and Deficiencies.* Inspectors, paratechnical personnel, and examiners should be on the alert for any indication of fraudulent or altered forms of identification. Under no circumstances should an inspector, paratechnical employee, or an examiner attempt to confiscate a suspected forged or counterfeit certificate or identification. Suspicious incidents should be reported immediately to the nearest CASFO or RCASD, and if possible, a copy of the false ID should be made for enforcement action purposes.

E. *Dealing with Suspected Cases of False Representation.* Inspectors, examiners, and paratechnicals should use proper interviewing techniques and exercise good judgment and common sense when dealing with individuals whom they suspect of falsely representing themselves. Behaviors to be aware of include: lack of specificity or directness in answering questions, skipping areas on applications, unusual hesitations, unusual nervousness, and strange or bizarre behavior. No attempt should be made to apprehend or physically restrain any individual. Instead, the inspector should observe and record the applicant's height, weight, and distinguishing characteristics. Suspicious incidents should be reported immediately to the nearest CASFO or RCASD.

29. INSTRUCTIONS FOR COMPLETING APPLICATION FORMS. The instructions for completing FAA application forms should be followed to preclude an excessive number of airman certification paperwork files from being returned to the applicant by the Airman Certification Branch, AVN-460, for correction. These forms are designed for computer processing, therefore, the applicant should consider that character limitations are imposed in some areas. Inspectors should ensure that FAA Form 8710-1, "Airman Certificate and/or Rating Application," is used for the ATP certificate (see figure 5.1.2.1.) and that FAA Form 8400-3, "Application for an Airman Certificate and/or Rating" is used for the flight engineer, flight navigator, and aircraft dispatcher certificates (see figure 5.1.2.2.). Inspectors should use the procedures and guidance that follows when reviewing an application form.

A. *Front Side of Application Form.* Inspectors should review the front side of the application form as follows:

(1) Ensure that the block containing the type of certificate for which application is being made is checked.

(2) When an applicant already holds the basic certificate and is applying for a rating to be added to the basic certificate, ensure that the "Additional Rating" block is checked.

(3) When the applicant already holds the certificate and is applying for the certificate to be reissued, ensure that the "Reissuance" block is checked. This block is used only when a rating is being added to an existing certificate.

(4) On FAA Form 8400-3, ensure that in the "Type of Aircraft To Be Used" block, the make and model of the aircraft to be used is entered. This entry should be identical to the current designation listed in either figure 5.1.2.5. or 5.1.2.6. Since aircraft type designations are frequently changed, a current listing of the designations may be obtained through FSAS. This current information may be obtained by selecting the airworthiness/MMEL subsystem at the main FSAS menu. Then, when the broadcast message page appears, press "enter" or "go" until the MMEL main menu appears. Finally, select the type rating.

(5) On FAA Form 8400-3, ensure that in the "Time in this Aircraft" block, the time accrued in the make and model of aircraft to be used in the flight test is entered. Simulator time must not be entered. If the flight test will be conducted in two segments (simulator and aircraft), the space should be left blank until the applicant takes the aircraft portion of the test.

B. *Applicant Information or Identification Block (For Application Forms 8710 and 8400-3).* In this block the inspector should proceed as follows:

(1) "*Name.*" Enter the legal name but not more than one middle name. Do not change the name on subsequent

applications unless it is done in accordance with FAR 61.25. The last name is limited to 17 characters. The first and middle names should not exceed 26 characters, including spaces between names. Hyphenated names should be shortened so that the number of characters allowed is not exceeded. If the applicant does not have a middle name, enter "NMI." If the applicant has only a middle initial, add the note, "initial only." The name on the application should be the same as the name on the superseded certificate, unless it is changed in accordance with FAR 61.25.

(2) *"Social Security No." or "SSN."* The social security number (SSN) is optional, however, this block should not be left blank. If the SSN is not available for FAA use, enter, "Do Not Use." If the applicant does not have a SSN, enter, "None." In either case, the Airman Certification Branch, AVN-460, will issue a nine-digit pilot certificate number.

(3) *"Date of Birth."* Enter six numeric-character digits in this space. For example, enter 07-09-55 instead of July 9, 1955. Compare the date of birth on the application form with the date of birth on the applicant's medical certificate to verify that they are the same and accurate.

(4) *"Height."* Enter height in inches. For example, 5'9" should be entered as 69 inches. Enter whole inches only. Do not enter fractions. Foreign applicants must convert to U.S. measurements (for height, 1 inch = 2.54 cm.; 1 cm. = .3937 inches).

(5) *"Weight."* Enter weight in pounds. Enter whole pounds only. Do not enter fractions. Foreign applicants must convert to U.S. measurements (for weight, 1 lb. = .4536 kg.; 1 kg.= 2.20 lb.).

(6) *"Hair."* Spell out the color of hair or use an abbreviation that cannot be confused with another color. If bald, enter "bald." If wearing a toupee, enter color of hair under the wig or toupee.

(7) *"Eyes."* Enter the true color of the eyes, regardless of whether tinted contact lenses are worn. Spell out the color or use an abbreviation that cannot be confused with another color.

(8) *"Sex."* Enter male or female ("M" or "F" may be used).

(9) *"Nationality."* Enter the applicant's country of citizenship. Citizens of the United States shall enter "USA." All others shall spell out the full name of the country.

(10) *"Place of Birth."* If the applicant was born in the U.S., enter the city and state. If the city is unknown, enter the county and state. If the applicant was born outside of the U.S., enter the city and country.

(11) *"Permanent Mailing Address" or "Address."* Enter the address to which the permanent certificate is to be sent. Check for accuracy. Make sure numbers are not transposed. The number and street or the P.O. box should not exceed 17 characters, including spaces.

(12) *Block "M" on Form 8710-1, "Airman Certificate and/or Rating Application."* This block contains the statement, "Do you now hold, or have you ever held an FAA pilot certificate?" Airmen should only answer this in the present tense such as, "Do you now hold an FAA pilot certificate?" The adjoining block containing the statement, "If yes, has certificate ever been Suspended or Revoked?" may be omitted by the applicant. If the applicant chooses to answer this question, the applicant must indicate the enforcement actions taken within the previous 5-year period.

(13) *"Grade Pilot Certificate."* Enter the grade of pilot certificate (such as student, recreational, private, commercial, or ATP). Flight instructor certificate information should not be entered into this block.

(14) *"Certificate Number."* Enter the current certificate number on Form 8710-1, "Airman Certificate and/or Rating Application," when the applicant already holds a pilot certificate.

C. *Alcohol and Drug-Related Convictions.* Inspectors should use the following guidance when reviewing an application for alcohol and drug-related information concerning the applicant.

(1) *Background.* On November 29, 1990, a final rule affecting pilots convicted of alcohol or drug-related motor vehicle offenses came into effect. An airman's conviction involving either alcohol or drugs is to be evaluated by the Aeromedical Certification Division, AAM-300. An alcohol or drug-related conviction is not necessarily a disqualifying condition. A medical judgment relative to the condition involved must be made by the Federal Air Surgeon, the

Manager of the Aeromedical Certification Division, or a regional flight surgeon. Under this new rule, an airman certificate or rating may be denied to an individual who has had two or more alcohol or drug-related motor vehicle convictions or state motor vehicle administrative actions within a 3-year period. The information requested on the old FAA Form 8710-1, "Airman Certification and/or Rating Application," was beyond the requirements currently outlined in the FAR's. As a result of the problem, the FAR language was revised to comply with the new rule. When the Federal Air Surgeon reissues a medical certificate to a drug or alcohol-convicted airman, the airman may then exercise the privileges of the new airman certificate. The inspector or examiner should inspect the applicant's current medical certificate to ensure that it does not contain limitations which would preclude the applicant from exercising the privileges of the certificate.

(2) *Block "U" on FAA Form 8710-1.* Block U contains the statement, "Have you ever been convicted for violation of any Federal or State statutes pertaining to narcotic drugs, marijuana, and depressant or stimulant drugs or substances, or motor vehicle operation involving alcohol related offenses?" The applicant must check either "No" or "Yes," as appropriate.

(a) *"No" Checked.* If the applicant checked "No," the inspector shall conduct the practical test and, if appropriate, issue the airman certificate as usual. If it is determined later that the applicant should have checked "Yes," the inspector should conduct an investigation to determine compliance (see FAA Order 2150.3, "Compliance and Enforcement," regarding falsification of application).

(b) *"Yes" Checked.* If the applicant checked "Yes," the inspector must determine if the response is related to a drug or an alcohol offense. If it is an alcohol offense, the inspector shall proceed as if "no" were checked. If it is a drug offense, the applicant must indicate the date of final conviction. The inspector should determine if the date of final conviction was either more or less than 1 year and proceed as follows:

(i) *Date of Final Conviction is More Than 1 Year.* If the date of final conviction is more than 1 year before the date of application, the applicant should indicate "NO CHANGE" in the block. In such a case, the inspector should conduct the practical test and, if appropriate, issue the airman certificate as usual.

(ii) *Date of Final Conviction is Less Than 1 Year.* If the date of final conviction is less than 1 year before the date of application, the inspector must deny the application and issue FAA Form 8060-5, "Notice of Disapproval of Application." The notice of disapproval shall contain a statement that the application was denied because of a narcotics conviction within the preceding year. A practical test shall not be conducted by the inspector.

D. *"Certificates Held By Applicant" (on FAA Form 8400-3).* Check the appropriate certificates currently held by the applicant.

E. *Section II, "Certificate or Rating Applied For on Basis of" (on FAA Form 8710-1).* Check appropriate block A, B, C or D.

(1) *Block A, 1 "Aircraft to be Used."* Enter the make and model of the aircraft to be used. This should be identical to the current designation listed in either figure 5.1.2.5. or figure 5.1.2.6. AVN-460 double checks this with the attached Temporary Airman Certificate to assure the proper aircraft type rating is issued.

(2) *Block A, 2a "Time in this Aircraft."* Enter the time accrued in the make and model of aircraft to be used in the flight test, including flight test time. Do not enter simulator time. If the flight test will be conducted in two segments (simulator and aircraft), leave the space blank until the applicant takes the aircraft portion of the test.

(3) *Block A, 2b, "Pilot-in-Command."* Enter total pilot-in-command time in the aircraft to be used. For the ATP type rating this block is normally zero.

(4) *Block B, "Military Competence Obtained In."* Enter the applicant's branch of service, date rated as a military pilot, current or last grade and service number, and the military aircraft flown 10 hours or more as pilot-in-command in the last 12 months.

(5) *Block C, "Graduate of Approved Course."* Complete this block according to the following:

(a) *"NAME AND LOCATION OF TRAINING*

AGENCY." Enter as it is shown on the graduation certificate. Be sure the location is entered.

(b) "*AGENCY SCHOOL NUMBER.*" Enter as shown on the graduation certificate.

(c) "*CURRICULUM FROM WHICH GRADUATED.*" Enter as shown on the graduation certificate.

(d) "*DATE.*" Enter the date of graduation from the indicated course. An approved course graduate must also complete "COMPLETION OF REQUIRED TEST" in Block "A."

(6) *Block D, "Holder of Foreign License Issued By."* See volume 5, chapter 9, section 8 of this handbook, "U.S. Airman Certificates and Special Purpose Airman Certificates Issued on the Basis of a Foreign Certificate."

F. *Section III, Record of Pilot Time (on FAA Form 8710-1).* Enter the minimum flight experience required by the appropriate regulation for the certificate or rating sought. If flight experience has no bearing on the certificate action, such as exchange of certificate, it is not necessary to include flight experience on the application. Applicants should however, be encouraged to enter flight experience for historical purposes anytime an airman uses this form. The "Instruction Rec'd" blocks of the airplane, rotorcraft, glider, and "Lighter than Air" lines refer to instruction in an aircraft in flight. The time entered in the "Training Device/Simulator" column is for instruction in simulators and training devices only.

G. "*Section IV. Have You Failed A Test for this Certificate or Rating Within The Past 30 Days?*" Check appropriate block.

H. "*Applicant's Certification.*" Enter the date the application was signed. The applicant must certify to the accuracy and truth of the information on the application by signing in this space.

I. *Reverse Side of FAA Form 8710-1, "Airman Certificate and/or Rating Application."* The reverse side of FAA Form 8710-1 is used for recommendations, reports, records and attachment notes when required.

(1) "*Instructor's Recommendation" Block.* A recommendation is not required for the ATP certificate or type rating (see FAR 61.39(a)(5)(iii)). If the applicant has received instruction in an approved Part 121 or Part 135 training program, an instructor, supervisor, or check airman must certify that the applicant's knowledge and proficiency is satisfactory before the applicant may take the test in accordance with FAR 121.401(c) and FAR 135.323(c). When an applicant is being retested within 30 days after a failure for an initial ATP certificate or type rating, the instructor must sign the "Instructor's Recommendation" section (FAR 61.49).

NOTE: Under Part 61, an applicant does not need a recommendation if the applicant holds a foreign pilot license authorizing at least the privileges of the airman certificate sought, is applying for a type rating only, or, is applying for an ATP certificate or an additional aircraft type rating on that certificate (FAR 61.39).

(2) "*Air Agency's Recommendation" Block.* This block is only used by Part 141 pilot schools and their examining authority.

(3) "*Designated Examiner's Report" Block.* This block is used by aircrew program designees (APD's), air carrier airman examiners and general aviation pilot examiners. The APD or examiner who issues the temporary airman certificate or notice of disapproval is required to sign this block, and must check the "I have personally tested this applicant," block and the "Approved" or "Disapproved" block. The APD or examiner must then complete the information requested in the boxes titled: "Location of Test", "Certificate or Rating for Which Tested", "Type(s) of Aircraft Used" (with level of simulator used), and "Registration No.(s)" of aircraft if used. The remaining blocks need to be completed with date, examiner's signature, certificate number, designation number and expiration date. The "Duration of Test" block should contain an indication of the approximate duration of the oral, simulator, and flight check. Inspectors and examiners shall hand-draw a "SIM" block, as shown in figure 5.1.2.1. The level of simulator used must be noted in the "Type(s) of Aircraft Used" block of the examiner's report.

(4) "*Evaluator's Record For Airline Transport Certificate/Rating Only" Block.* This block must be used by an inspector, designated examiner, or APD who administers any multiple-phase testing using a simulator or training device. The inspector, designated examiner, or APD who administers each phase of the test must sign. In addition, inspectors

shall enter their 110A credential number and designated examiners and APD's shall enter their designee number. The inspector should ensure that each phase of a multiple-phase check has be dated.

NOTE: In some cases, only flight simulators are used without an aircraft flight check segment.

J. "*Inspector Report.*" This section is to be accomplished only by FAA aviation safety inspectors.

(1) If the inspector has personally tested the applicant and is issuing or denying a certificate, the inspector shall checkmark the temporary certificate or notice of disapproval in the "Approved" or "Disapproved" box, as appropriate. Inspectors shall complete the information requested in the boxes titled: "Location of Test;" "Certificate or Rating for which Tested;" "Type(s) of Aircraft Used" (with level of simulator used); and "Registration No.(s)" of aircraft, if used. If the inspector did not issue the temporary certificate or the notice of disapproval all of these boxes must be left blank. The inspector completes this section by dating, signing, and identifying the inspector's permanently-assigned FSDO.

(2) Inspectors reviewing examiner forms shall checkmark the "Examiner's Recommendation" block and "accepted" or "rejected" block. If the inspector rejects the examiner's recommendation, the inspector must attach a brief statement containing both an explanation and any intended further actions (such as a re-examination). Inspectors may check the "Examiner Recommends Retesting" block. The inspector shall then date, sign, and enter the FSDO designation.

(3) Inspectors renewing a Part 121 or Part 135 flight crewmember instructor rating only have to checkmark the "Certificate or Rating Based on" block, the "Issued" block, the "Instructor" block, the "Flight" block, the "Renewal" block, the "Approved" block, and the "Instructor Renewal Based on 'Activity' or 'Acquaintance'" block. The inspector shall complete this section of the form by dating, signing, and identifying the inspector's permanently-assigned: FSDO (such as AAC-951); regional office (such as ASO-260); or headquarters office (such as AFS-550), into the "FAA District Office" block.

K. "*Attachments.*" This section of the form is used for completing the appropriate information and annotating attachments as required by inspectors and examiners. The "Airman's Identification" block in this section of FAA Form 8710-1 must be completed to indicate how the airman's identity was established.

31. ORAL TEST PHASE.

A. *Purpose.* The purpose of the oral test is to determine that the applicant has acquired adequate practical knowledge relevant to the certificate.

B. *Location.* The preferred locations for conducting oral tests for airman certificates are in ground training devices, flight training devices, or flight simulators. The interactive logic available in these devices provides an effective method of testing the applicant's knowledge of normal, abnormal, and emergency procedures. The POI may accept other locations for conducting oral tests when the preferred locations are not immediately available or practical.

C. *Question Phrasing.* Questions should be phrased in simple, focused, and specific terms. Applicants shall be encouraged to answer in the same manner. An example of a simple, focused, and specific question is, "What is the EGT limit during start?" An example of an abstract, ambiguous, and confusing question is, "Tell me everything you know about starting an engine." Applicants shall be encouraged to ask for clarification when they are unsure of the meaning of a question.

D. *Length and Scope.* The scope of oral tests is defined by regulation. The items that must be evaluated on each type of oral test are specified on the applicable job aid. Inspectors shall choose their questions over the entire range of topics rather than concentrate on only a few topics. Questions should be related to the specific characteristics of the aircraft involved. The length of the oral test depends on the complexity of the aircraft involved. For simpler aircraft with uncomplicated systems, the oral test can normally be accomplished in approximately 1 hour. For large, complex aircraft, the oral test can normally be accomplished in approximately 2 hours. Oral tests that exceed 2½ hours may indicate inadequate knowledge on the part of the applicant or improper testing technique on the part of the inspector or examiner.

E. *Standards of Performance.* Applicants are expected to possess a broad understanding of the aircraft and its systems rather than a highly detailed knowledge of component

design and construction. They should be able to demonstrate an understanding of the essential features of system design and how various systems interrelate. Applicants must be able to demonstrate such knowledge by interpreting cockpit indications and describing the condition of aircraft systems from these indications. Applicants are not expected to have memorized specific facts that are immediately available in reference manuals and checklists that are required to be in the cockpit. However, applicants must be able to state memory items on emergency checklists and flight manual limitations from memory.

(1) When a limitation is presented in terms of a gauge marking, the applicant shall be able to state the operational significance of the marking but does not need to have memorized the appropriate value the marking represents. When a limitation is not clearly presented by such a marking, the applicant must be able to state the appropriate value from memory.

(2) To illustrate the standards described, the following example is provided. Assume the aircraft involved requires a specific fuel burn sequence. The applicant should be able to describe in general terms the fuel burn sequence and to detect correct and incorrect conditions from gauge indications. The applicant should be aware of any checklist or procedure which corrects an improper condition and where that checklist or procedure is located. The applicant is not expected to memorize the sequence of steps necessary to correct the condition. On the other hand, the applicant should be able to state the flight manual limitation concerning allowable fuel imbalance between pairs of tanks from memory.

(3) An applicant may not be able to give entirely correct answers to some of the questions in an oral test, however, that applicant may still meet an acceptable standard. Inspectors and examiners must base their decisions on whether applicants pass or fail on the soundness of the applicants' overall command of basic principles.

F. *Debriefing.* Inspectors and examiners shall avoid commenting on an applicant's performance until after the oral test is complete. Immediately after the oral test, the applicant will be debriefed on his performance and informed of the results of the test.

33. FLIGHT TEST PHASE.

A. *Purpose.* The purpose of the flight test is to evaluate the applicant's ability to operate safely and effectively in a real time environment. Inspectors and examiners shall determine that applicants have achieved an acceptable level of physical manipulation skills, positional orientation abilities, flight management skills, and crew coordination skills.

B. *Separation of Oral Phase from Flight Test Phase.* For all flightcrew airman certificates, the oral and flight test phases should be conducted as closely as possible to each other, but not simultaneously. The purpose of the oral test phase is to examine an applicant's depth of knowledge while the purpose of the flight test phase is to observe and evaluate an applicant's skills. An inspector's or examiner's presence in the cockpit can affect the normal interaction of the flightcrew. Inspectors and examiners should endeavor to minimize this effect by maintaining a passive role and by not becoming involved in normal crew operation. Questions which require explanations and probe the applicant's depth of knowledge are appropriate during the oral test phase but not during the flight test phase. In the flight test phase, questions should be limited to those which help clarify the meaning of an applicant's behavior. Inspectors or examiners may also need to ask questions to determine if an applicant knows what effect can be expected from an action that cannot be observed. For example, if a simulated emergency procedure requires a circuit breaker to be opened, the applicant may be questioned to determine if he understands the effect of opening the circuit breaker. (Circuit breakers should not be opened in flight, except when required by actual circumstances.) If at all practical, such questions should be postponed until after the flight.

C. *Normal, Abnormal, and Emergency Procedure Test Events.* The specific events that must be evaluated on each flight test are listed on appropriate job aids. In addition, regulations require inspectors to evaluate normal, abnormal, and emergency procedures which appear in the operator's manual but are not specifically identified by regulation. Inspectors and examiners shall evaluate one or two of these events on each flight test. Examples of these events include flight instrument and display failures, operations in ice and rain, emergency descent, and emergency ground evacuation.

Inspectors shall vary these events on subsequent flight tests so that the effectiveness of the operator's manual and training program can be evaluated.

D. *Flight Management and Crew Coordination Skills.* Inspectors and examiners shall observe and evaluate crew coordination and flight management skills. The applicant must demonstrate good judgment, continual spatial andsituational awareness, and cockpit management throughout the flight test.

E. *Briefings.* Before the flight simulator segment and aircraft segment of a flight test, inspectors and examiners shall brief applicants on what will be expected of them during the flight test. When other crewmembers are involved, they shall be briefed on their roles. Suggested briefing outlines are included on the job aids.

F. *Debriefings.* The inspectors and examiners shall avoid commenting on the applicant's performance during the flight test. After the test, the applicant shall be informed of the results and debriefed in a timely manner. If the applicant is unsuccessful, the inspector or examiner shall ensure the applicant clearly understands specifically what was unsatisfactory about each event failed. Inspectors and examiners must use judgment and discretion when inviting other crewmembers to attend these debriefings. It is important that company instructors or check airmen receive direct feedback on their students' performances. Instructors or check airmen who participate in flight tests (as copilots or safety pilots) should usually be invited to attend these debriefings. However, under certain circumstances an inspector or examiner may choose to limit attendance at the debriefing to only the applicant. If an instructor or check airman who participated in the flight test is not at the debriefing, the inspector or examiner should debrief that person separately.

G. *Termination of Flight Tests Before Completion.* When the inspector or examiner determines that an applicant's performance of any event is unsatisfactory, both the event and the flight test are failed. The inspector or examiner may then either terminate the flight test immediately or continue with the flight test until the remaining events are completed. Usually, graduates of approved training programs are well prepared and although a single event is failed, retraining and retesting in all events of the flight test is not normally necessary. In such cases, it is usually better for the inspector or examiner to continue with the flight test to complete the other events. In the case where the inspector or examiner determines that the entire flight test must be repeated, the flight test should not be continued but should be immediately terminated. Whether the flight test is continued or not after a failure, the inspector or examiner must issue the applicant an FAA Form 8060-5, Notice of Disapproval of Application. Safety pilots shall immediately terminate any maneuver or an entire flight test whenever flight safety is in question.

H. *Repeat Events.* When the inspector or examiner determines that an event is incomplete or the outcome uncertain, the inspector or examiner may require the applicant to repeat the event or a portion of the event. This provision has been made in the interest of fairness and does not mean that instruction or practice is permitted during the certification process. In this circumstance, inspectors and examiners shall observe the following guidelines:

(1) When practical, the remaining events of the flight test phase should be completed before repeating the questionable event. If it is more practical, the questionable event may be repeated at the end of a logical sequence. For example, a stall might be repeated at altitude after all the other air work has been completed, but before returning to the traffic pattern.

(2) If the second attempt to perform a questionable event is not clearly satisfactory, the inspector or examiner shall consider it unsatisfactory.

(3) If an applicant's performance on one or two events is questionable and the inspector or examiner plans to repeat those events, and later the applicant's performance on subsequent events is questionable or clearly unsatisfactory, then the flight test shall be terminated. In this situation, the inspector or examiner shall not conduct repeats of questionable events and a notice of disapproval must be issued. The entire test shall be reaccomplished.

(4) If the check must be terminated (for mechanical or other reasons) and there are events which still need to be repeated, a notice of disapproval shall be issued listing the specific events which have not yet been success-fully completed.

35. DOCUMENTATION PHASE. There are documentation requirements which must be completed after each phase of the testing process. Documentation requirements are

specified in the chapter applicable to each certificate and are listed on appropriate job aids. After completing all phases of the testing process, the inspector or examiner shall complete a PTRS data sheet. See paragraph 41 for instructions on the PTRS data sheet. The inspector or examiner shall collect the required documents, and attach them to the completed application form. Inspectors shall forward the certification paperwork through their supervisors to the Airman Certification Branch. Examiners shall forward the appropriate certification paperwork to the appropriate certificate holding district office.

37. TEMPORARY AIRMAN'S CERTIFICATE, FAA FORM 8060-4. When the applicant has satisfactorily met all requirements for certification, including the age requirements, the inspector or examiner shall prepare a temporary airman's certificate, FAA Form 8060-4. Most of the information that must be entered on this form is self explanatory. There will frequently be differences, however, in the information supplied on the application and that shown on the superseded certificate. Inspectors and examiners shall ensure the information entered on the temporary certificate is in agreement with the application form or the differences appropriately resolved. The following instructions apply to certain information fields as indicated. See figure 5.1.2.3 for an example of the temporary airman certificate.

A. *Certificate No., Space III.* The FAA certificate number of the superseded certificate must be entered in this space. If no previous certificate number exists, enter the applicant's social security number. The applicant may wish to withhold the social security number in accordance with the privacy act. In this case, enter the word "pending" in this space and AVN-460 will assign a certificate number.

B. *Name, Space IV.* Enter the applicant's legal name in the normal sequence of first, middle, and last name. The name should appear exactly as it is on the application and should be the same as the name on the superseded certificate unless it has been changed in accordance with FAR 61.25.

C. *Address, Space V.* Enter the permanent mailing address. The number and street line should not exceed 32 characters including spaces. The city and state line should not exceed 17 characters including spaces.

D. *Date of Birth.* Enter six digits in this space. Use numeric characters, such as 07-09-55 instead of July 9, 1955. Check to see that date of birth is the same as it is on the medical certificate. Check for accuracy of the date of birth as this has been a problem area which has resulted in the Airman Certification Branch returning the certification paperwork for correction.

E. *Height.* Enter the applicant's height in whole inches. Do not use fractions. For example, 5'9" should be entered as 69.

F. *Weight.* Enter the applicant's weight in whole pounds.

G. *Hair.* Spell out the hair color or use an abbreviation that cannot be confused with another color. If the applicant is bald, enter "bald." If the applicant wears a wig or toupee, enter color of hair under the wig or toupee or indicate bald, if applicable.

H. *Eyes.* Spell out the color of the eyes or use an abbreviation that cannot be confused with another color.

I. *Sex.* Enter "M" for male or "F" for female.

J. *Nationality, Space VI.* Enter the applicant's country of citizenship.

K. *Certificate Name, Space IX.* Enter the correct name of the appropriate certificate as follows:

- Airline Transport Pilot
- Flight Engineer
- Flight Navigator
- Aircraft Dispatcher

L. *Ratings and Limitations, Space XII.* Inspectors or examiners shall ensure all ratings and limitations are correctly entered. Check these entries against the superseded certificate.

(1) *Pilot Category Ratings.* The category ratings which may be placed on a pilot certificate are as follows:

- Airplane
- Rotorcraft

(2) *Pilot Certificate - Airplane Class Ratings.* The airplane class ratings that may be placed on a pilot certificate are as follows:

- Single-Engine Land
- Multiengine Land
- Single-Engine Sea
- Multiengine Sea

(3) *Pilot Certificate - Rotorcraft Class Ratings.* The rotorcraft class ratings that may be placed on a pilot certificate are as follows:

- Helicopter
- Gyroplane (not applicable to ATP)

(4) *Flight Engineer Certificate - Class Ratings.* The class ratings that may be placed on a flight engineer certificate are as follows:

- Reciprocating
- Turbopropeller
- Turbojet

(5) *Aircraft Type Ratings.* Aircraft type ratings are placed on pilot certificates after class ratings. See figure 5.1.2.4 for authorized airplane type ratings and figure 5.1.2.5 for authorized rotorcraft type ratings.

(6) *Private and Commercial Privileges.* When an ATP certificate is issued, the applicant is entitled to the private and commercial level privileges previously held. Inspectors and examiners shall enter the following as appropriate:

- Commercial Privileges: (class and type ratings, as applicable)
- Private Privileges: (class and type ratings, as applicable)

M. *Limitations, Space XIII.* Any required limitations must be entered in this space.

N. *Signatures, Spaces VII and X.* The inspector or examiner and the applicant shall sign the certificate in the appropriate spaces.

39. NOTICE OF DISAPPROVAL OF APPLICATION, FAA FORM 8060-5. When an applicant's performance on any phase of the test process is unsatisfactory, inspectors and examiners shall complete FAA Form 8060-5, "Notice of Disapproval of Application" in duplicate. See figure 5.1.2.3 for an example. Inspectors and examiners shall indicate those events which the applicant failed and must be retested on, or indicate that the entire test must be repeated. If the entire flight test is not to be repeated, any events which were not accomplished during the failed flight test must also be indicated. The next inspector or examiner will have only the notice of disapproval to determine which events were unsatisfactory and which have yet to be accomplished. The notice of disapproval must be annotated with the date of the oral and simulator tests. This is necessary to maintain a record for computing the 30- and 60-day time limits (see paragraph 17.E). The duplicate copy of the notice of disapproval shall be given to the applicant. The original copy shall be attached to the completed application form and forwarded to the appropriate flight standards district office.

41. COMPLETION OF FAA FORM 8000-36, PTRS DATA SHEET. Both inspectors and examiners who conduct airman certification shall complete an FAA Form 8000-36, Program Tracking and Reporting Subsystem (PTRS) Data Sheet for each activity conducted (see figure 5.1.2.6). Office managers shall have the data sheets overprinted and supplied to examiners. This may be done by simply filling in the applicable fields and reproducing the form on a copy machine. Once the data from the sheet has been entered into the computer, the sheet may be either retained or discarded as desired. The following italicized titles apply to the data fields on the sheet:

A. "*Section I. Inspector Name Code.*" A valid inspector name code must be entered on each sheet before the data is imputed into the computer. Inspectors conducting certification shall enter their assigned code. Examiners should leave this space blank.

B. "*Record ID.*" Inspectors and examiners shall leave this field blank.

C. "*Activity Number.*" Inspectors shall enter the applicable code, from the 1500 series, in this field. The applicable

(2) *Pilot Certificate - Airplane Class Ratings.* The airplane class ratings that may be placed on a pilot certificate are as follows:

- Single-Engine Land
- Multiengine Land
- Single-Engine Sea
- Multiengine Sea

(3) *Pilot Certificate - Rotorcraft Class Ratings.* The rotorcraft class ratings that may be placed on a pilot certificate are as follows:

- Helicopter
- Gyroplane (not applicable to ATP)

(4) *Flight Engineer Certificate - Class Ratings.* The class ratings that may be placed on a flight engineer certificate are as follows:

- Reciprocating
- Turbopropeller
- Turbojet

(5) *Aircraft Type Ratings.* Aircraft type ratings are placed on pilot certificates after class ratings. See figure 5.1.2.4 for authorized airplane type ratings and figure 5.1.2.5 for authorized rotorcraft type ratings.

(6) *Private and Commercial Privileges.* When an ATP certificate is issued, the applicant is entitled to the private and commercial level privileges previously held. Inspectors and examiners shall enter the following as appropriate:

- Commercial Privileges: (class and type ratings, as applicable)
- Private Privileges: (class and type ratings, as applicable)

M. *Limitations, Space XIII.* Any required limitations must be entered in this space.

N. *Signatures, Spaces VII and X.* The inspector or examiner and the applicant shall sign the certificate in the appropriate spaces.

39. NOTICE OF DISAPPROVAL OF APPLICATION, FAA FORM 8060-5. When an applicant's performance on any phase of the test process is unsatisfactory, inspectors and examiners shall complete FAA Form 8060-5, "Notice of Disapproval of Application" in duplicate. See figure 5.1.2.3 for an example. Inspectors and examiners shall indicate those events which the applicant failed and must be retested on, or indicate that the entire test must be repeated. If the entire flight test is not to be repeated, any events which were not accomplished during the failed flight test must also be indicated. The next inspector or examiner will have only the notice of disapproval to determine which events were unsatisfactory and which have yet to be accomplished. The notice of disapproval must be annotated with the date of the oral and simulator tests. This is necessary to maintain a record for computing the 30- and 60-day time limits (see paragraph 17.E). The duplicate copy of the notice of disapproval shall be given to the applicant. The original copy shall be attached to the completed application form and forwarded to the appropriate flight standards district office.

41. COMPLETION OF FAA FORM 8000-36, PTRS DATA SHEET. Both inspectors and examiners who conduct airman certification shall complete an FAA Form 8000-36, Program Tracking and Reporting Subsystem (PTRS) Data Sheet for each activity conducted (see figure 5.1.2.6). Office managers shall have the data sheets overprinted and supplied to examiners. This may be done by simply filling in the applicable fields and reproducing the form on a copy machine. Once the data from the sheet has been entered into the computer, the sheet may be either retained or discarded as desired. The following italicized titles apply to the data fields on the sheet:

A. "*Section I. Inspector Name Code.*" A valid inspector name code must be entered on each sheet before the data is imputed into the computer. Inspectors conducting certification shall enter their assigned code. Examiners should leave this space blank.

B. "*Record ID.*" Inspectors and examiners shall leave this field blank.

C. "*Activity Number.*" Inspectors shall enter the applicable code, from the 1500 series, in this field. The applicable

name should be entered in the "Comments Text" field. On other occasions, the use of this field is optional.

W. *All Other Fields in Section I.* The remaining fields in this section are provided for regional and/or district office use, special programs, and future requirements. In the absence of any guidance, these fields should be left blank.

X. *"SECTION II - PERSONNEL (unlimited)."*

(1) When an examiner completes the data sheet, the applicant's name shall be entered under "personnel name." "APPL" shall be entered under "position." The applicant's certificate number (ATP, FE, or FD) shall be entered under "remarks." In the event of an original issuance of a certificate, enter "pending" under certificate number.

(2) When a recommendation is required for a test phase, the name of the recommending instructor shall be entered under "personnel name." "RI" shall be entered under "position." The instructor's certificate number (ATP, FE, or FD) shall be entered under "remarks." When a recommendation is not required for the applicant, the name of the instructor or supervisor who has certified that the applicant is competent shall be entered in the same manner.

Y. *"SECTION III - EQUIPMENT."* Entries in the fields in this section are optional.

Z. *"SECTION IV - COMMENT SECTION (unlimited)."* Both inspectors and examiners are encouraged to make entries in this field. A topic such as the reasons and circumstances surrounding the failure of an applicant should be commented upon, however, comments should not be limited to this type of topic. A blank line should be left between each separate comment. Inspectors should code their comments. To assist in the standardization of coding, examiners should leave the coding blank. The reviewing inspector should code the examiner's remarks.

43. DISTRICT OFFICE RESPONSIBILITIES. District offices shall make the PTRS data entries for both inspectors and examiners and either retrain or discard the data sheet, as appropriate. District offices shall review completed certification paperwork for accuracy and completeness and forward the certification paperwork to the Airman Certification Branch. See paragraphs 207 and 209. The address of the airman certification branch is as follows:

Airman Certification Branch, AVN-460
P.O. Box 25082
Oklahoma City, Oklahoma 73125

44. - 50. RESERVED

FIGURE 5.1.2.1
FAA FORM 8710-1
"AIRMAN CERTIFICATE AND/OR RATING APPLICATION"
(FRONT ONLY)

TYPE OR PRINT ALL ENTRIES IN INK

Form Approved OMB No: 2120-0021

U.S. Department of Transportation
Federal Aviation Administration

Airman Certificate and/or Rating Application

I Application Information

- ☐ Student
- ☐ Recreational
- ☐ Private
- ☐ Commercial
- ☒ Airline Transport
- ☐ Instrument
- ☐ Additional Aircraft Rating
- ☐ Airplane Single-Engine
- ☒ Airplane Multiengine
- ☐ Rotorcraft
- ☐ Glider
- ☐ Lighter-Than-Air
- ☐ Flight Instructor ____ Initial ____ Renewal
- ☐ Flight Instructor Reinstatement
- ☐ Additional Instructor Rating
- ☐ Ground Instructor
- ☐ Medical Flight Test
- ☐ Reexamination
- ☐ Reissuance of _____ Certificate
- ☐ Other _____

A. Name (First, Middle, Last)	B. SSN	C. Date of Birth (Mo. Day Year)	D. Place of Birth
John Jay Doe	DO NOT USE	10 02 46	Topeka, KS

E. Address	F. Nationality	G. Do you read, speak and understand English?
10801 EAST RIVER Road City, State, Zip Code	☒ USA ☐ Other _____ Specify	☒ Yes ☐ No

H. Height	I. Weight	J. Hair	K. Eyes	L. Sex
72 in.	210 Lbs.	BLACK	BROWN	☒ Male ☐ Female

M. Do you now hold, or have your ever held An FAA Pilot Certificate?	If yes, has certificate ever been Suspended or Revoked	N. Grade Pilot Certificate	O. Certificate Number	P. Date Issued
☒ Yes ☐ No	☐ Yes _____ Date ☒ No	COMMERCIAL	10509907	6-90

Q. Do you hold a Medical Certificate?	R. Class of Certificate	S. Date Issued	T. Name of Examiner
☒ Yes ☐ No	FIRST	6-90	SAM Patchem, MD

U. Have you ever been convicted for violation of any Federal or State statutes pertaining to narcotic drugs, marijuana, and depressant or stimulant drugs or substances, or motor vehicle operation involving alcohol related offenses? ☒ No ☐ Yes

V. Date of Final Conviction

Glider or Free Balloon Pilots only: *Medical Statement: I have no known physical defect which makes me unsafe to pilot a glider or free balloon*

W. Signature

X. Date

II Certificate or Rating Applied For on Basis of:

☒ A. Completion of Required Test
1. Aircraft to be used (if flight test required): LEAR Jet
2a Total time in this aircraft: 550 hours
2b Pilot in command: 0 hours

☐ B. Military Competence Obtained in
1 Service
2 Date Rated
3 Rank or Grade and Service Number
4 Has flown at least 10 hours as pilot in command during the past 12 months in the following military aircraft.

☐ C. Graduate of Approved Course
1 Name and Location of Training Agency
2 Agency School Number
3 Curriculum From Which Graduated
4 Date

☐ D. Holder of Foreign License Issued By
1 Country
2 Grade of License
3 Number
4 Ratings

III Record of Pilot time *(Do not write in the shaded areas.)*

	Total	Instruction Rec'd	Solo	Pilot in Command	Second in Command	Cross Country Instruction Received	Cross Country Solo	Cross Country Pilot in Command	Instrument	Night Instr. Rec'd.	Night Take-off/ Landing	Night Pilot in Command	Night Takeoff/ Landing Pilot in Command	Number of Flights	Number of Auto-Tows	Number of Ground Launches	Number of Powered Launches	Number of Free Flights
Airplane																		
Rotor-Craft																		
Glider																		
Lighter-Than-Air																		
Training Device Subtotal	—	—							—									

IV Have you failed a test for this certificate or rating within the past 30 days? ☐ Yes ☒ No

V Applicant's Certification
I certify that the statements made by me on this application are true.

A. Signature: John Jay Doe

B. Date: 9-15-90

FAA Use Only

EMP	REG	D.O.	SEAL	CON	ISS	ACT	LEV	TR	S.H.	SRCH	#RTE		RATING (1)

FIGURE 5.1.2.2
FAA FORM 8400-3,
"APPLICATION FOR AIRMAN CERTIFICATE AND/OR RATING"
(FRONT ONLY)

Form Approved
OMB No. 2120-0007

U.S. Department of Transportation
Federal Aviation Administration

Application For An Airman Certificate and/or Rating

☐ Flight Engineer
☐ Reciprocating Engine Powered
☐ Turbopropeller Powered
☐ Turbojet Powered

☐ Flight Navigator
☐ Control Tower Operator
☐ VFR Tower Rating
☐ Non-Radar Approach Control Tower Rating

☐ Aircraft Dispatcher
☐ Reissuance of Certificate
☐ Additional Rating

1. TYPE OF AIRCRAFT TO BE USED	2. TIME IN THIS AIRCRAFT	3. NAME OF EMPLOYER

4. Applicant Identification

A. NAME (First-Middle-Last)

K. PERMANENT MAILING ADDRESS (Include Zip Code)

B. SOCIAL SECURITY NO.	C. DATE OF BIRTH	D. HEIGHT	E. WEIGHT

F. HAIR	G. EYES	H. SEX	I. NATIONALITY

J. PLACE OF BIRTH

TELEPHONE NO.

5. Certificates Held by Applicant

A. ☐ Pilot
☐ Airline Transport
☐ Commercial
☐ Flight Instructor
☐ Private

B. ☐ Flight Navigator
C. ☐ Control Tower Operator
D. ☐ Flight Engineer

E. ☐ Ground Instructor
F. ☐ Aircraft Dispatcher
G. ☐ Mechanic

6. Applicant's Certification I certify that I meet all pertinent requirements of the Regulations for the certificate or rating applied for

Date _____ Applicant's Signature _____

Instructor's Recommendation
7. I consider the above applicant ready to take the test for which he/she is applying:

A. ☐ Oral Test
B. ☐ Flight Test
or
C. ☐ Practical Test
Aircraft Dispatcher Only

D. Date	Instructor's Signature	Instructor's Certificate No. And Expiration Date	Grade and Certificate No.
E. Date	Instructor's Signature	Instructor's Certificate No. And Expiration Date	Grade and Certificate No.

8. Evaluation Record

	Inspector	Examiner	Signature	Date
Oral				
Practical Test Aircraft Dispatcher				
Practical Test Control Tower Operator				
Simulator Check				
Aircraft Flight Check				

9. Inspector's Record

☐ Temporary Airman Certificate Issued ☐ Notice of Disapproval of Application Issued ☐ Examiner's Action Accepted

DATE	INSPECTOR'S SIGNATURE	FAA OFFICE

CP	REG	OFFICE	COM	ISS	ACT	EMP	TRNG	M T	DIS	CLASS	SEX	RATING	STATE	COUNTY

☐ Do Not Micro
☐ Special Mailing
☐ Airmail
☐ IFO Mailing
☐ Correspondence

FAA FORM 8400-3 (5-84)

FIGURE 5.1.2.3
FAA FORM 8060-4,
"TEMPORARY AIRMAN CERTIFICATE"

I. UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION — FEDERAL AVIATION ADMINISTRATION

II. TEMPORARY AIRMAN CERTIFICATE

III. CERTIFICATE NO.

THIS CERTIFIES THAT IV.

V.

DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY
	VII.					VI.

IX. has been found to be properly qualified and is hereby authorized in accordance with the conditions of issuance on the reverse of this certificate to exercise the privileges of

RATINGS AND LIMITATIONS

XII.

XIII.

THIS IS ☐ AN ORIGINAL ISSUANCE ☐ A REISSUANCE OF THIS GRADE OF CERTIFICATE

DATE OF SUPERSEDED AIRMAN CERTIFICATE

BY DIRECTION OF THE ADMINISTRATOR

EXAMINER'S DESIGNATION NO. OR INSPECTOR'S REG. NO.

X. DATE OF ISSUANCE

X. SIGNATURE OF EXAMINER OR INSPECTOR

DATE DESIGNATION EXPIRES

VII. AIRMAN'S SIGNATURE

FAA Form 8060-4 (8-79) USE PREVIOUS EDITION

FAA FORM 8060-5,
"NOTICE OF DISAPPROVAL OF APPLICATION"

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

NOTICE OF DISAPPROVAL OF APPLICATION

NOTE
PRESENT THIS FORM UPON APPLICATION FOR REEXAMINATION

NAME AND ADDRESS OF APPLICANT

CERTIFICATE OR RATING SOUGHT

On the date shown, you failed the examination indicated below:

☐ FLIGHT ☐ ORAL ☐ PRACTICAL

AIRCRAFT USED *(Make and Model)*

FLT. TIME RECORDED IN LOGBOOK

PILOT-IN-COMM. OR SOLO	INSTRUMENT	DUAL

UPON REAPPLICATION YOU WILL BE REEXAMINED ON THE FOLLOWING:

I have personally tested this applicant and deem his performance unsatisfactory for the issuance of the certificate or rating sought.

DATE OF EXAMINATION	SIGNATURE OF EXAMINER OR INSPECTOR	DESIGNATION OR OFFICE NO.

FAA Form 8060-5 (4-70)

FIGURE 5.1.2.4.
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - AIRPLANES

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
Aero Commander Division North American Rockwell Corp.	1121 Jet Commander Westwind	AC-1121 CJ-1123	IA-JET
Aerospatiale, France	SN 601 Corvette ATR-42		SN-601 ATR-42
Armstrong Whitworth Aircraft, Ltd., UK	Argosy AW 650	Armstrong Whitworth AW-650	AW-650
Beech Aircraft Corp., USA (Formerly Mitsubishi Aircraft Int'l)	BE-300/1900 200T/200TC Starship Diamond I and MU-300-10	BE-300, BE-1900 BE-200 MU-300	 BE-2000 MU-300, BE-400
Boeing Co., USA	B-17 247-D 314 S-307, SA-307 377, C-97 YC-97 707, 720 C-135, E3-A 727 737/100/200/300, T-43 747, 747SP, E4 747-400 757, 767	Boeing B-17 Boeing 247 Boeing 314 Boeing 307 Boeing 377 Boeing 707/720 Boeing 727 Boeing 737 Boeing 747 Boeing 757, 767	B-17 B-247 B-314 B-307 B-377 B-707, B-720 B-727 B-737 B-747 B-747-4 B-757, B-767
Breguet, France	Fauvette 905A		BG-905
Bristol Aircraft Ltd., UK	Britannia 305		BR-305
British Aerospace Aircraft Group Hatfield Chester Division Hatfield-Hetfordshire, England	BAE-146 100/200 Series		BAE-146

FIGURE 5.1.2.4. (Cont'd.)
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - AIRPLANES

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
British Aerospace Aircraft Group Scottish Div. Ayrshire, Scotland KA92RW	HP.137, MK.1 Jetstream Series 200 Jetstream 3101		BA-3100
British Aircraft Corp., UK	BAC 1-11	BAC-1-11	BA-111
B/A Concorde	Concorde SST		CONCRD
Bushmaster Aircraft	Bushmaster 2000		BU-2000
Canadair, Ltd. Canada	CL-44, OC-6 CL-215 IA10 Challenger CL-600 Challenger	Canadair	CL-44 CL-600
Cessna Aircraft Corp., USA	Cessna 500 Series Citation III, Model 650		CE-500 CE-650
Chase (also Roberts Aircraft Co.), USA	YC-122	Chase YC-122	YC-122
Consolidated Vultee Aircraft	(See General Dynamics Corp.)		
Convair	(See General Dynamics Corp.)		
Constructiones Aeronauticas S.A.	CASA (Model) C-212-CB C-235		CA-212 CN-235
Curtiss-Wright Corp., USA	Commando CW-20	Curtis-Wright C-46	CW-46
Dart Aircraft Corp.	(See General Dynamics Corp.)		
Dassault, General Aeronautique Marcel, Dassault, France	Mystere 10 Falcon, Fan Jet Mystere 20 Falcon, Fan Jet	GAMD/SUD-20	DA-10 DA-20

FIGURE 5.1.2.4. (Cont'd.)
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - AIRPLANES

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
Dassault, General Aeronautique Marcel, Dassault, France (Cont'd.)	Falcon 50 (Tri-jet) Falcon 200 Falcon 900		DA-50 DA-200 DA-900
DeHavilland Aircraft of Canada Ltd., Canada (See Hawker Siddeley)	Caribou 4A, USAF C-7A, Army CV-2 DHC-7 DHC-8	DeHavilland Caribou	DH-4 DH-4 DHC-7 DHC-8
Dee Howard Co., USA	Howard 500	Howard 500	HW-500
Dornier GMBH Friedrickshafen, Germany	Dornier 228-201/101		DO-228
Douglas Aircraft Co.	(See McDonnell Douglas)		
Empresa Brasileira de Aeronautica, Brazil	EMB-110P1, P2, P3 EMB-120		EMB-110 EMB-120
Fairchild Aircraft Corp., USA	C-119C C-123		FA-119C FA-123
Fairchild Aircraft Corp., USA and Fokker, The Netherlands	Friendship F-27 F-227	Fairchild F-27/227	F-27
Fairchild Hiller	C-82A		C-82A
Fokker, Netherlands	Fellowship F-28 (Models 1000 & 4000) FA-1100		FK-28 FA-1100
Ford Motor Corp., USA	Tri-Motor 4-AT 5-AT	Ford 5	FO-5
Gates Learjet	23, 24, 25, 28, 29, 35, 36, and 50 Series	LR-23, LR-24, LR-25, LR-28, LR-29, LR-36, LR-36	LR-JET

FIGURE 5.1.2.4. (Cont'd.)
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - AIRPLANES

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
Dassault, General Aeronautique Marcel, Dassault, France (Cont'd.)	Falcon 50 (Tri-jet) Falcon 200 Falcon 900		DA-50 DA-200 DA-900
DeHavilland Aircraft of Canada Ltd., Canada (See Hawker Siddeley)	Caribou 4A, USAF C-7A, Army CV-2 DHC-7 DHC-8	DeHavilland Caribou	DH-4 DH-4 DHC-7 DHC-8
Dee Howard Co., USA	Howard 500	Howard 500	HW-500
Dornier GMBH Friedrickshafen, Germany	Dornier 228-201/101		DO-228
Douglas Aircraft Co.	(See McDonnell Douglas)		
Empresa Brasileira de Aeronautica, Brazil	EMB-110P1, P2, P3 EMB-120		EMB-110 EMB-120
Fairchild Aircraft Corp., USA	C-119C C-123		FA-119C FA-123
Fairchild Aircraft Corp., USA and Fokker, The Netherlands	Friendship F-27 F-227	Fairchild F-27/227	F-27
Fairchild Hiller	C-82A		C-82A
Fokker, Netherlands	Fellowship F-28 (Models 1000 & 4000) FA-1100		FK-28 FA-1100
Ford Motor Corp., USA	Tri-Motor 4-AT 5-AT	Ford 5	FO-5
Gates Learjet	23, 24, 25, 28, 29, 35, 36, and 50 Series	LR-23, LR-24, LR-25, LR-28, LR-29, LR-36, LR-36	LR-JET

FIGURE 5.1.2.4. (Cont'd.)
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - AIRPLANES

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
Handley Page Aircraft Co., Ltd., UK	Herald 300	Handley Page 300	HP-300
Hawker Siddeley Aviation Ltd., UK	DH-125 DH-106, Comet 4C DH-114 Heron Hawker Siddeley 748	Hawker Siddeley deHavilland 4C Hawker Siddeley	HS-125 HS-106 HS-114 HS-748
Howard Aero Corp.	(See Dee Howard Co.)		
Israel Aircraft Ltd., Israel	Commodore Jet 1123 Westwind 1124 (See Aero Commander) IAI-1125 ARAVA IA 101B	AC-1121, CJ-1123	IA-JET IA-1125 IA-101
Lockheed Aircraft Corp., USA	Lighting P-38 B-34, PV-1, Series 14 Series 18, C-57, C-60, R-50, Learstar Constellation 049, 149, 649, 749, 1049, 1649 P2V Electra 188, P-3 Jetstar 1329, C-140 Jetstar 11, 1329-25 382, C-130 300, C-141 L-1011 Tristar T-33	Lockheed P-38 Lockheed B-34 Lockheed 14 Lockheed 18 Lockheed Constellation Lockheed P2V Lockheed 188 Lockheed 1329 Lockheed 382 Lockheed 300	L-P38 L-B34 L-14 L-18 L-1049 L-PSV L-188 L-1329 L-382 L-300 L-1011 T-33
Martin-Martietta Corp., USA	B-26 Marauder PBM-5, C-162 Mariner 202/404	Martin B-26C Martin PBM-5 Martin 202/404	M-B26 M-PBM-5 M-202, M-404
McDonnell Douglas Aircraft Corp., USA	AD-4N A-20 A-24, SBD	 Douglas A-20 Douglas A-24	AD-4N DC-A20 DC-A24

FIGURE 5.1.2.4. (Cont'd.)
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - AIRPLANES

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
McDonnell Douglas (Cont'd.)	B-26	Douglas B-26	DC-B26
	B-18	Douglas B-18	DC-B18
	B-23, UC-67	Douglas B-23	DC-B23
	DC-2, C-32, C-34, C-39, C-42	Douglas DC-2	DC-2
	DC-3, C-47, C-117	Douglas DC-3	DC-3
	Super DC-3, C-117D, DC-3 (Turboprop)	Douglas DC-3S	DC-3S DC-3TP
	DC-4, C-54	Douglas DC-4	DC-4
	DC -6, DC-7 C-118	Douglas DC-6, DC-7	DC-6, DC-7
	DC-8	Douglas DC-8	DC-8
	DC-9, DC-9-50, C-9, MD-80	Douglas DC-9	DC-9
	DC-10, KC-10		DC-10
Mitsubishi Aircraft International, Inc.	(See Beech Aircraft)		
Morane-Saulnier, France	MS760	Morane-Saulnier MS-760	MS-760
Nihon Aeroplane Manufacturing Co., Ltd., Japan	YS-11	NAMC YS-11	YS-11
Nord Aviation, Rockwell Corp., France	262 262 FM, Mohawk 298 Broussard, ND 262/262FM	Nord 262	ND-262
North American Rockwell Corp., USA	B-25 Mitchell	North American B-25	N-B25
	NA-265 Sabreliner T-39	North American NA-265	N-265
Northrop Corp., USA	P-61 Black Widow	Northrop P-61	NH-P61
Piaggio, Italy	Piaggio-Douglas 808	Piaggio Douglas PD-808	P-808
Piper Aircraft, USA	PA-42-720 (Restricted)		PA-42R

FIGURE 5.1.2.4. (Cont'd.)
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - AIRPLANES

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
SAAB-Fairchild International, Sweden	SAAB-Fairchild 340		SF-340
Short Brothers and Harland Ltd., Northern Ireland (UK)	SD3-30, SD3-60 Variant 200	SD3-30	SD-3
Sikorsky Aircraft Division of United Aircraft Corp., USA	VS-44AC-32, C-34 S-43 Series	Sikorsky VS-44 Sikorsky S-43	SK-44 SK-43
Sud Aviation, France	SE Caravelle I, II, VIR	SUD 210	S-210
Swearingen Fairchild Aircraft Corp.	SA 226-TC, SA-227-AC, AT, TT		SA-227
Vickers-Armstrong British Aircraft Corp., UK	700 & 800 Series	Vickers Viscount	VC-700 VC-800

FIGURE 5.1.2.5.
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - ROTORCRAFT

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
Bell USA	BH-214St		BH-14ST
Boeing Vertol, USA	107-II, H-46 Kawasaki, KV107-II 114, Ch-47A Series, BV-234	Vertol 107 II	BV-107 BV-114 or BV-234
Sikorsky, USA	S-43 Series VS-44AC-32, C-34 H-37 Series S-58 Series H-34 Series S-61 Series S-64 Series HH-53, CH-53A S-70 (UH-60)	Sikorsky S-43 Sikorsky S-58 S-581T Sikorsky S-61 Sikorsky S-64 Sikorsky S-65	SK-43 SK-44 SK-56 SK-58 SK-61 Sk-64 SK-65
Sud Aviation, USA	SA321F SA330F, SA-332 AS-330		S-321 S-330
Vertol, USA	H-21	Vertol 44	BV-44

The following applies to helicopters weighing 12,500 pounds or less on which type ratings are issued to holders of airline transport pilot certificates only:

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
Aerospatiale, France	SA 341/342 Gazelle SA 360 AS 350 Astar SA 355 Twinstar SA 360C Dauphine (SE) SA 365 Dauphine (ME)		SA-341 AS-350 AS-355 SA-360 SA-365

FIGURE 5.1.2.5. (Cont'd.)
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - ROTORCRAFT

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
Bell, USA	47 Series H-13 Series 204-B, UHI-B, -D, H205A 206A, 206B 212/412 Series 214 Series 222 Series	Bell 47 Bell 204 Bell 206 Bell 212	BH-47 BH-204 BH-206 BH-212 BH-214 BH-222
Brantley, USA	B-2 (YH03BR) B-305	Brantley B-2 Brantley B-305	BY-2 BY-305
Construzioni Aeronautiche Giovanni Agusta, Italy	A109 Agusta		A-109
Enstrom, USA	F-28	Enstrom F-28	EN-28
Hiller, USA	UH-12 Series H-23 Series	Hiller UH-12	HH-12
Fairchild, USA	FH-1100	FH-1100	FA-1100
Hughes, USA	300, 269 Series 500, 369 Series	Hughes 269A Hughes 500	HU-269 HU-369
Kaman, USA	K-190A K-225 K-240, HTK-1 K-600	Kaman K-190A Kaman K-225 Kaman K-240 None	KM-190 KM-225 KM-240 KM-600
Lockheed, USA	Lockheed California 286	Lockheed California 286	L-286
Messerschmitt Bolkow Gmbh (West Germany)	BO-150A BK-117-A1		BO-105 BK-117
Omega, USA	12D1A	Omega 12D1	OM-12
Piasecki, USA	HRP-1, HRP-2	Piasecki HRP	PI-HRP
Robinson Helicopter	R-22	None	R-22

FIGURE 5.1.2.5. (Cont'd.)
PILOT CERTIFICATE AIRCRAFT TYPE DESIGNATIONS - ROTORCRAFT

MANUFACTURER	MODEL DESIGNATION	PRIOR DESIGNATION	CURRENT DESIGNATION
Sikorsky, USA	R-4B	Sikorsky R-4B	SKI-4
	R-5A, YR-6A R-6A, HOS-1	Sikorsky R-5A	SK-5
	S-51	Sikorsky S-51	SK-51
	S-52 Series	Sikorsky S-52	SK-52
	S-55, H-19 Series	Sikorsky S-55	SK-55
	S-62A, HH-52A	Sikorsky S-62	SK-62
	S-76		SK-76
Silvercraft, USA	SPA-SH4		SI-4
Scheutzow, USA	Model B		SC
Sud Aviation	SE 3130,	Sud Alouette II/III	S-3130
	SE 313B		
	SE 3160,		
	SA 316B		
	SA 3180,		
	SA 318B		
	SA 318C,		
	SA 315B		
	SO 1221	Sud Djinn	S-1221
Westland Helicopters, Inc., Yeoville, England	W-30		WH-30

FIGURE 5.1.2.6
FAA FORM 8000-36,
PROGRAM TRACKING AND REPORTING SUBSYSTEM DATA SHEET (FRONT ONLY)

PROGRAM TRACKING AND REPORTING SUBSYSTEM DATA SHEET

SECTION I

Inspector Name Code: ________________ Record ID: ________________

Activity Number:	FAR:	NPG:
Status: (COP)	Callup Date:	Start Date:
Results: (ACEFISTX)	Pass/Fail (P/F):	Completion Date:
Designator:	Airman Cert #:	
Airman Name/Other:		
Aircraft Reg #: N		
Make-Model-Series: ______ - ______ - ______		
Loc/Departure Point:	Arrival Point:	Flight #:
Investigation # (12):		
Tracking:		
Miscellaneous:		
Numeric Misc:		
Local Use:		
Regional Use:		
National Use:		
Activity Time:		
Travel Time:		
Triggers: (Activity #/ INVS/ REXM/ R # (repeat))		

______ ______ ______ ______ ______

SECTION II — PERSONNEL (unlimited)

Personnel Name:	Position:	Base:	Remarks (35 Characters)

SECTION III — EQUIPMENT (unlimited)

Manufacturer:	Model:	Serial #:	Remarks (23 Characters)

SECTION IV — COMMENT SECTION (unlimited)

COMMENT CODES Primary/Key	Opinion (UPIE)	Comment Text (unlimited length)

Date: Originator: Office:

Inspector Signature: Supervisor Initials:

FAA Form 8000-36 (10-89)

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CHAPTER 5. AIR TRANSPORTATION DESIGNATED EXAMINERS

SECTION 1. GENERAL

351. GENERAL. FAA managers are authorized by Part 183 of the Federal Aviation Regulations (FAR's) to designate examiners working in air transportation programs. FAA managers designate examiners to relieve FAA inspectors of certain certification tasks and to ensure that the public has access to certification services on a timely basis. The two broad categories of examiners designated for flight operations are general aviation pilot examiners and air transportation examiners (ATE's). This handbook is primarily concerned with ATE's. This chapter contains direction and guidance to be used by FAA managers and inspectors when designating ATE's.

353. OVERVIEW OF DIFFERENT TYPES OF EXAMINERS.

A. *General Aviation Pilot Examiners.* General aviation pilot examiners are designated to conduct pilot examinations for all pilot certificates and ratings when the examination is not conducted as a part of the qualification curriculum segment of a Part 121 or Part 135 training program. A pilot who has been examined for a certificate or rating by a general aviation pilot examiner may not serve in Part 121 or Part 135 service until the pilot has completed the operator's approved training program, which includes the qualification curriculum segment of that program. Inspectors may refer to volume 2, chapter 15 of FAA Order 8700.1, General Aviation Operations Inspector's Handbook for information on the qualification requirements and designation procedures for general aviation pilot examiners.

B. *Air Transportation Examiners (ATE's).* ATE's are examiners designated under the direction and guidance of this handbook. According to this handbook, FAA managers may designate the following types of ATE's:

(1) *Aircrew Program Designees (APD's).* APD's are designated to conduct certification within specifically approved programs of complex Part 121 or Part 135 operators termed as aircrew designated examiner (ADE) programs. APD's are restricted to examining only those applicants who were trained in the operator's approved training program. APD's must be employed by the operator and qualified as check airmen for the operator before they may be designated as APD's. Principal operations inspectors (POI's) are authorized to designate APD's to serve in the program that the POI supervises, however, POI's are not authorized to designate other types of examiners (see chapter 6 of this volume for direction and guidance concerning the ADE program).

(2) *School Designated Examiners (SDE's).* SDE's are designated to conduct certification under Part 142. Direction and guidance for the administration of SDE programs will be published in this volume when the rule is adopted.

(3) *Other Air Transportation Examiners (ATE's).* Flight standards district office (FSDO) managers and certificate management office (CMO) managers may designate airline transport pilot examiners (ATPE's), flight engineer examiners (DFEE's), aircraft dispatcher examiners (DADE's), and flight navigator examiners (DFNE's) in accordance with this chapter. These designated examiners are authorized to conduct certification examinations of applicants trained in Part 121 and Part 135 programs. All designated examiners authorized to conduct certification checks which will satisfy Part 121 or Part 135 proficiency or competency checking requirements must be fully qualified check airmen or dispatcher supervisors in the operator's approved training program. Examiners designated according to this subparagraph need not be an employee of the operator. FSDO and CMO managers may also authorize ATE's to conduct certification tests for more than one operator.

355. GUIDANCE FOR MANAGERS WHEN DESIGNATING EXAMINERS. POI's and FSDO, CMO, and regional flight standards division (RFSD) managers should consider designating examiners when the volume of certification activity makes such designations cost-effective for the FAA.

This circumstance normally occurs when the volume of certification activity is relatively high or when the aircraft is a rare or specialized type.

A. *Programs for Various ADE's and SDE's.* POI's and FSDO, CMO, and RFSD managers may designate examiners in the various programs as follows:

(1) *Aircrew Designated Examiner (ADE) Program.* Aircrew program designees (APD's) are trained in the ADE program. The ADE program is the preferred means of conducting the certification of flight crewmembers for complex Part 121 and Part 135 operators. The ADE program is intended for, and limited to, those operators with sophisticated training capabilities, highly trained personnel, and a large volume of certification activity. POI's should consider establishing an ADE program before the operator's airman certification workload for a single aircraft type approaches 40 certification tasks per year (see chapter 6 of this volume for further direction and guidance).

(2) *School Designated Examiner (SDE) Program.* School designated examiners (SDE's) are trained in the SDE program. The SDE program is the preferred means of conducting certification in an approved Part 142 training center. This regulation is under development; therefore, specific direction and guidance concerning this program will be published in this volume when the rule is adopted.

NOTE: Until Part 142 is enacted, the Air Carrier Training Branch (AFS-210) will consider the designation of examiners to serve the needs of training centers conducting Part 121 and Part 135 operations under the terms of an exemption.

B. *Programs for Other Air Transportation Examiners (ATE's).* FSDO and CMO managers should designate ATE's to meet the demand for airman certification examinations. Other categories of ATE's include ATPE's, DFEE's, DADE's, DFNE's, and written test examiners. These categories of ATE's may be trained as follows:

(1) *Air Transport Pilot Examiners (ATPE's).*

(a) *ATPE's for Airplanes Listed in Figure 5.5.1.1.* FSDO managers should find qualified candidates to designate as ATPE's for the certification of pilots in the aircraft listed in figure 5.5.1.1. It is not cost-effective for the FAA to train and maintain the qualifications of FAA inspectors to accomplish this work. FSDO managers should only designate an examiner when there is reason to anticipate a recurring demand for certification within the district. In other cases, FSDO managers should locate and direct applicants to other FSDO's or to ATPE's operating in other districts that have the capability to conduct the required check.

(b) *ATPE's for Airplanes Not Listed in Figure 5.5.1.1.* FSDO and CMO managers may only designate ATPE's for airplanes not listed in figure 5.5.1.1. and used in air transportation service with prior written approval from the Air Carrier Training Branch, AFS-210. AFS-210 does not encourage ATPE designations for those airplanes not listed in figure 5.5.1.1., and will only consider approval of an ATPE for such airplanes when an adequate and convincing justification is provided. Usually, AFS-210 will authorize only two ATPE's in any airplane type for each operator. When more designated examiners are required, the POI and FSDO manager should consider establishing an ADE program.

(2) *Flight Engineer Examiners (DFEE's).* The preferred means of conducting flight engineer certification is through the ADE program. FSDO and CMO managers may need to designate a DFEE for a school approved under Part 63 or for operators not having an ADE program. FSDO and CMO managers should consider designating a DFEE to conduct certification when the average certification activity reaches five applicants per month. FSDO and CMO managers should assign inspectors that hold a flight engineer certificate and an ATP certificate and type rating for the specific airplane to supervise these designated examiners.

(3) *Aircraft Dispatcher Examiners (DADE's).* FSDO and CMO managers should consider designating a DADE to conduct certification when the average certification activity reaches five applicants per month. FSDO and CMO managers should assign inspectors that possess a dispatcher certificate to supervise these designated examiners (see volume 5, chapter 4, paragraph 287).

(4) *Flight Navigator Examiners (DFNE's).* FSDO managers shall not consider designating a DFNE unless a

specific recurring need has been identified. The designation of a DFNE requires prior written approval from AFS-210.

NOTE: See chapter 7 of this volume for information on how members of the public may obtain flight navigator checks.

NOTE: Written test examiners are designated in accordance with FAA Order 8080.1 and are not covered by this order.

357. DESIGNATED EXAMINER AUTHORITY AND RESPONSIBILITIES. A designated examiner may be authorized to perform only those airman certification tests for which the designated examiner has been trained in and been found competent to conduct.

A. *Certification Privileges.* Designated examiners are authorized to do the following:

- Accept applications and conduct those certification, type rating, or proficiency tests specified on FAA Form 8430-9, "Certificate of Authority"
- Issue temporary certificates to applicants that the designated examiner has tested and found qualified for the certificate or rating sought
- Issue FAA Form 8060-5, "Notice of Disapproval of Application" to applicants that the designated examiner has tested and found not qualified for the certificate or rating sought

NOTE: Designated examiners may charge applicants a reasonable fee for their services.

B. *Limitations.* Designated examiners must observe the following limitations:

(1) A designated examiner may not conduct any test that is not specifically authorized by FAA Form 8430-9, "Certificate of Authority."

(2) A designated examiner may not conduct a test for a certificate or rating that the designated examiner does not hold. To conduct a certification examination that will simultaneously satisfy the qualification requirements of either Part 121 or 135, the designated examiner must be a qualified check airman for the operator. The designated examiner's letter of authorization must contain each operator that the designated examiner is allowed to serve.

(3) Without prior approval from the supervising inspector, a designated examiner may not conduct an evaluation of any applicant whom the designated examiner has instructed in preparation for the certificate or rating to be issued.

(4) A designated examiner may not conduct special medical evaluations, tests for waivers, or any test for competency under Section 609a of the Federal Aviation Act. Supervising inspectors shall instruct designated examiners to direct applicants for waivers, special medical evaluations, and competency tests under Section 609a to a FSDO.

(5) An airman certification examiner may not conduct written tests unless the designated examiner also holds a currently valid written test examiner authorization.

(6) A designated examiner may not amend or alter any certificate, except when adding a rating to the certificate of an applicant that the designated examiner has tested and found to be competent.

(7) A designated examiner authorized to conduct certification tests within a Part 121 or Part 135 training program may do so at any base or facility approved for the operator's use by the POI.

C. *Professional Conduct.* Each designated examiner must represent the Administrator in a manner which credits the FAA. Designated examiners must conduct themselves in a professional, prompt, and courteous manner. Designated examiners must continuously exhibit a positive attitude toward safety and are required to promote the FAA's role in aviation safety.

D. *Designated Examiner Responsibilities.* Designated examiners are responsible for the following:

- Maintaining personal currency and proficiency as an airman
- Remaining current with regulatory and operational matters

- Conducting all practical tests in air transportation programs in accordance with the applicable sections of this handbook (Inspectors should ensure that designated examiners are aware that all operators with approved training programs must have a procedures and maneuvers document which contains specific training and testing standards. This document must be based on the applicable practical test standards (PTS). Certification tests of airmen employed by operators not having training programs (single pilot operators, single pilot-in-command, and basic operators) must be conducted according to the applicable PTS.)

- Submitting complete and accurate certification packages (which include the PTRS data sheets or locally prepared data input forms) to the supervising FSDO within 5 working days of administering a test

E. *Multiple Designation.* An airman may be designated as more than one type of examiner. For example, an APD could also be designated as a private pilot examiner (PPE) in gliders. Air transportation examiners (ATE's) other than APD's and SDE's may be authorized to serve more than one operator as follows:

(1) *APD's and SDE's.* Aircrew program designated examiner (APD) and school designated examiner (SDE) privileges are limited to those specific training programs with which an examiner is affiliated. An APD or SDE is limited to conducting examinations in a specific type of airplane or helicopter. Designation as one of these types of examiners does not, however, preclude the airman from also being designated as another type of examiner.

(2) *ATPE's.* Managers may authorize an air transportation pilot examiner (ATPE) to conduct pilot certification in only two different types of aircraft of the transport and commuter family, the turboprop and SFAR family, or the helicopter family. A manager may authorize an examiner to conduct checks in two series of multiengine, general-purpose airplanes as defined in figure 3.2.7.7. An examiner may be authorized to conduct certification in all airplanes of the single-engine, general-purpose family. An examiner may be authorized to conduct evaluations in two of the following families of aircraft:

- The single-engine, general-purpose family

- One series of the multiengine, general-purpose family

- The helicopter family

(3) *Demonstration of Competence.* An examiner candidate must demonstrate competence in each aircraft of the transport and commuter family, the turboprop and SFAR family, and the helicopter family before designation in that aircraft. An examiner candidate must demonstrate competence in each series of aircraft of the multiengine, general-purpose family and in one aircraft of the single-engine, general-purpose family before original designation. In subsequent years, observations of the examiner for the renewal of the designation must be conducted in alternate aircraft or, when applicable, in alternate families of aircraft.

NOTE: Only one FAA Form 8430-9, "Certificate of Authority" may be issued to, or held by, a designated examiner at any one time. When a designated examiner holds more than one designation, all of the examiner's designations shall be listed on the same certificate.

359. SUPERVISING INSPECTOR RESPONSIBILITIES. Aircrew program managers (APM's) or designated supervising inspectors are responsible for ensuring that examiners are trained in certification duties and procedures, that surveillance is scheduled, and that examiners maintain certification standards. For the examiners designated in accordance with this handbook, these responsibilities include the following:

A. *Initial Training and Observation.* APM's and supervising inspectors are responsible for ensuring that examiner candidates are properly trained to conduct certification and are observed conducting an evaluation before designation.

B. *Surveillance.* Supervising inspectors must ensure that each examiner is observed a minimum of once a year by a qualified aviation safety inspector and that this observation has been accomplished before the examiner's designation is renewed. The responsibility for scheduling surveillance lies with the supervising inspector. Supervising inspectors are responsible for establishing procedures by which the designated examiner provides schedules of proposed activities as far in advance as is practical or required.

C. *Airman Certification Standards.* APM's and supervising inspectors are responsible for ensuring that the designated examiners supervise and maintain airman certification standards as prescribed by the FAR's, practical test standards (PTS), and applicable handbooks. APM's and supervisors are required to conduct an active program of meetings and surveillance to achieve this objective.

361. OFFICE MANAGER RESPONSIBILITIES. Office managers must establish effective administrative systems for supporting designated examiner programs. This support must include, but is not limited to, the following:

A. *Certification Paperwork.* Office managers are responsible for establishing administrative procedures for the expedient and efficient processing of certification paperwork within the office. As much of the processing as possible should be accomplished by trained administrative personnel and paratechnical personnel, not by inspectors, supervisors, or POI's. Managers are not required to maintain hard copies of certification paperwork, job aids, or PTRS data sheets since the PTRS serves as a record of certification activity.

B. *Data Processing Support.* Office managers are responsible for establishing administrative procedures for entering the data generated by designated examiners into the PTRS system.

C. *Resources.* Office managers are responsible for measuring the personnel, training, and budget resources necessary to accomplish the surveillance of designated examiners. Personnel, training, and budget forecasts must contain adequate provisions for the surveillance of designated examiners. Office managers should anticipate changes in personnel requirements due to either growth in operator programs or public demand.

363. REGIONAL FLIGHT STANDARDS DIVISION (RFSD) RESPONSIBILITIES. In general, the RFSD is responsible for ensuring that airman certification standards are upheld. RFSD's are not required to take any action to formally approve the designation of specific airmen as examiners, but must be informed of, and concur with, the selections made. This concurrence may be informal. Other responsibilities held by the RFSD are as follows:

A. *Coordination.* RFSD's are responsible for establishing procedures for flight standards district offices (FSDO's) and certificate management offices (CMO's) for locating inspectors to conduct designated examiner surveillance when a qualified inspector is not locally available.

B. *Program Evaluation.* RFSD's are responsible for evaluating the management of the designated examiner program in each FSDO and CMO when warranted. This evaluation should be conducted at least every 3 years, and when practical, in conjunction with regularly scheduled office evaluations.

364. - 374. RESERVED.

FIGURE 5.5.1.1.
PERMISSIBLE EXAMINER DESIGNATIONS

MANUFACTURER	MODEL DESIGNATION	CURRENT DESIGNATION
Aero Commander Division North American Rockwell Corp.	1121 Commander West Wind	IA-JET
Aerospatiale	SN-601	SN-601
Armstrong Whitworth	Argosy AW-650	AW-650
Beech Aircraft Corp., USA Witchita, KS	BE-300 BE-1900 200T/200TC BE-2000 BE-2000 Starship Diamond I and MU-300-10	BE-300 BE-1900 BE-200 BE-2000 MU-300, BE-400
Boeing Co., USA	B-707/720	B-707, B-720
Breguet, France	Fauvette 905A	BG-905
Bristol Aircraft	Britannia 305	BR-305
British Aerospace Group	BA-3100	BA-3100
Canadair, LTD Canada	CL-44 CL-600	CL-44 CL-600
Cessna Aircraft Corp.	Citation 500 Series Citation III, VI	CE-500 CE-650
Constructiones Aeronauticas, S.A.	CASA C-212-CB C-235	 CA-212 CN-235
Convair (see General Dynamics Corp.)	240, 340, 440, T-29, C-131 Allison 340/440 22, 22M (880), (990) Dart Convair 240, 340, 440	CV-240, CV-340, CV-440 CV-A340 CV-880, CV-990 CV-600, CV-640
Curtiss-Wright Corp., USA	Commando CW-20	CW-46
Dassault, General Aeronautique Marcel, Dassault, France	Mystere 20 Falcon Fanjet Model 200	DA-20 DA-200

FIGURE 5.5.1.1. (Cont'd.)
PERMISSIBLE EXAMINER DESIGNATIONS

MANUFACTURER	MODEL DESIGNATION	CURRENT DESIGNATION
Dassault, General Aeronautique Marcel, Dassault, France (cont'd.)	Mystere 10 Falcon Fanjet Mystere 50 Falcon Fanjet	DA-10 DA-50
DeHavilland Aircraft of Canada LTD.	Caribou 4A, USAF C-7A Army CU-2 DHC-7 DHC-8	DH-4 DHC-7 DHC-8
Dornier GMBH Frederickshafen, Germany	Dornier 228-201/101	DO-228
Empressa Brasileira de Aeronautica, Brazil	EMB-110 P1, P2, P3 EMB-120	EMB-110 EMB-120
Fairchild Aircraft Corp., USA and Fokker, The Netherlands	F-27/227	F-27
Fairchild - Hiller	C-82A	C-82A
Gates Learjet	23, 24, 25, 28, 29, 31, 35, 36, 55, C21-A	LR-JET
Grumman Aircraft Engineering Corp., USA	G-64 Albatross Mallard G-159 Gulfstream G-1159 G-1159C	G-111 G-73 G-159 G-1159 G-IV
Handley Page Aircraft Co., LTD, U.K.	DH-125 Herald 300	HS-300 HS-125
Hamburger Flugzuban G.M.B.H., West Germany	Hansa Jet 320	HF-320
Hawker Siddeley Aviation LTD, U.K.	DH-114 Heron DH-125	HS-114 HS-125
Israel Aircraft LTD, Israel	Commodore Jet 1123 Westwind 1124 (see Aero Commander) 1125 ASTRA ARAVA 1A 101B	IA-JET IA-1125 IA-101

FIGURE 5.5.1.1. (Cont'd.)
PERMISSIBLE EXAMINER DESIGNATIONS

MANUFACTURER	MODEL DESIGNATION	CURRENT DESIGNATION
Lockheed Aircraft	Jetstar 1329 Electra 188, P-3 C-130, L-382	L-1329 L-188 L-382
Martin-Marietta	Mariner 202/404	M-202, M-404
McDonnell Douglas	DC-3, C-47 DC-6, DC-7, C-118	DC-3 DC-6, DC-7
Nihon Aeroplane Manufacturing Co., LTD, Japan	YS-11	YS-11
Nord Aviation	262A Super Broussard	ND-262
North American	Sabreliner NA-265, T-39	N-265
Piaggio, Italy	Piaggio-Douglas 808	P-808
Piper Aircraft, USA	PA-42-720 (Restricted)	PA-42R
Saab-Fairchild	340	SF-340
Short Brothers and Harland LTD., Northern Ireland	SD3-30, SD3-60	SD-3
Sud Aviation, France	SE Caravelle I, II, VIR	S-210
Swearingen Fairchild Aircraft Corp.	SA-227-AC	SA-227
Vickers-Armstrong British Aircraft Corp., USA	700 & 800 Series	VC-700, VC-800

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SECTION 2. ADMINISTRATION OF DESIGNATED EXAMINER PROGRAMS

375. SELECTION OF EXAMINERS. This section contains information, direction, and guidance to be used by inspectors for the administration of designated examiners working in air transportation programs. This section applies only to the administration of programs defined in section 1 of this chapter.

A. *Application.* Examiner candidates must submit a complete statement of professional qualifications on FAA Form 8710-6, "Examiner Designation and Qualification Record," before designation. If a candidate currently holds any other examiner designations, the candidate must also submit a copy of a completed and current FAA Form 8430-9, "Certificate of Authority." The aircrew program manager (APM) or supervising inspector shall review the candidate's qualifications to ensure that the candidate meets the requirements and standards for an examiner designation.

B. *Qualifications of Candidates Other Than Pilots.* Examiner candidates that are not pilots must have the following qualifications:

- Possess appropriate airman certificate and appropriate rating, if applicable
- Have documented training and professional experience
- For those examiners designated to conduct certification in Part 121 or 135 training programs, candidate must be a navigator or flight engineer check airman or dispatcher supervisor in the operator's program
- If affiliated with a school or operator, must possess a letter of recommendation from the employer

NOTE: The preferred source for examiner candidates is airmen who are actively engaged in the activity for which examinations are to be conducted. Another preferred source is retired inspectors.

- Have a good record of compliance with the FAR's (Isolated and unrelated violations or incidents are not disqualifying.)
- In the case of an examiner applying for an additional designation, must have a record of competence and reliability

C. *Qualifications of Air Transport Pilot Examiners (ATPE's).* ATPE candidates must have the following qualifications:

- Possess ATP certificate and applicable category, class, and type ratings
- Have above average knowledge, ability, and experience
- Have check airman status in the operator's program
- Have a letter of recommendation from the operator
- Have a good record of compliance with the FAR's (Isolated and unrelated violations or incidents are not disqualifying.)
- A record of competence and reliability from an examiner applying for an additional designation

NOTE: See chapter 6 of this volume for APD qualifications.

377. EXAMINER TRAINING AND EVALUATION. The APM or supervising inspector shall ensure that prospective examiners are trained for, and evaluated on, their duties and responsibilities prior to designation.

A. *Candidate Training.* Examiner candidates must be trained in certification policies, procedures, and standards. The supervising inspector must ensure that the candidate is trained in the following areas:

- The knowledge, abilities, and skill requirements for the original issuance of the certificate and added ratings, as applicable

- The procedures, methods, and techniques associated with administering the required certification tests

- Examiner responsibilities, authority, and limitations under the FAR's and applicable FAA orders

- The use of FAA forms and job aids associated with the particular examiner function

- Administrative procedures and relationships with supervisory inspectors

B. *Representing the FAA.* Inspectors shall stress to prospective examiners that in performing the functions of an examiner, they are representatives of, and responsible to, the Administrator. Prospective examiners must understand that company policies or affiliations, economics, union affiliation, and seniority with the operator are not relevant issues when determining the qualification of airmen.

C. *Observation of Testing.* After the examiner candidate has been trained, a qualified inspector must observe the examiner candidate conduct a complete certification test (oral, simulator, and aircraft portions as applicable to the operator's program.)

(1) *Conduct of an Actual Certification Test.* Inspectors should observe examiner candidates conducting an actual certification test while being observed by an inspector.

(2) *Simulated Certification Test.* When the circumstances make the observation of an actual certification test impractical, inspectors may observe the examiner candidate conducting a competency or proficiency check as if the check were being conducted for certification. Other methods, such as the inspector acting as the applicant, may be used when the preferred methods are not practical.

(3) *Recording Examiner Training.* Inspectors or APM's who conduct training for an examiner candidate shall complete FAA Form 8000-36, "Program Tracking and Reporting Subsystem (PTRS) Data Sheet," using activity code 1595 for each examiner candidate trained. The inspector shall use Section IV and J783 to identify the type of training activities that are conducted.

379. SUPERVISION AND ADMINISTRATIVE CONTROL OF DESIGNATED EXAMINERS. Supervising inspectors are responsible for the supervision of designated examiners. Inspectors should use the following guidance when evaluating this type of supervision.

A. *Working Relationships.* Supervising inspectors should emphasize the designated examiner's general handling of applicants, maintenance of desired test standards, and accurate completion and processing of certification paperwork. Supervising inspectors shall conduct regular designated examiner meetings for the purpose of maintaining effective working relationships. These meetings can be recorded in the PTRS system under activity code 1595. A close and continuing dialogue for the clarification of problem areas should be developed between the supervising inspectors and designated examiners. Designated examiners should be encouraged to contact their supervising inspectors to resolve questions or difficulties. Special meetings should be held when there is any change to FAA airman certification requirements, policies, or procedures that affect the particular designated examiner or the program in general.

B. *Examiner Supplies and Materials.* Supervising inspectors shall ensure that each designated examiner has access to the materials, manuals, and supplies necessary for the examiner's tasks. Supervising inspectors shall ensure that examiner candidates have the following materials before designation and that any revisions to these materials are supplied to the examiner thereafter:

- Volume 5 of FAA Order 8400.10, Air Transportation Operations Inspector's Handbook

- Appropriate job aids (may be copied from FAA Order 8400.10)

- Application forms

- FAA Form 8060-4, "Temporary Airman Certificate"

- FAA Form 8060-5, "Notice of Disapproval of Application"

- FAA Form 8000-36, "Program Tracking and Reporting Subsystem (PTRS) Data Sheet" (see volume 5, chapter 1, section 2, paragraph 41)

381. ADMINISTRATIVE FILES. The flight standards district office (FSDO) or certificate management office (CMO) shall maintain a file on each designated examiner. This file shall contain the following information:

- FAA Form 8430-9, "Certificate of Authority" for each original designation of authority and for the last renewal
- FAA Form 8000-5, "Certificate of Designation" for the last renewal
- Aviation safety analysis system (ASAS) violations history, if applicable
- A summary of annual activity from the PTRS for each renewal (which replaces FAA Form 8000-5, "Airman Certification Log")
- Periodic surveillance reports (from the PTRS)
- Any pertinent correspondence

383. PROCESSING INITIAL EXAMINER DESIGNATIONS. Supervising inspectors shall ensure that all the requirements for an examiner designation have been met and shall prepare the necessary paperwork as follows.

A. *FAA Form 8710-6, "Examiner Designation and Qualification Record."* After the examiner applicant has completed and signed the front of FAA Form 8710-6, the supervising inspector shall complete the form as follows:

(1) On the back of the form under the block labeled "Additional Qualifications," the supervising inspector shall enter the certificates, ratings, and aircraft type, or the family of aircraft for which the designated examiner is authorized to conduct certification checks. For designated examiners authorized to conduct certification in Part 121 or 135 programs, the name of the operator shall be listed. For designated examiners authorized to conduct certifications in more than one operator program, an additional sheet of paper may be used.

(2) In the action block at the bottom on the reverse side of the form, the supervising inspector shall cross out the word "region" and enter the word "district" or "certificate management," as applicable.

(3) The supervising inspector shall check both sides of the form for accuracy and completeness.

(4) The supervising inspector shall enter the type of designation (such as "ATPE" or "APD"), followed by the certificate and airplane type in the space labeled, "Type of Designation," below the "District Office Action" block.

(5) The supervising inspector shall enter the designated examiner's designation number under the space labeled, "Certificate of Authority Issued" in the space titled, "No."

(6) The supervising inspector shall enter the expiration date, which should be the last day of the month of designation in the following year.

(7) The supervising inspector shall enter the applicable flight standards office in the "DO to Serve Under" block.

(8) The supervising inspector shall sign the "Inspector's Signature" block.

B. *Examiner Designation Numbers.* This subject is to be developed (TBD). For current guidance see volume II, chapter 15, section 1 in FAA Order 8700.1, General Aviation Operations Inspector's Handbook.

C. *Other Forms.* Supervising inspectors shall also prepare FAA Form 8000-5, "Certificate of Designation" and FAA Form 8430-9, "Certificate of Authority" (see figures 5.5.2.2. and 5.5.2.3.). The originals of these forms shall be issued to the designated examiner, and copies shall be retained in the designated examiner's file.

D. *Approval.* The principal operations inspector (POI), office manager, or their designated representative shall indicate approval by completing the first line of the block labeled, "District Office Action" on the FAA Form 8710-6, and then signing in the appropriate space. The POI or office manager shall also sign the remaining forms in the appropriate space.

385. DESIGNATED EXAMINERS ABROAD. An examiner may be designated to serve at locations outside of the United States, provided the designated examiner will examine only U.S. citizens or applicants trained in an

approved Part 121 or 135 training program. The designated examiner's activities must be adequately supervised by an FAA inspector. POI's may coordinate with international field offices (IFO's) to conduct this surveillance. A person who is not a U.S. citizen may be designated as an examiner abroad only when the need cannot be filled by a U.S. citizen and only if approved by the applicable regional flight standards division (RFSD) manager. A person serving outside the U.S. as a designated examiner may not test foreign nationals without the approval of the RFSD.

387. MULTIPLE EXAMINER DESIGNATIONS. An individual airman may be designated as more than one type of designated examiner or as a designated examiner for more than one operator. For example, an individual could be designated an ATPE to conduct CE-500 checks for a Part 135 operator according to this handbook and as a pilot examiner to conduct Part 91 CE-500 checks according to Order 8700.1. A designated examiner may be issued only one FAA Form 8710-6, "Examiner Designation/Qualification Record," one FAA Form 8000-5, "Certificate of Designation," and one FAA Form 8430-9, "Certificate of Authority." In such a case, more than one inspector may supervise the designated examiner. The following direction and guidance apply to the foregoing designations:

A. *Supervisory Responsibilities.* POI's and managers should delegate responsibility for supervising all of a designated examiner's activities to a single inspector when practical. It may be necessary, however, for the supervisory responsibility to be divided in accordance with the activities the designated examiner is authorized to perform. For example, an airman could be designated as an APD to conduct B-747 type ratings for an operator located in Florida and also be designated as a general aviation examiner in gliders by a FSDO in Colorado. In this case, the airman would be supervised by an APM in Miami for B-747 activities and by an appropriately rated inspector in Colorado for the glider activities.

B. *Responsibility for Maintaining Examiner Files.* A single inspector must be assigned the responsibility for maintaining a particular designated examiner's file. When more than one FSDO is involved, the file should normally be maintained by the office for which the designated examiner performs air transportation functions. When the examiner conducts certifications for more than one Part 121 or Part 135 operator, the file should be maintained in the office of original designation. Other arrangements are permissible and may be negotiated to the satisfaction of the applicable FSDO's and CMO's.

C. *Procedure for Granting Additional Examination Authority.* The training and observations required for an examiner's second designation must be completed before the designated inspector can amend the examiner's FAA Form 8710-6, "Examiner Designation and Qualification Record" and FAA Form 8000-5, "Certificate of Designation."

(1) When the authority is requested by an examiner candidate to act as a designated examiner for a second operator, the examiner candidate must complete qualification as a check airman for the second operator prior to designation.

(2) The inspector tasked with performing any required observations of the designated examiner is responsible for notifying the inspector who maintains the designated examiner's file once the observations have been completed and the check airman designation has been made for the second operator.

D. *Expiration Date.* All designations expire on the expiration date on the FAA Form 8710-6, "Certificate of Designation," which is the last day of the 12th calendar month after designation. The inspector assigned to maintain the designated examiner's records may approve changing the expiration date when an additional designation is added.

(1) When both examining authorizations are related and supervised by the same office, the supervising inspector should normally change the date to the last day of the 12th calendar month in the following year during which the second designation was made.

(2) When the examination authorities are unrelated or supervised by different offices, as are the authorities in the example of the glider examiner and B-747 APM designations given in previous subparagraph A, the date is not normally changed.

E. *Records.* When the supervision of a designated examiner will be shared by more than one FSDO, the FSDO or CMO manager who will have responsibility for maintaining the designated examiner's records shall coordinate with the other office before approving the designation. When the designation has been completed, a copy of the FAA Form

8000-5, "Certificate of Designation," shall be sent to the office that does not maintain the records.

389. AMENDMENT OF DESIGNATED EXAMINER DESIGNATIONS. The manager responsible for maintaining a designated examiner's file may amend an examiner's FAA Form 8000-5, "Certificate of Designation" and FAA Form 8710-6, "Examiner Designation and Qualification Record" for the addition or deletion of certificates, aircraft types, or operator authority, any time such an amendment is required. When an FAA Form 8000-5 is amended, the inspector must cancel the previously issued forms and issue a new one. When the FAA Form 8000-5 is amended to include more than one designation, the inspector must enter an adequate description of each designation in the "Additional Qualifications Limitations" block. When more than one FSDO or CMO is involved, the office supervising each activity must be listed on the certificate. When required, the inspector may list additional authorities and limitations on a sheet of paper and attach it to the certificate. The administrative steps for the issuance of an amended certificate of designation are the same as those outlined for initial designation (see paragraph 379).

391. RENEWAL OF DESIGNATED EXAMINER DESIGNATIONS. Designated examiners must renew their designations every 12 calendar months. Inspectors should use the following procedures when renewing a designated examiner.

A. *Required Forms.* The inspector assigned to the designated examiner shall renew the designation after the required annual observation and the following required forms are completed:

- FAA Form 8710-6, "Examiner Designation and Qualification Record"
- FAA Form 8000-5, "Certificate of Designation"
- FAA Form 8430-9, "Certificate of Authority"
- FAA Form 8000-36, "Program Tracking and Reporting Subsystem (PTRS) Data Sheet"

B. *Annual Observation of Check.* Within the 3-calendar month period before the designated examiner's current designation expires, the examiner must be observed conducting a certification check by the supervising inspector, or by another appropriately rated inspector designated by the supervising inspector. When an examiner designation is renewed, the day and month normally remain the same; only the year is changed.

(1) *Type of Check.* Inspectors should observe designated examiners conducting actual certification checks when at all possible. Also, when possible, the supervising inspector or a designated representative should observe the designated examiner conduct a certification check. When the preferred method is impractical, the inspector may observe the designated examiner conduct a proficiency or competency check. In rare cases, an inspector may observe the examiner's own proficiency or competency check. In addition to the proficiency or competency check events, the inspector or safety pilot should perform events for the designated examiner to evaluate.

(2) *Multiple Designations.* When the designated examiner has designations that are closely related, only one observation by an inspector is required. An example of this is when an ATPE in the CE-500 conducts certifications for more than one Part 135 operator. When the examiner's designations are unrelated, an observation by the inspector of each activity may be required prior to renewal. An example of this is when an examiner holds both B-747 APD and glider designations.

(3) *Scheduling.* The designated examiner is responsible for scheduling each required observation far enough in advance to assure that it can be accomplished before the expiration of the designation. Should the required observations not be conducted within the eligibility period, the supervising inspector should ensure that the examiner's services are still required prior to renewing the examiner's designation. A designated examiner who is overdue for renewal may not conduct any checks until the observations have been conducted by the inspector and the renewal has been completed.

(4) *Annual Briefing.* Each designated examiner must attend a meeting or a briefing each year conducted by an inspector on designated examiner duties.

393. PROCESSING DESIGNATED EXAMINER CERTIFICATION PAPERWORK. FAR 183.17 requires that designated examiners make reports as prescribed by the Administrator. Designated examiners shall forward airman

certification paperwork to the designated FSDO for review, processing, and transmittal to the Airman Certification Branch. When a multiple designation with more than one supervising office is involved, certification paperwork shall be sent to the supervising office for each designation. This paperwork shall only be submitted to, and processed by, the specified office; it may not be accepted by other offices.

A. *Designated Examiner Responsibilities.* Designated examiners must complete the airman certification paperwork in accordance with the requirements of this volume in the handbook. The paperwork must be accurate, complete, and timely. Designated examiners must complete the PTRS data sheets for each test conducted. Satisfactory fulfillment of this responsibility is a requirement for renewed designation as an examiner.

B. *Supervising Inspector Responsibilities.* Supervising inspectors are responsible for training designated examiners on correct documentation. Supervising inspectors should provide the designated examiners with ample PTRS data sheets, and should ensure that as much information as possible should be overprinted on these forms. Inspectors may overprint forms or job aids in any convenient manner, such as by pen, pencil, or copy machine.

395. REVIEW OF DESIGNATED EXAMINER DECISIONS. If an airman is dissatisfied with a designated examiner's decision, the airman may appeal to the supervising inspector for a retest. The airman must submit the appeal in writing and indicate the reasons for protesting the designated examiner's decision. The responsible inspector shall review the matter and decide if retesting is appropriate. If the inspector grants a retest, a new application must be completed by the airman, and the entire test must be accomplished again with an FAA inspector.

397. TERMINATION OF DESIGNATED EXAMINER DESIGNATION. An examiner designation may be cancelled at any time. The preferred procedure for the termination of a designation is to allow the designation to elapse without renewal.

A. *Basis for Termination.* The termination of an examiner designation may be based on any of the following:

- The designated examiner's services are no longer required
- A change in the designated examiner program policy
- A change in the designated examiner's employment, base of operations, or professional activities
- Voluntary surrender of the designation, by the designated examiner sending in a written request for cancellation
- Evidence of malpractice, fraudulent use of the designation, or any actions by the designated examiner which discredit the FAA
- A request by the designated examiner's employer (made when the employer's recommendation was required for designation)
- Unsatisfactory performance in any phase of the designated examiner's duties or responsibilities (to include failure to accurately accomplish certification paperwork or an unwillingness or inability to accept or carry out the supervising inspector's instructions)
- Evidence indicating that requirements for the original designation were not met at the time of designation
- When the designated examiner fails to be present for the annual observation within the specified allowed time

B. *Cancellation for Administrative Reasons.* Inspectors should cancel designations for administrative reasons (such as an examiner program change) by not renewing a designation when it expires.

(1) If the designation is to be cancelled before expiration, the designated examiner may be allowed to complete previously scheduled tests. In these cases, the supervising inspector should hold an informal meeting with the designated examiner. Should the designated examiner object to the decision to terminate the designation, the inspector shall proceed in accordance with the instructions contained in this paragraph.

(2) The supervising inspector shall confirm by letter the cancellation of the examiner's designation. The letter should contain an appreciation by the FAA commensurate with the designated examiner's level of service and an effective date of cancellation. The letter shall also contain a request for the return of the designated examiner's FAA Form 8430-9, "Certificate of Authority," and all unused FAA materials and supplies. The examiner's FAA Form 8000-5, "Certificate of Designation," may be retained by the designated examiner after it has been marked "Cancelled," and dated and signed by the supervising inspector.

C. *Cancellation for Cause.* POI's and FSDO managers shall notify a designated examiner of the cancellation of the examiner's designation for cause by sending the designated examiner a registered letter. A letter shall also be sent to all operators or schools that are affected by the cancellation of the designated examiner's authority (see figure 5.6.2.5. for a sample letter). The registered letter to the designated examiner (see figure 5.6.2.4. for a sample) shall be prepared by the supervising inspector and should contain the following:

- A clear statement of the reasons for the cancellation action
- A notification that the cancellation is effective immediately
- A statement that the designated examiner has a right to appeal to the RFSD manager either in writing or in person
- A statement that, should the designated examiner choose to make an appeal in person, the examiner may be accompanied by counsel
- A statement that a record will be made of any meeting concerning appeal
- A statement that the designated examiner is given 10 days from receipt of the letter to respond or schedule an appearance (see figure 5.6.2.4. for a sample letter)
- A statement that directs the designated examiner to return to the FSDO the FAA Form 8430-9, "Certificate of Authority" and FAA Form 8000-5, "Certificate of Designation," as well as all unused FAA materials and supplies

D. *Recording the Cancellation.* When an examiner designation is cancelled, the POI or office manager shall complete the designated examiner's current FAA Form 8710-6, "Examiner Designation and Qualification Record," as follows:

(1) The word "CANCELLED" shall be stamped or typed in the block titled, "Inspector's Recommendation Action," in the section labeled, "Justification for Approval/Reasons for Disapproval." In the same space, the inspector or office manager shall enter an explanation of the reasons for the cancellation.

(2) The inspector shall sign and date the form under the explanation of the reasons for cancellation.

(3) This form shall be retained in the designated examiner's file in the CHDO for at least 2 years.

399. ADVERSE ACTIONS. When an inspector or office manager either confirms a report of, or personally observes, irresponsibility or incompetence by a designated examiner, immediate action must be taken. The inspector's or manager's appropriate action may be in the form of counseling or training. When counseling or training is applicable, the inspector must record the reason for the action, the action itself, and enter it in both the PTRS system and the designated examiner's file. In cases of professional incompetence or when safety is jeopardized, the inspector may require a re-examination of the examiner's competence to hold the certificate or rating according to Section 609 of the FA Act. In extreme cases such as fraud, the facts in the case must be provided to the Department of Justice for possible criminal prosecution. This paragraph contains direction and guidance for those cases in which the cancellation of a designated examiner's designation is contemplated under adverse circumstances.

A. *Coordination with RFSD.* Before taking any action, POI's and FSDO managers shall ensure the matter is thoroughly documented and shall then coordinate with the applicable RFSD. The RFSD should coordinate with the Regional Counsel.

B. *Notification of Proposed Revocation.* When a manager

decides to cancel an examiner's designation, the manager shall notify the designated examiner in writing, by registered mail. When the action is being taken for cause, the letter must contain the following:

- A statement that prohibits the designated examiner from conducting any further examinations until the matter is resolved
- The specific reasons for the proposed action, along with the appropriate FAR's or handbook guidance
- In the case of unacceptable conduct by a designated examiner, specific examples of this conduct
- A statement that the designated examiner has the option to either respond in writing or by appearing in person
- A statement that if the designated examiner chooses to appear in person, the examiner may be accompanied by counsel
- A statement that a record will be made of any meeting for appeal
- A statement that the designated examiner has 10 days from receipt of the letter to respond or schedule an appearance

C. *Fact-Finding Meeting.* The manager having designation authority shall conduct a fact-finding meeting when requested by the designated examiner. A record of this meeting must be made by the inspector, either in the form of notes taken by a secretary, a summary made by an inspector, or in a transcript prepared by a court reporter. The designated examiner shall be provided with a copy of the record and offered an opportunity to submit comments. The manager shall attach to the record any comments submitted by the designated examiner.

D. *Decision.* The inspector with the examiner's designation authority has the authority to terminate a designation. The POI or FSDO manager shall consider the facts provided by the designated examiner and the advice of the certificate manager and the RFSD before reaching a decision. Once a decision is reached by the POI or FSDO manager, the designated examiner shall be notified by registered letter. The decision will either be to allow the designated examiner to resume examination activities at once or to resume examination activities after having successfully completed specified training and re-evaluation, or to terminate the examiner's designation. In the latter case, the procedures in paragraph 397 of this section must be followed.

E. *Appeal to the Regional Division Manager.* An airman whose examiner designation has been revoked may appeal that decision to the regional division manager. In making this appeal, the airman may provide a written statement or request to appear in person.

(1) Should the airman request a meeting, the regional division manager shall invite Regional Counsel to attend. A record of the meeting will be made. The airman will be provided with a copy of the record and offered an opportunity to submit comments. These comments shall be attached to the record.

(2) The airman shall be informed by certified letter of the division manager's decision and the reasons for it. Should the division manager concur with the termination of the airman's examiner designation, the letter shall contain advice to the airman that the legal remedy is by petition for review to the United States Court of Appeals within 60 days of the postmark of the division manager's letter.

400. - 410. RESERVED.

FIGURE 5.5.2.1.
FAA FORM 8710-6, "EXAMINER DESIGNATION AND QUALIFICATION RECORD" (FRONT)

Form Approved
OMB NR.2120-0033

US Department of Transportation
Federal Aviation Administration

EXAMINER DESIGNATION AND QUALIFICATION RECORD

TYPE OF DESIGNATION
- [ ] PRIVATE PILOT
- [ ] COMMERCIAL PILOT EXAMINER
- [ ] AIRLINE TRANSPORT PILOT EXAMINER
- [ ] PROFICIENCY PILOT EXAMINER
- [ ] FLIGHT ENGINEER EXAMINER
- [ ] FLIGHT INSTRUCTOR EXAMINER
- [ ] OTHER

Attach supplemental sheets if more space is required for any item

1. NAME (Last, first, middle) | Telephone No.

2. ADDRESS (Number, street, city, state, and ZIP code)

3. DATE OF BIRTH (Month, day, and year)

4. U.S. CITIZEN
- [ ] YES
- [ ] NO

5. DO YOU NOW HOLD, OR HAVE YOU EVER HELD, AN EXAMINER DESIGNATION
- [ ] YES
- [ ] NO

TYPE AND NUMBER

6. HAS ANY CERTIFICATE OR RATING ISSUED YOU EVER BEEN SUSPENDED OR REVOKED OR HAVE YOU PAID A CIVIL PENALTY AS A RESULT OF A VIOLATION OF THE FEDERAL AVIATION REGULATIONS. (Complete for original designations only)
- [ ] YES
- [ ] NO

7. CERTIFICATES HELD

TYPE	CERTIFICATE NO.	RATINGS	DATE ISSUED

8. FLIGHT EXPERIENCE (in hours)

	AIRPLANE		ROTORCRAFT		GLIDERS		INSTRUMENT FLIGHT (Actual or sim)	NIGHT FLIGHT
	TOTAL	LAST 12 MOS.	TOTAL	LAST 12 MOS.	TOTAL	LAST 12 MOS.		
PILOT-IN-COMMAND								
FLIGHT INSTRUCTION GIVEN								
COPILOT								
FLIGHT NAVIGATOR								
FLIGHT ENGINEER								

9. EMPLOYMENT (Indicate professional experience pertinent to this designation)

EMPLOYER'S NAME	NATURE OF WORK	DATES	TITLE OF POSITION

10. SPECIAL TRAINING PERTINENT TO THE DESIGNATION

CERTIFICATION: I certify that I am familiar with the requirements for this designation, its privileges and limitations, and that the information stated herein is true. It is understood that this designation may be terminated upon notice by the FAA for the reasons specified in section 183.15(c) of the Federal Aviation Regulations.

DATE | SIGNATURE

FAA FORM 8710-6 (10-83)

FIGURE 5.5.2.1. (Cont'd.)
FAA FORM 8710-6, "EXAMINER DESIGNATION AND QUALIFICATION RECORD" (REVERSE SIDE)

FOR FAA USE

TYPE OF ACTION	
	ORIGINAL ISSUANCE
	RENEWAL
	ADDITIONAL AUTHORITY
	SPOT CHECK ONLY - NO RENEWAL EFFECTED
	REINSTATEMENT

FLIGHT TEST ACTIVITIES-GENERAL AVIATION *(Complete for renewals and additional designations)*

CERTIFICATES/RATINGS		TOTAL SUBMITTED	DISAPPROVED BY EXAMINER	ACCEPTED BY INSPECTOR	RECHECKED BY INSPECTOR	NO. RE-TURNED FOR CORRECTION
PRIVATE PILOT						
COMMERCIAL PILOT						
AIRLINE TRANSPORT PILOT						
INSTRUMENT RATING						
ADDITIONAL RATINGS	PRIVATE					
	COMMERCIAL					
	ATR					

DATE LAST REPORT SUBMITTED

Complete for original issuance and reinstatements only

CHARACTER AND REPUTATION *(Include industry and community reputation as well as personal knowledge possessed by FAA personnel)*

PROFESSIONAL ABILITY *(Brief narrative description of examiner indoctrination and training given and results expressed as "good," "excellent," or "unsatisfactory.")*

INSPECTOR'S RECOMMENDATION/ACTION		
		APPROVE
		DISAPPROVE

JUSTIFICATION FOR APPROVAL/REASONS FOR DISAPPROVAL

The individual named has been flight tested/examined and deemed competent to perform the duties of the designation indicated below.

DESIGNATION			CATEGORY		ADDITIONAL QUALIFICATIONS LIMITATIONS *(For pilot flight engineer examiner give aircraft category)*
		PRIVATE PILOT			
		COMMERCIAL PILOT EXAMINER		AIRPLANE	
		AIRLINE TRANSPORT PILOT EXAMINER			
		PROFICIENCY PILOT EXAMINER		ROTOCRAFT	
		FLIGHT ENGINEER EXAMINER			
		FLIGHT INSTRUCTOR EXAMINER		GLIDER	
		OTHER			

DATE	OFFICE NO.	INSPECTOR'S SIGNATURE

REGIONAL OFFICE ACTION

	CONCUR	DATE	SIGNATURE
	DISAPPROVE		

TYPE OF DESIGNATION	CERTIFICATE OF AUTHORITY ISSUED		
	NO.	DO TO SERVE UNDER	EXPIRATION DATE

FIGURE 5.5.2.2.
FAA FORM 8000-5, "CERTIFICATE OF DESIGNATION"

U.S. Department of Transportation
Federal Aviation Administration

Certificate of Designation

Reposing special trust and confidence in the integrity, diligence, and discretion of

who has been found to have the necessary knowledge, skill, experience, interest, and impartial judgment to merit special public responsibility, I hereby designate as

with authorization to act in accordance with the regulations and procedures prescribed by the Federal Aviation Administration relating to this designation.

Issued at *By Direction of the Administrator*

Dated _____

Certificate No. _____

FIGURE 5.5.2.3.
FAA FORM 8430-9, "CERTIFICATE OF AUTHORITY"
(FRONT)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
CERTIFICATE OF AUTHORITY

DESIGNATION NO.

NAME

DESIGNATION EXPIRES

Is authorized to act in the capacity of a

AT FIXED BASE OF OPERATION

for the Administrator

DESIGNEE'S SIGNATURE

(DATE) (SIGNATURE)

FAA FORM 8430-9 (1-70) FORMERLY FAA FORM 1382

FIGURE 5.5.2.3.
FAA FORM 8430-9, "CERTIFICATE OF AUTHORITY"
(FRONT)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
CERTIFICATE OF AUTHORITY

DESIGNATION NO.

NAME

DESIGNATION EXPIRES

Is authorized to act in the capacity of a

AT FIXED BASE OF OPERATION

for the Administrator

DESIGNEE'S SIGNATURE

(DATE) (SIGNATURE)

FAA FORM 8430-9 (1-70) FORMERLY FAA FORM 1382

FIGURE 5.5.2.4.
SAMPLE LETTER OF NOTIFICATION OF PROPOSED REVOCATION

(Office Letterhead)

November 28, 1991

CERTIFIED MAIL RETURN RECEIPT REQUESTED

In Reply
Refer to: Jones

Mr. John J. Examiner
1011 S. Cottage Grove Ave.
Urbana, Illinois 33022

Dear Sir,

This office has evidence that indicates you issued an L-1011 type rating to Mr. John Smith on November 27, 1991, without conducting the required flight examination.

This is to inform you that this matter is under investigation by the Federal Aviation Administration, and this office is considering cancelling your airman examination designation. We wish to offer you an opportunity to discuss the incident personally and/or submit a written statement. If you desire to do either, this should be accomplished within 10 days following receipt of this letter. Your statement should contain all pertinent facts and any extenuating or mitigating circumstances which you believe may have a bearing on this incident. You may contact this office by telephone at (303) 555-1111.

Until this matter is resolved, you may not conduct any airman examinations and are directed to return all examiner materials and supplies issued to you.

Sincerely,

John Jones
Manager

FIGURE 5.5.2.5.
SAMPLE LETTER OF NOTIFICATION

(Office Letterhead)

December 1, 1991

CERTIFIED MAIL RETURN RECEIPT REQUESTED

In Reply
Refer to: Jones

Yucan Fly Aviation
141 Airport Road
Aileron, Illinois 33022

Dear Sir,

This letter serves as notice that Mr. John J. Examiner no longer has authorization to represent the Federal Aviation Administration as a pilot examiner.

Any questions regarding this matter may be directed to the Flight Standards District Office by telephone at (303) 555-1111.

Sincerely,

John Jones
Manager

[PAGES 5-230 THROUGH 5-240 RESERVED]

FIGURE 5.5.2.5.
SAMPLE LETTER OF NOTIFICATION

(Office Letterhead)

December 1, 1991

CERTIFIED MAIL RETURN RECEIPT REQUESTED

In Reply
Refer to: Jones

Yucan Fly Aviation
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Sincerely,

John Jones
Manager

[PAGES 5-230 THROUGH 5-240 RESERVED]

CHAPTER 6. AIRCREW DESIGNATED EXAMINER (ADE) PROGRAM

SECTION 1. GENERAL

411. GENERAL. This chapter contains information concerning aircrew designated examiner (ADE) programs and guidance to be used by principal operations inspectors (POI's) and inspectors when evaluating an operator's request for an ADE program. This section contains a general description of the ADE program. Section 2 of this chapter contains policy, direction, and guidance for the management of an ADE program. Section 3 of this chapter contains policy, direction, and guidance on the selection, training, and supervision of aircrew program designees (APD's).

413. ADE PROGRAM OBJECTIVES. The primary objective of an ADE program is to make effective use of available inspector resources for airman certification and for the surveillance of complex Part 121 and Part 135 operators.

A. *Effective Use of Inspector Resources.* The ADE program is effective if inspectors are relieved from certification activities so that they may perform technical and surveillance functions more efficiently. The program requires that assigned inspectors gain a close and expert knowledge of the operator's aircraft, manuals, procedures, management personnel, and training programs. Surveillance is conducted primarily as an integral part of the assigned inspector's everyday activities and is supplemented by planned inspections conducted by geographic surveillance units. Operator compliance with airman certification requirements, operating regulations, and safe operating practices can be achieved through a close working relationship between inspectors assigned to the ADE program and operator personnel.

B. *Airman Training and Certification.* The ADE program is a means of assuring the continued qualification and proficiency of airmen trained and certified in the operator's training program.

C. *Safe Operating Practices.* The ADE program is a means of continuously monitoring the operator's flight operations and training programs to detect and correct (with the operator's cooperation) potential problems which could adversely affect safety.

415. PROGRAM DESCRIPTION. The ADE program was established under the provisions of Part 183 for the purpose of delegating certification authority and responsibility to select employees of complex Part 121 and Part 135 operators. The program is designed for those operators with sophisticated training capabilities, highly trained personnel, and a large volume of certification activity. The ADE program is based on the assumption that a candid relationship exists between the operator and the FAA. The program is comprised of employees known as aircrew program designees (APD's) who conduct certification under the supervision of FAA inspectors, known as aircrew program managers (APM's). Both APD's and APM's are selected for their experience, knowledge, and professional standing, in the interest of maintaining high certification standards. An APD candidate is selected from the ranks of the operator's proficiency check airmen and is given training in FAA policies and certification procedures before being designated as an APD (see section 3 of this chapter). An APM candidate is selected for knowledge of, and experience with, airman certification and air carrier training programs. Before being assigned APM duties, an APM is trained by the operator to qualify as a pilot-in-command (PIC) and as a fully-qualified check airman in one of the operator's aircraft. If the ADE program includes flight engineer APD's, the APM is trained by the operator to qualify as a flight engineer. An APM can exercise effective quality control over the operator's programs by having an expert knowledge of the operator and the operator's programs and by resolving problems from an informed and knowledgeable perspective.

417. GUIDELINES FOR ESTABLISHING AN ADE PROGRAM. POI's, certificate-holding district office (CHDO) managers, and regional flight standards division (RFSD) managers should consider establishing an ADE program when the volume of airman certification work generated for one or more types of aircraft used by an operator makes the program beneficial. One indication of the need for an ADE

program is the number of aircraft in an operator's fleet; however, this number is only an indicator. The following items usually justify the establishment of an ADE program:

A. *Certification Activity.* As a guideline, 40 complete airman certification or type rating actions on a specific aircraft type annually is usually sufficient activity to justify establishing an ADE program. The number 40 has been established because it roughly approximates 1 year of work for an inspector. Circumstances vary widely, however, from operator to operator, and each situation must be individually analyzed to determine if establishing an ADE program is beneficial to both the FAA and the operator for a particular aircraft. Such factors as multiple crew domiciles, travel time to and from training sites, the complexity of the operator's aircraft, and the complexity of the operator's type of operation, all affect the analysis. For example, an operator using a complex aircraft in international operations may justify the need for an ADE program, with considerably less than 40 certification actions per year on that aircraft.

B. *Expert Training.* In many cases, the training received by an inspector when qualifying as an aircrew program manager (APM) justifies the program when certification activity alone does not. This is particularly true when new aircraft designs or new derivatives of existing designs are initially introduced. APM training provides a level of expertise that may not otherwise be available to the FAA. Such training enables the APM to effectively advise the certificate manager concerning the approval of complex operations and training programs. The training also allows the APM to establish an effective surveillance program. When considering an ADE program, POI's and FSDO managers should analyze the benefits to be gained from the expert knowledge an APM can provide.

C. *Future Requirements.* When inspectors evaluate the need for an ADE program, future requirements must be considered. For example, when an operator introduces a new aircraft into service, the FAA often experiences an exceptionally high demand for airman certification work and a need for expert surveillance of operations with that aircraft for the first few years the aircraft is operated. In such cases, the FAA can often benefit by anticipating the need to establish an ADE program as the aircraft is entered into service.

(1) CHDO and RFSD managers shall ensure that APM positions are created, that inspectors are selected, and that the positions will be filled in time for the chosen inspector to be sent to initial cadre training.

(2) It is particularly important that APM candidates be required to attend initial cadre training along with the operator's employees and that the APM candidates participate in the flight standardization board (FSB) determinations concerning type rating and training program requirements.

419. OPERATOR QUALIFICATION FOR AN ADE PROGRAM. In order to qualify for participation in the ADE program, an operator must be a Part 121 or a Part 135 operator. The operator must have a history of satisfactory compliance with the FAR's and safe operating practices and must have also sustained a direct and open relationship with the FAA. Inspectors should ensure that operators requesting participation in an ADE program are willing to do the following:

- Participate in the ADE program and bear the expense for training APM's and maintaining their currency

- Extend privileges and courtesies to APM's beyond those afforded aviation safety inspectors (ASI's) not assigned as APM's (These privileges must include all privileges the operator grants to its own check airmen, except that of acting as PIC of an aircraft in flight. For example, APM's must be granted the same authority to operate the controls of flight simulators and flight training devices as the authority the operator grants to its own check airmen.)

- Enter into a negotiated written agreement with the FAA as to how the ADE program is to be initiated, conducted, and, if necessary, terminated

420. - 430. RESERVED.

[PAGES 5-243 THROUGH 5-254 RESERVED]

SECTION 2. ADE PROGRAM MANAGEMENT

431. GENERAL. This section contains information and guidance to be used by principal operations inspectors (POI's) and aircrew program managers (APM's) when administering an operator's aircrew designated examiner (ADE) program. This section also contains information on the general structure of the ADE program and definitions of the duties and responsibilities of the individuals involved with the program.

433. ADMINISTRATIVE STRUCTURE OF AN ADE PROGRAM. Flight standards district offices (FSDO's) that hold certificates with ADE programs may be organized in a variety of ways. Regional flight standards division (RFSD) managers may structure the administration of an ADE program to accommodate local conditions. The following individuals have primary roles in an ADE program:

A. *Certificate Manager.* The certificate manager is the manager of the certificate management office (CMO) that provides FAA oversight for the operator. The certificate manager is responsible for all matters concerning the administration of the ADE certificate.

B. *Principal Operations Inspector (POI).* The POI is the operations inspector who has the authority and responsibility for all operational matters of the ADE program. The POI reports to, and is directly responsible to, the certificate manager. The organization of the operations unit below the level of POI is left to the discretion of the POI with the concurrence of the certificate manager and the RFSD manager. All operations personnel assigned to the ADE program report to the POI.

C. *Aircrew Program Managers (APM's).* APM's are appropriately rated operations inspectors assigned to manage the certification and surveillance of the operator's airmen on specific aircraft.

435. RESPONSIBILITIES OF POI's. POI's are responsible for all operational matters concerning the administration of the operator's certificate, including the management of the ADE program. This responsibility includes, but is not limited to, the following:

A. *Achievement of Program Objectives.* The POI is responsible for measuring, analyzing, and ensuring that the ADE program meets its objectives.

B. *FAA-Operator Relations.* The POI is responsible for establishing policies and procedures for operations inspectors in relation to the operator. This responsibility entails not only coordinating administrative policies and functions, such as scheduling, but also establishing and maintaining effective working relations between operations inspectors and operator personnel.

C. *Supervision of APM's.* The APM is responsible for reporting to the POI on all technical matters concerning the ADE program. The POI's supervision of APM's includes the following:

(1) POI's are responsible for the technical and administrative supervision of APM's, including the preparation of APM employee performance reports. District office managers and the RFSD manager shall organize the district offices so that effective supervisory and reporting relationships between POI's and APM's are established.

(2) The APM position requires a high degree of independence, specialization, expertise, and flexibility. An APM usually requires only broad guidance from the POI. On occasion, a POI may be required to provide detailed and specific guidance to standardize APM activities and to implement national direction and guidance.

D. *Resource Management.* POI's and certificate-holding district office (CHDO) management are responsible for recommending the initial establishment of an ADE program. A POI is responsible for identifying APM resource requirements and for coordinating with the certificate manager, FSDO manager, and the RFSD to ensure that these requirements are satisfied. These resource management duties include, but are not limited to, the following:

(1) *Monitor APM Workloads and Assignments.* An APM position is initially established on the assumption that the APM workload will fully occupy the assigned inspector. A POI is responsible for monitoring APM workloads and for

recommending the addition or deletion of the APM and assistant APM positions as workloads change.

(a) When an APM's duties, as defined in this handbook, require less than 75% of the APM's available time, the POI should consider the assignment of additional duties to the APM. For example, an APM may be assigned duty as an assistant APM on another type of aircraft, or duty as an assistant POI.

(b) When an APM's duties, as defined by this handbook, exceed 90% of the APM's available time, the POI should consider the assignment of an assistant APM for the particular aircraft type.

(c) As discussed previously in this chapter, 40 complete certifications a year approximates a year of inspector work. When the number of certification actions approaches 70, 110, or 150, there is reason for the POI to consider appointing additional assistant APM's. POI's are responsible for projecting trends at least 3 years ahead and for making appropriate manpower resource level forecasts and budget forecasts.

(2) *Oversee Administrative Support Requirements.* The POI is responsible for both ensuring that APM administrative support requirements are identified and for coordinating those requirements with the certificate manager to obtain the necessary support. APM's should not be assigned administrative tasks or other duties such as answering complaints or conducting incident investigations and enforcement activities outside of their assigned program. Such duties are more appropriately assigned to assistant POI's or other inspectors. This provision is not intended to relieve APM's from the responsibility for processing enforcement cases when the APM has observed noncompliance during the course of assigned duties. It is also not intended to relieve the APM from administrative duties directly related to the ADE program.

(3) *Oversee APM Training Requirements.* The POI shall ensure that APM's are scheduled for, and receive, the required aircraft training from both the operator and the FAA. The POI shall identify and coordinate through the certificate manager any requirements other than aircraft training requirements with district and regional office management. POI's are responsible for projecting needed manpower resource levels and training requirements at least 3 years ahead.

(4) *Obtain Support Services and Supplies.* The POI shall establish channels to obtain the services of qualified inspectors to support APM programs, when necessary. POI's shall coordinate with certificate managers to ensure that APM's are provided with adequate automated data processing support and are supplied with computer-generated reports.

E. *Coordination with Geographic Surveillance Units.* POI's are responsible for establishing channels and procedures for communicating with those geographic units responsible for conducting surveillance on the operator.

437. RESPONSIBILITIES OF APM's. An APM reports directly to the POI and is the focal point for all technical matters and surveillance pertaining to the assigned aircraft. The APM manages the portion of the ADE program relating to the APM's assigned aircraft. These duties include, but are not limited to, the following:

A. *Airman Certification.* An APM is responsible for ensuring that airman certification standards prescribed by the FAR's and this handbook are maintained in the ADE program. The APM recommends candidates for selection as APD's and is responsible for training and qualifying the APD's in the conduct of airman certification. The APM maintains certification standards through an active program of meetings and surveillance. To ensure continued, firsthand knowledge of an operator's program and certification activities, an APM shall personally conduct a minimum of three certification actions (oral tests or flight tests) each quarter.

B. *Check Airmen.* APM's shall ensure that high standards are maintained in the operator's proficiency and line check program by developing and maintaining active surveillance of the operator's check airmen. When possible, an APM or assistant APM shall observe each check airman performing check airman duties during the initial qualification for check airman. The initial check airman observation may be conducted by a qualified inspector when workload prevents an APM from personally performing the observation.

NOTE: The geographic inspector must receive approval from the POI or the APM before conducting an initial

check airman observation requested by the operator. The inspector must be familiar with the procedure established by the POI, which allows a successful check airman candidate to be scheduled immediately.

(1) An APM shall establish programs to ensure that each check airman is observed at least once a year. Before a check airman is designated, the APM shall determine the geographic unit that will have surveillance responsibility for that airman. The geographic unit shall be notified of the check airman designation so that an annual check airman observation can be made a "P" item in the Program Tracking and Reporting Subsystem (PTRS) system. This requirement applies to both proficiency and line check airmen.

(2) In addition, each year an APM shall personally conduct a number of inspections, which shall be made "P" items on the APM's work program, to include the following:

- At least four inspections (preferably no-notice) of the operator's check airmen conducting proficiency checks
- At least four inspections of check airmen conducting line checks (preferably no-notice)
- Conduct four proficiency checks

C. *Training Programs.* An APM is responsible for reviewing training programs for assigned aircraft and, when appropriate, for recommending initial and final approval to the POI. An APM is responsible for ensuring the ongoing quality of the operator's training program. APM's shall conduct direct surveillance and monitor an operator's actions when students either do not progress as scheduled or fail proficiency tests. An APM is responsible to the POI for conducting surveillance and for re-evaluating the adequacy of the assigned aircraft training program at least once each calendar year. This surveillance shall be entered as a "P" item in PTRS for that APM's annual work program. In this re-evaluation, the APM should identify any deficiencies and recommend changes, where appropriate.

D. *Currency.* An APM shall maintain aircraft qualification and currency, as specified in paragraph 443 in this section. Completion of the required training, or a check in the calendar month before or after the month the training or check is due, is considered to have been completed in the month in which it is due.

E. *Technical Assistance.* An APM is expected to develop expert knowledge of the assigned aircraft. APM's shall review the operator's aircraft operating manuals, policy manuals, MEL's, and procedures as an integral part of the surveillance program. APM's shall advise the POI on manual approvals and coordinate with the Aircraft Evaluation Group (AEG) for technical assistance. APM's shall provide technical assistance on incident, accident, and violation investigations related to their assigned aircraft. The ADE work and training requirements, as described in this handbook, must take priority over other assignments. When ADE requirements have not been accomplished, an APM shall not be assigned other work tasks. This provision is not intended to relieve APM's from the responsibility for filing and processing enforcement cases when they have observed noncompliance during the course of their assigned duties.

F. *En Route Surveillance.* APM's are responsible for ensuring a high level of aircrew performance through en route surveillance on the assigned aircraft type.

(1) *Determine Geographic Unit Responsibility.* APM's shall determine which geographic units have surveillance responsibility for aircrew domiciles of the assigned aircraft. From the tables presented in volume 6 of this handbook, the APM shall determine the desired number of observations and the proportion required from each aircrew domicile. The APM shall ensure that this information is made available to each geographic unit supervisor through the POI by August 1 of each year so that the supervisor can construct a work plan for the next fiscal year.

(2) *Conduct En Route Surveillance.* APM's shall personally conduct en route surveillance each quarter to maintain firsthand knowledge of the operator's line operations. These observations shall be entered as "P" items on the APM's work program.

(3) *Monitor En Route Inspection Program.* An APM shall monitor and analyze the effectiveness of the en route inspection program for the operator and for the assigned aircraft on a continuing basis. For example, an APM may conclude that an inadequate number of en route inspections are being conducted in a particular area of operation and recommend increased en route inspections through the POI

to the appropriate geographic unit supervisors. APM's should analyze inspection results for trends that indicate a need for corrective action. The APM shall inform the POI of any trends or deficiencies identified and, if appropriate, recommend that the POI establish a special-emphasis items program for en route inspections conducted on the operator.

(4) *Prepare Annual En Route Inspection Trend Analysis.* The POI, in conjunction with each APM, shall prepare an annual en route inspection trend analysis based on the en route surveillance program. The POI shall provide a copy of the report to the operator. This report should be an analysis of the comments and observations made by inspectors through the PTRS system. The report is not intended to be a statistical account of the number of inspections accomplished, but is intended to serve as an early warning and quality-control tool for both the FAA and for the operator's managers. The report is intended to be a departure point for the negotiations between the POI and the operator on the corrective measures to be taken by the operator.

G. *Training of Geographic Unit Inspectors.* APM's shall participate in a program to train geographic unit inspectors responsible for surveying segments of the program the APM manages. Training must be conducted on the operator's manuals, checklists, and procedures (including cockpit resource management). This training is normally conducted annually with a 60-day prior notification to geographic unit supervisors, so that the appropriate personnel can be scheduled to attend.

H. *Exchange of Information.* APM's are encouraged to promote an interchange of information and ideas with other APM's and inspectors. The APM shall identify inspectors in other district offices who are qualified in the assigned aircraft and who conduct surveillance on the operator. The APM shall, when appropriate, communicate directly with these inspectors and their supervisors. To provide feedback to district offices with geographic surveillance responsibilities for the operator, the APM shall send copies of the annual en route inspection program trend analysis report to those district offices.

I. *Board Representation.* An APM shall serve on the Flight Standardization Board (FSB) and/or the Flight Operations Evaluation Board (FOEB), for their assigned aircraft, when selected. APM's are a preferred resource for these boards.

439. APM QUALIFICATIONS. Before being assigned to the operator's training program, inspectors who are APM candidates must meet the following prerequisites:

- Must be fully qualified as an aviation safety inspector, GS 1825
- Must hold an ATP certificate
- When being considered for a Part 121 aircraft, must hold a type rating in an aircraft of the same group
- When being considered for an APM assignment to a Part 135 aircraft that requires a type rating, must hold a type rating in an aircraft of the same category
- When being considered for an APM assignment to a Part 135 aircraft that does not require a type rating, must hold a class rating in an aircraft of the same category
- When being considered for airplanes requiring a flight engineer, must pass the flight engineer written exam before beginning training with the operator
- Must have served a minimum of 3 years as an aviation safety inspector performing airman certification duties

NOTE: For an inspector being considered for assignment to a Part 121 aircraft, the 3-year experience requirement must have been acquired on a Part 121 aircraft. For candidates being considered for assignment to a Part 135 aircraft, this experience must have been acquired on an aircraft of the same category. The inspector may be given credit for equivalent experience gained in industry as a check airman or as a designated pilot examiner. The inspector may also be given credit for experience in the military as an instructor or flight examiner on an equivalent aircraft.

- Must be willing to remain in the APM assignment for a minimum of 2 years after completion of training

441. APM TRAINING BEFORE DESIGNATION. Before

APM designation, an inspector must satisfactorily complete the same training and qualify to the same standards as flight crewmembers and as check airmen employed by the operator in the assigned aircraft.

A. *Minimum Required Training for APM's.* An APM candidate must complete, to the satisfaction of both the POI and the operator, at least the following segments of the operator's approved training curriculums:

(1) Basic indoctrination training must be completed.

(2) Pilot-in-command (PIC) initial equipment training, must be completed, including type certification, when appropriate. If the operator does not have an initial equipment training curriculum for the aircraft, APM's must complete the PIC transition curriculum for the aircraft. APM's shall complete the flight engineer initial equipment or transition curriculum, when applicable.

(3) Any special training, such as Category II, Category III, or long-range navigation, that is required for qualification as a PIC for the operator, must be completed.

(4) The operator's check airman training for the pilot duty position or for the flight engineer duty position, when applicable, must be completed.

(5) Instead of receiving operating experience (OE), as the operator's flight crewmembers do, the APM candidate will observe at least three on-line flights that are representative of the use of the the aircraft in operations.

(6) An APM candidate is eligible for the advanced simulation provisions of Part 121, Appendix H and may receive the certification flight tests in a level C simulator, when required. Since APM's are not able to accomplish OE, however, the APM must complete at least 2 hours of flight training in the aircraft. This training shall be provided at FAA expense in accordance with established FAA procedures. Every effort should be made to contract with the operator to which the APM will be assigned before obtaining the training from another source.

B. *APM Duties During Training.* During the period in which APM candidates are in training with the assigned operator, they shall not be assigned or perform normal inspector duties.

C. *APM Qualification on a New or Additional Aircraft.* Under limited conditions, an inspector may be assigned as an APM on more than one aircraft. Inspectors should be knowledgeable of the following guidance.

(1) Dual qualification of inspectors assigned to Part 121 aircraft is discouraged. An inspector may not be dual-qualified on a Part 121 airplane without the written permission of the responsible division manager.

(2) An APM assigned to Part 135 turbojet or other aircraft requiring a type rating may only be assigned to two aircraft types.

(3) An APM assigned to Part 135 aircraft other than the transport and commuter category family of aircraft, may be assigned to two families of aircraft, as defined in volume 3, chapter 2, section 2, paragraph 285 of this handbook. In the multiengine, general-purpose airplane family other than transport and commuter category, an assigned APM may maintain qualification in two equivalent series of aircraft, such as the Cessna and Piper series.

(4) Should it become necessary to qualify an APM on a new aircraft or a second type of aircraft, the APM must complete all of the requirements of this section for the second aircraft, except for the following:

- Basic indoctrination training
- That portion of check airman training not specific to the second airplane type

D. *Responsibility for Training.* The operator is responsible for providing all required training except 2 hours of flight training in the airplane provided at FAA expense. The FAA shall bear the cost of any lodging and per diem incurred by the APM.

443. MAINTENANCE OF APM QUALIFICATIONS. APM's must complete the same proficiency, currency, and recurrent training requirements as the operator's check airmen, with the exception of line checks.

A. *Recurrent Training.* Recurrent training for an APM shall consist of the same ground and flight training curriculum segments used by the operator, including the proficiency check requirements for a PIC and flight engineer, when

applicable. APM's should also complete the FAA air carrier operations inspector job function recurrent training, a minimum of every 24 calendar months (course number 21621). Proficiency checks of APM's shall be conducted by an inspector designated by the POI or by an APD being observed by another inspector. A company-qualified check airman will occupy the co-pilot's position as a safety pilot during all APM proficiency checks conducted in the aircraft.

NOTE: FAR 121.453 specifies the currency requirements for a flight engineer. The POI and the operator should include a proviso in the memorandum of understanding to allow the APM to maintain currency. One method would be to provide simulator periods every 6 months for training and checking.

B. *Check Airman Qualification.* APM's shall attend the recurrent check airman training that the operator provides for check airmen.

C. *Landing Currency.* APM's shall maintain landing currency (3 landings every 90 days) in each assigned aircraft for which a type rating is required. For other aircraft, the APM shall maintain currency in the assigned category, class, and equivalent grouping of aircraft. It is the operator's responsibility to provide APM's with the opportunity to accomplish landing currency. If the operator uses only a simulator to maintain the APM's landing currency, each quarter the operator shall provide the APM with 2 hours of flight simulator time for manipulating the flight controls. When the operator maintains the APM's currency with a simulator only, the APM must receive 2 hours of flight training in the aircraft each year, at FAA expense, to accomplish landing training. CHDO managers and RFSD managers are responsible for ensuring that APM's receive training in the aircraft. Aircraft training time will be contracted with the APM's assigned operator whenever feasible.

D. *Maintenance of Dual Qualification.* APM's assigned to two aircraft types must be trained and qualified on both aircraft in accordance with the guidance in this handbook and with the operator's approved training program.

E. *Failure to Maintain Qualification and Currency.* APM's who fail to maintain qualification in accordance with this paragraph, shall not perform inspector duties until the delinquent training has been accomplished.

(1) Training completed in the month before or the month after it is due is considered to have been accomplished in the month due.

(2) POI's shall not designate APD's when the operator has not provided the APM with the opportunity to remain qualified and current. The POI and district office management must take positive action to ensure that the FAA responsibilities for keeping APM's qualified and current are fulfilled. When an APM is transferred or retires, the POI shall obtain the services of qualified inspectors to perform the APM's duties on a temporary basis until the APM position can be refilled. If adequate supervision of the APD's cannot be maintained, the POI shall take action to withdraw the APD designations.

445. TRANSITION UPON REASSIGNMENT OF APM'S. When an APM is reassigned, POI's, office managers, and regional flight standards divisions (RFSD's) are responsible for assuring the continuity of the ADE program. When the need of a replacement for a reassigned APM is known, a replacement inspector shall be identified and entered into training as soon as it is practical. Outgoing APM's shall complete the renewal requirements for those APD's whose designations will expire within 90 days of the date of reassignment from APM status. If an APM position is vacant for any substantial period of time, the office manager, POI, and regional flight standards division shall detail a qualified inspector to monitor the program. If the APM position remains unfilled for 6 months, the office manager shall consider withdrawing the ADE program for that aircraft.

447. REMOTE TRAINING FACILITIES. Operators with ADE programs may have training facilities located outside the CHDO's area of geographic responsibility. APM's working in these programs shall be assigned to the certificate holding office. These APM's shall regularly travel to the training facility to accomplish APM duties. In some cases, this arrangement may be inefficient, and it may be beneficial to locate the APM in a facility other than the certificate-holding office. The POI and certificate-holding office manager shall evaluate the specific circumstances, particularly the time and means of commuting to the remote site. If the travel time between the certificate-holding office and the training facility is too lengthy for an APM to travel to the training site and to perform APM duties in the same day, locating the APM in a district office closer to the training facility should be considered. Another consideration

is whether the APM can perform en route surveillance on the assigned aircraft during travel to and from the training location. When the certificate-holding office and training facility are in the same region, the recommendation for an APM's remote placement shall be forwarded to the RFSD. When the certificate-holding office and training facility are in different regions, the recommendation shall be forwarded through the RFSD to AFS-510 for approval. If AFS-510 concurs with the recommendation, AFS-510 shall ensure that the necessary support for the remote APM is provided by the region in which the APM is to be located.

449. OPERATOR RESPONSIBILITIES. The operator under an ADE program must assume additional responsibilities. Each operator participating in the program must be willing to undertake and fulfill the responsibilities that follow.

A. *FAA-Operator Relations.* The ADE program is based on the assumption that an open relationship between the operator and the FAA can be maintained. The operator must be willing to maintain this open working relationship and be willing to give the APM complete access to facilities, working-level personnel, and managers. The operator must be willing to accept input from the POI and APM concerning procedures, manuals, and training programs and to seek mutually acceptable solutions for deficiencies at the working level. The operator must be willing to cooperate fully with incident, accident, and violation investigations. In this relationship, compliance is usually achieved with minimum use of enforcement action and is advantageous to both the operator and the FAA. When an operator is no longer willing to maintain an open relationship, the ADE program must be terminated.

B. *APM Support.* The operator is obligated under the ADE program to assume the responsibility and costs for qualifying and maintaining the APM's currency in the assigned aircraft. The operator must be willing to cooperate in scheduling so that APM qualification and currency requirements are accomplished in a timely manner.

C. *Information.* The operator must agree to make the following information available to the POI and APM:

- Projected and revised training schedules
- Projected and revised APD schedules
- Notification of any failures and withdrawals from training
- Actions taken on students who fail or who are withdrawn from training
- A report of additional training provided to airmen in excess of approved training hours
- A report of failed proficiency and line checks

451. CERTIFICATE-HOLDING OFFICE MANAGER RESPONSIBILITIES. Managers of certificate-holding offices are responsible for establishing effective administrative systems to support ADE programs. This support shall include, but is not limited to, the following:

A. *Certification Paperwork.* Office managers are responsible for establishing administrative procedures for the expedient and efficient processing of certification paperwork within the certificate-holding office. As much of the processing as possible should be accomplished by trained administrative personnel and not by inspectors, APM's, or POI's. This does not relieve APM's from the responsibility of ensuring that APD's accurately and punctually complete certification paperwork. Flight standards offices are not required to maintain hard copies of certification paperwork since the PTRS serves as a record of certification activity.

B. *Data Processing Support and Standards Reports.* The office manager is responsible for establishing the administrative procedures for entering APM and APD data into the PTRS. At the close of each quarter, the POI and office managers shall have three reports prepared. These reports are needed by APM's for management of their work programs. These reports are designed to be generated through ad hoc procedures from the PTRS data base. In the future, these reports shall be available as standard reports. The three reports are as follows:

(1) *APD Surveillance Report.* An APD surveillance report, showing the surveillance accomplished on each APD during the past 4 quarters, should address the following subjects:

- Operator
- Aircraft type and name of each APD assigned to that aircraft

- Name of each APD
- Type of surveillance (oral/simulator/aircraft), and date of surveillance
- Starting date of report
- Ending date of report

(2) *Check Airman Surveillance Report.* A check airman surveillance report, showing the surveillance accomplished on check airmen during the past 4 quarters, should be formatted as follows:

- Operator
- Aircraft type and number of approved check airmen by specialty (proficiency check or line check)
- Names of check airmen observed, type of surveillance (proficiency check or line check), and date of surveillance
- Starting date of report
- Ending date of report

(3) *Aircraft Activity Report.* A quarterly activity report should be prepared for each aircraft in the operator's ADE program (see figure 5.7.2.1. for format).

453. REGIONAL FLIGHT STANDARDS DIVISION (RFSD) RESPONSIBILITIES.

A. *Program Approval.* RFSD managers are responsible for the approval of the initial establishment of ADE programs for operators located within their regions. The RFSD should give written notification of any such action to AFS-200 and AFS-500.

B. *Resources.* RFSD managers are responsible for ensuring that ADE programs are allocated adequate personnel and budget resources to function effectively.

(1) Sufficient resources must be allotted for administrative support and for the training of APM's, in accordance with the requirements of this handbook.

(2) An adequate number of APM's, assistant APM's, assistant POI's, ASI's, and clerical personnel must be provided to accomplish the certificate management and APM functions described in this handbook, in an effective and timely manner.

(3) Personnel and budget forecasts for a 3-year period shall be prepared and revised annually. Adequate provisions for personnel turnover because of promotions and retirements must be made. In addition, the need for additional positions due to growth in operator programs must be forecast.

C. *Components of the Program Assessment.* The RFSD shall conduct periodic reviews of each ADE program. The purpose of these reviews is to ensure that the ADE program is effectively managed and that the program meets its stated objectives. These reviews shall be conducted as often as necessary, but not less than once each 36 months. A checklist for this purpose is provided in figure 5.7.3.2.

(1) *Assessment Team Members.* The program assessment team shall consist of five members:

- A team leader from within the region, designated by the regional division manager
- A headquarters representative, designated by the AFS-500 division manager
- A POI of another operator having an ADE program, preferably from outside the region
- Two APM's from other programs, preferably from outside the region

(2) *Four-Part Program Assessment Report.* The program assessment report shall consist of at least four parts:

- An assessment of the operator's training program to determine if airmen are being adequately trained to perform in the operating environment
- An assessment of the APD's and check airmen to determine if the required standards are being maintained

- An assessment of the certificate holder's operating practices to determine if there are any undetected trends which might affect safety (particular attention should be given to manuals, checklists, and operating procedures)

- An assessment as to whether or not the operations portion of the certificate unit is performing effectively and a determination as to whether the division, certificate manager, POI, assistant POI's, and APM's have complied with the guidance of this chapter

(3) *Major Findings.* The assessment contained in the program assessment report shall be divided into major and minor findings. Major findings consist of the following items:

- Operator deficiencies which could adversely affect safety and which have gone undetected, unreported, or for which the operator has failed to implement effective corrective action

- Deficiencies in the management of the ADE program which, in the opinion of the assessment team, have a major impact on the effectiveness of the program

(4) *Minor Findings.* The minor findings contained in the assessment report are those deficiencies which APM's or POI's have recognized and are either in the process of being corrected or are ones which can readily be corrected. Minor findings should be brought to the attention of the appropriate individual and resolved as they are found.

(5) *Oral Out-Briefing.* An oral out-briefing shall be given to the certificate manager, the POI, and the APM's. A written report of the assessment shall be prepared, containing the identification of each major finding and the recommended corrective action. A review of the extent and nature of minor findings shall be presented, but the identification of each minor finding and recommended action is unnecessary. A copy of the report shall be furnished to the certificate manager, the regional division manager, AFS-200, and AFS-500. A separate out-briefing shall be conducted for the operator. This out-briefing should cover items of concern to the operator.

455. ESTABLISHING AN ADE PROGRAM. Either the operator or the FAA may initiate discussions about the establishment of an ADE program. The assigned POI should discuss the contents of this chapter in detail with the operator. Program requirements, limitations, and authorizations should be completely understood by the operator. When an operator decides to participate in an ADE program, a "memorandum of understanding" shall be used as the basis of agreement for negotiations and shall be mutually prepared by the POI and the operator. A sample memorandum of understanding is provided in figure 5.2.5.3. This sample is provided only as an example. Since each operator has different training programs and requirements, each memorandum of understanding will be unique according to the needs of the operator and the FAA. The memorandum of understanding must be signed by an appropriate official for the operator and by the POI. The memorandum of understanding should contain the reasons for establishing the ADE program and the aircraft types involved and an overview of how the requirements of the program will be met. A copy of this memorandum, any appropriate attachments, and the office manager's recommendations shall be forwarded to the RFSD for review. If the RFSD manager determines that the ADE program should be established, approval of the program shall be indicated by the RFSD stamping or typing the word, "APPROVED," on the memorandum of understanding. The RFSD manager shall sign and date the memorandum of understanding and return it to the certificate-holding office files for retention in the ADE program files. When an ADE program is approved, the flight standards division shall forward a copy of the memorandum of understanding to AFS-200 and AFS-500. If the RFSD manager determines the ADE program should not be established, the manager shall forward a letter to the appropriate office manager and return the memorandum of understanding. The letter must contain an explanation of the reasons for not establishing the ADE program.

457. PROGRAM REVISIONS. Revisions to approved ADE programs are required for a variety of reasons, such as mergers and equipment changes. The POI is responsible for analyzing the effects of such changes and for taking appropriate action, including negotiating a revised memorandum of understanding. Some changes, such as mergers, may affect more than one operator. Recommendations for changes affecting more than one operator in the same region shall be forwarded to the RFSD for action.

458. - 468. RESERVED.

FIGURE 5.6.2.1.

ADE PROGRAM QUARTERLY ACTIVITY REPORT

Aircraft Type:_____
Operator Name:_____
Dates:_____

PILOT CERTIFICATION		AIRCRAFT ATP/TR 1510/1514	ORAL ATP/TR 1511/1515	SIMULATOR ATP/TR 1512/1516
Conducted By:	APM	_____	_____	_____
	ASI	_____	_____	_____
	APD	_____	_____	_____
	Totals:	_____	_____	_____

F/E CERTIFICATION		AIRCRAFT ATP/TR 1510/1518	ORAL ATP/TR 1511/1519	SIMULATOR ATP/TR 1512/1520
Conducted By:	APM	_____	_____	_____
	ASI	_____	_____	_____
	APD	_____	_____	_____
	Totals:	_____	_____	_____

CHECK AIRMAN SURVEILLANCE - PTRS ACTIVITY CODE 1631

No. Conducted By APM _____ No. Conducted By ASI _____ Total: _____

PROFICIENCY CHECK AIRMAN SURVEILLANCE - PTRS ACTIVITY CODE 1632

No. Conducted By APM _____ No. Conducted By ASI _____ Total: _____

FIGURE 5.6.2.1.

ADE PROGRAM QUARTERLY ACTIVITY REPORT (Cont'd.)

LINE CHECK AIRMAN SURVEILLANCE - PTRS ACTIVITY CODE 1633

No. Conducted By APM _____ No. Conducted By ASI _____ Total: _____

APD SURVEILLANCE - PTRS ACTIVITY CODE 1672

No. Conducted By APM _____ No. Conducted By ASI _____ Total: _____

FIGURE 5.6.2.2.

PROGRAM ASSESSMENT CHECKLIST

AREA I. OPERATOR'S TRAINING PROGRAM. An assessment of the operator's training program shall be conducted.

A. Are the airmen trained and certified in the program qualified for and proficient in the operations conducted?

B. Does the operator have a consistent cockpit management philosophy which is applied to all aircraft operated?

AREA II. APD AND CHECK AIRMAN PERFORMANCE. An assessment of the APD's and the check airman's performance shall be conducted to determine if the required standards are being maintained.

A. Is the level of competence required for the check airman and APD designation adequate?

B. Are the APD's complying with the airman certification regulations and the guidance of this handbook?

C. Are the check airmen complying with the regulations and guidance of this handbook?

AREA III. OPERATING PRACTICES. An assessment of the certificate holder's operating practices shall be made to determine if undetected trends are present which might affect safety.

A. Is the policy and direction provided by the operator clear and adequate?

B. Do crews adhere to the policy and guidance provided by the operator, the regulations, and safe operating practices?

C. Are problems or trends present that have not previously been recognized and documented?

D. Are corrective actions being taken to solve previously identified problems?

E. If there are previously identified problems, does the team judge the corrective actions as likely to be effective and sufficient?

AREA IV. ADE PROGRAM MANAGEMENT. An assessment of the operations portion of the certificate unit will be made to determine if the APM is performing effectively in managing the ADE program.

A. Are APM's able to concentrate on technical questions, APD training, and the surveillance of APD's and check airmen, or are they required to concentrate on certification activities and enforcement duties?

B. Have APM's gained an expert knowledge of the operator's aircraft, manuals, procedures, management personnel, and training programs?

FIGURE 5.6.2.2.

PROGRAM ASSESSMENT CHECKLIST (Cont'd.)

C. Are APM's personally conducting a minimum of three certification actions (oral tests or flight tests) each quarter?

D. Are APM's personally conducting the required number of inspections that follow?

- At least four inspections of the operator's check airmen conducting proficiency checks
- At least four inspections of check airmen conducting line checks
- Four proficiency checks

E. Are APM's establishing programs to ensure that each check airman is observed at least once a year?

(1) Are geographic units being notified of check airman designations?

(2) Are the results of check airman observations being monitored and analyzed for trends?

F. Are APM's reviewing training programs for their assigned aircraft, including conducting direct surveillance and monitoring operator's actions when students either do not progress as scheduled or fail proficiency tests?

G. Are APM's monitoring and analyzing the effectiveness of the en route inspection program on both the operator and the assigned aircraft on a continuing basis?

(1) Are APM's determining the geographic units which have surveillance responsibility for aircrew domiciles of the assigned aircraft and providing geographic unit supervisors with information to establish "P" items by August 1 of each year?

(2) Are APM's analyzing inspection results for trends and other areas that indicate a need for corrective action?

(3) Are en route inspection trend analysis reports prepared by the POI in conjunction with each APM?

(4) Are copies of the report provided to and discussed with the operator?

(5) Are APM's identifying and training geographic unit inspectors who have specific surveillance responsibilities for segments of the program the APM manages?

(6) Are APM's exchanging information and ideas with other APM's and inspectors?

FIGURE 5.6.2.2.

PROGRAM ASSESSMENT CHECKLIST (Cont'd.)

H. Applying the guidance of volume 5, chapter 5, section 2 of this handbook (40 airman certification actions per year), how many APM's should be assigned to the program?

(1) Is this number too many or too little for the conditions found? Are there other factors such as the need for expert training present?

(2) Have future factors been identified and planned for?

I. Is the operator willing to participate in the program?

(1) Is the operator providing the APM's with the training previously agreed to?

(2) Is the operator extending privileges and courtesies to APM's required as a condition of the program?

(3) Is the operator giving APM's unrestricted access to facilities, working-level personnel, and managers?

(4) Is the operator willing to accept input from the POI's and APM's concerning procedures, manuals, and training programs and to seek mutually acceptable solutions for deficiencies at the working level?

(5) Is the operator willing to cooperate fully with incident, accident, and violation investigations?

(6) Is the operator cooperating in scheduling so that APM qualification and currency requirements are accomplished in a timely manner?

(7) Is the operator providing the required information to the POI and APM's?

J. Is there a memorandum of agreement between the operator and the certificate-holding office?

(1) In the team's opinion, does the memorandum effectively define the responsibilities of both parties?

(2) Are these responsibilities being faithfully discharged?

(3) Has the memorandum of understanding been kept up to date?

K. Is the operations unit effectively managed?

(1) Is the certificate manager informed about issues, problems, and corrective actions within the ADE program?

FIGURE 5.6.2.2.

PROGRAM ASSESSMENT CHECKLIST (Cont'd.)

(2) Are both the authority and responsibility for accomplishing the administrative functions related to management of the certificate and to the ADE program, vested in one senior operations inspector, who reports to and is directly responsible to the certificate manager?

(3) In the team's opinion, is the organizational structure effective?

(4) How is the operations unit measuring, analyzing, and ensuring that the ADE program meets its objectives?

(5) Have policies and procedures been established for operations inspectors in relation to the operator? In the opinion of the team, are these policies and procedures effective?

(6) Does the office organizational structure ensure that supervisory and reporting relationships between the POI and the APM's are effective?

(7) Have APM resource requirements been analyzed annually and projected 3 years ahead? Has coordination been conducted with the certificate manager, office manager, and the regional flight standards division to ensure that these requirements are satisfied?

(8) Has a budget forecast for 3 years ahead been forwarded to the certificate manager and to the regional flight standards district office?

(9) Have APM administrative support requirements been identified and coordinated with the certificate manager to obtain the necessary support?

(10) Are APM's scheduled for required training from both the operator and from the FAA? Are APM's actually receiving the required training from both the operator and from the FAA?

(11) Were channels established to obtain the services of qualified inspectors in support of APM programs, when necessary?

(12) Are adequate data processing support facilities supplied?

L. Are APM's completing the same training and qualified to the same standards as flight crewmembers and check airmen employed by the operator in the assigned aircraft? Are APM's completing the following training?

(1) Basic indoctrination training?

(2) PIC initial equipment training?

FIGURE 5.6.2.2.

PROGRAM ASSESSMENT CHECKLIST (Cont'd.)

(2) Are both the authority and responsibility for accomplishing the administrative functions related to management of the certificate and to the ADE program, vested in one senior operations inspector, who reports to and is directly responsible to the certificate manager?

(3) In the team's opinion, is the organizational structure effective?

(4) How is the operations unit measuring, analyzing, and ensuring that the ADE program meets its objectives?

(5) Have policies and procedures been established for operations inspectors in relation to the operator? In the opinion of the team, are these policies and procedures effective?

(6) Does the office organizational structure ensure that supervisory and reporting relationships between the POI and the APM's are effective?

(7) Have APM resource requirements been analyzed annually and projected 3 years ahead? Has coordination been conducted with the certificate manager, office manager, and the regional flight standards division to ensure that these requirements are satisfied?

(8) Has a budget forecast for 3 years ahead been forwarded to the certificate manager and to the regional flight standards district office?

(9) Have APM administrative support requirements been identified and coordinated with the certificate manager to obtain the necessary support?

(10) Are APM's scheduled for required training from both the operator and from the FAA? Are APM's actually receiving the required training from both the operator and from the FAA?

(11) Were channels established to obtain the services of qualified inspectors in support of APM programs, when necessary?

(12) Are adequate data processing support facilities supplied?

L. Are APM's completing the same training and qualified to the same standards as flight crewmembers and check airmen employed by the operator in the assigned aircraft? Are APM's completing the following training?

(1) Basic indoctrination training?

(2) PIC initial equipment training?

FIGURE 5.6.2.3.

SAMPLE MEMORANDUM OF AGREEMENT

MEMORANDUM OF UNDERSTANDING
BETWEEN
_____ AIRLINES, INC. & THE FEDERAL AVIATION ADMINISTRATION

This Memorandum of Understanding is based upon guidance found in FAA Order 8400.10, Air Transportation Operations Inspector's Handbook, volume 5, chapter 6. The parties involved are _____ Airlines, Inc. and the Federal Aviation Administration Certificate Management Office, _____. The object of this memorandum is to establish a working agreement for an Aircrew Designated Examiner (ADE) program.

1. The FAA ADE program has been established under the provisions of Part 183 of the Federal Aviation Regulations for the delegation of certification authority and responsibility to selected employees of complex Part 121 operators. The ADE program is comprised of employee(s) of _____ Airlines known as Aircrew Program Designees (APD's) who will conduct airman certification examinations under the supervision of FAA Inspector(s), known as Aircrew Program Managers (APM's). The APM is, in turn, functionally responsible for the surveillance and certification of a specific aircraft. All APM's report directly to the Principal Operations Inspector (POI) on all matters pertaining to the ADE program.

2. The FAA inspector assigned as the POI is responsible for the overall management of the ADE program, including establishing policies and procedures, coordinating, and standardizing the APM's.

3. The ADE program is based upon the requirement that _____Airlines and the certificate management unit maintain an open relationship. _____ Airlines agrees to allow the APM's unrestricted access to facilities, working level personnel and managers. _____ agrees to accept input from the Principal Operations Inspector (POI) and the APM's concerning procedures, manuals and training programs and to seek mutually acceptable solutions for deficiencies at the working level.

A. _____ agrees to actively and continuously measure the effectiveness of its policies and procedures, manuals, and training programs. Through the POI and APM's, the FAA will share its surveillance findings so that _____ is provided an independent assessment to measure the effectiveness of the program.

B. It is mutually understood that in the management of a complex organization such as an airline, technical deviations from the regulations occur, and good operating policies, FAA-approved manuals, checklists, procedures, and training programs become outdated. In accordance with the Administrator's policy on compliance and enforcement, the Certificate Management Office (CMO), _____ agrees to record but defer any enforcement or other action (such as withdrawing approval) on such deficiencies until an attempt to find a mutually acceptable solution is made. Should a mutually acceptable corrective action be found and successfully implemented, no further action on the part of the FAA will be taken. This policy does not, however, extend to the acts of individual employees which actually jeopardize flight safety.

FIGURE 5.6.2.3.

SAMPLE MEMORANDUM OF AGREEMENT (Cont'd.)

C. _____ agrees to enforce its policies and directives by taking appropriate and just disciplinary action against employees who fail to comply. The FAA will take enforcement action against individuals who violate the FAR's and pose an actual threat to passengers or other employees. In order to be fair, however, the CMO, _____ agrees to delay, recommend a sanction in such cases until it determines what action _____ has taken. If, in the POI's opinion, the disciplinary action is appropriate and timely, the POI shall recommend the FAA accept it as an adequate sanction.

D. In order for APM's to function effectively in the ADE program, they require an expert knowledge of the operator's program. _____ agrees to extend privileges to APM's beyond those afforded to aviation safety inspectors (ASI's) not assigned as APM's. These privileges include all privileges that the operator grants to its own check airmen (except that of acting as pilot-in-command (PIC) of an aircraft in flight). For example, APM's must be granted the same authority to operate the controls of flight simulators and flight training devices as the operator grants to its own check airmen.

4. _____ Airlines will provide the APM designee with the training that _____ Airlines provides to its flight crewmembers and check airmen for initial qualification as well as recurrent training requirements. The APM's must complete this training to the mutual satisfaction of _____ Airlines and the POI. Should an APM fail to progress through training satisfactorily, _____ Airlines will provide the same remedial training provided to its own crewmembers. Should the APM continue to fail to reach or maintain a mutually satisfactory standard, the POI shall meet with a designated airline official to resolve the matter. The minimum required training includes:

- Basic indoctrination training
- Initial equipment training (includes type rating and flight engineer rating, if required)
- Any special training (such as CAT I or CAT II procedures, if required)
- Check airman training for the pilot and flight engineer position (if required)

5. The APM candidate (in lieu of OE) must observe, from the cockpit, a minimum of three _____ Airlines line flights. These flights must include two complete revenue trip patterns and involve no less than three days. These flights will require that the APM remain with the aircrew throughout the trip pattern to become familiar with a cross-section of line operations. The APM, during this line observation, will not grade the performance of the _____ crewmembers. The FAA PTRS Data Sheet form completed for these flights will show in the comments section, "Participating in Aircrew Program Manager Training with _____ Airlines in the _____ (specified) aircraft".

6. The APM is eligible for advanced simulation provisions of Part 121, Appendix H and may receive the certification check in a simulator; however, initial training must include 2 hours as PIC in the actual aircraft, and if applicable, actual aircraft training and checking as flight engineer. The cost of aircraft training will be an FAA expense.

FIGURE 5.6.2.3.

SAMPLE MEMORANDUM OF AGREEMENT (Cont'd.)

C. _____ agrees to enforce its policies and directives by taking appropriate and just disciplinary action against employees who fail to comply. The FAA will take enforcement action against individuals who violate the FAR's and pose an actual threat to passengers or other employees. In order to be fair, however, the CMO, _____ agrees to delay, recommend a sanction in such cases until it determines what action _____ has taken. If, in the POI's opinion, the disciplinary action is appropriate and timely, the POI shall recommend the FAA accept it as an adequate sanction.

D. In order for APM's to function effectively in the ADE program, they require an expert knowledge of the operator's program. _____ agrees to extend privileges to APM's beyond those afforded to aviation safety inspectors (ASI's) not assigned as APM's. These privileges include all privileges that the operator grants to its own check airmen (except that of acting as pilot-in-command (PIC) of an aircraft in flight). For example, APM's must be granted the same authority to operate the controls of flight simulators and flight training devices as the operator grants to its own check airmen.

4. _____ Airlines will provide the APM designee with the training that _____ Airlines provides to its flight crewmembers and check airmen for initial qualification as well as recurrent training requirements. The APM's must complete this training to the mutual satisfaction of _____ Airlines and the POI. Should an APM fail to progress through training satisfactorily, _____ Airlines will provide the same remedial training provided to its own crewmembers. Should the APM continue to fail to reach or maintain a mutually satisfactory standard, the POI shall meet with a designated airline official to resolve the matter. The minimum required training includes:

- Basic indoctrination training
- Initial equipment training (includes type rating and flight engineer rating, if required)
- Any special training (such as CAT I or CAT II procedures, if required)
- Check airman training for the pilot and flight engineer position (if required)

5. The APM candidate (in lieu of OE) must observe, from the cockpit, a minimum of three _____ Airlines line flights. These flights must include two complete revenue trip patterns and involve no less than three days. These flights will require that the APM remain with the aircrew throughout the trip pattern to become familiar with a cross-section of line operations. The APM, during this line observation, will not grade the performance of the _____ crewmembers. The FAA PTRS Data Sheet form completed for these flights will show in the comments section, "Participating in Aircrew Program Manager Training with _____ Airlines in the _____ (specified) aircraft".

6. The APM is eligible for advanced simulation provisions of Part 121, Appendix H and may receive the certification check in a simulator; however, initial training must include 2 hours as PIC in the actual aircraft, and if applicable, actual aircraft training and checking as flight engineer. The cost of aircraft training will be an FAA expense.

FIGURE 5.6.2.3.

SAMPLE MEMORANDUM OF AGREEMENT (Cont'd.)

- Service as a Check Airman for a minimum of 1 year before designation as an APD, subject to reduction at the discretion of the POI and the APM (check airman experience in other types of aircraft and with other operators may be credited)

- Possess an above average of knowledge, ability and experience

- A good record of compliance with the Federal Aviation Regulations (isolated and unrelated violations or incidents not disqualifying)

9. The APD candidate will submit a complete statement of professional qualifications on FAA Form 8710-6, "Examiner Designation and Qualification Record." The APM shall review the qualifications and if found eligible, will recommend to the POI that the candidate be designated as an APD. An APD selection must be mutually agreed upon by the APD, the APM, and _____ Airlines.

10. The APD's will be authorized to perform airman certification on only one type of aircraft. This authority is limited to the certification of graduates of _____ Airline's FAA-Approved Training Program.

11. All certification conducted by the APD shall be limited to the privileges of the APD's airman certificate and the APD's Certificate of Authority in the assigned aircraft. The APD may conduct pilot oral examinations and flight tests for ATP certificates, and for category, class and type ratings to be added to an ATP certificate. Flight engineer APD's may conduct oral examinations and flight tests for flight engineer certificates and for the addition of a class rating to a flight engineer certificate.

A. An APD may not conduct an evaluation of any applicant which the APD has instructed for the certificate or rating to be issued unless specifically authorized by the POI or the APM. In addition, an APD may not conduct FAA written tests, special medical evaluations, test for waivers, or any test for competency under Section 609(a) of the Federal Aviation Act. Any privileges and limitations listed on the certificate of authority issued outside an ADE program do not apply to the ADE program.

B. The APM shall train and evaluate the prospective APD on APD duties and responsibilities. The APD shall be trained and evaluated in at least the following areas:

- The knowledge, abilities, and skill requirements for the original issuance of the ATP certificate and applicable added ratings

- The procedures, methods and techniques associated with administering the required certification tests

- The responsibilities, authority, and limitations under the FAR's and FAA Order 8400.10, Air Transportation Operations Inspector's Handbook

FIGURE 5.6.2.3.

SAMPLE MEMORANDUM OF AGREEMENT (Cont'd.)

- The usage of FAA forms and job aids associated with the particular job function
- The administrative procedures and supervisory relationships that exist in the ADE program
- The understanding that _____ Airline policies, economics, union affiliation and seniority with _____ Airlines are not relevant issues when determining the qualification of an airman
- After formal training, must observe the APM conduct a complete oral test, flight test and the necessary briefings as well as the completion of the certificate paperwork
- The APM shall conduct regular meetings with the APD's for the purpose of maintaining an effective working relationship, clarifying of any problem areas, and for attending crewmember safety meetings held by _____Airlines. (The APM shall ensure that required supplies and materials are available to the APD.)

The following signatures signify agreement to this memorandum of understanding and its contents:

_____

_____

_____

[PAGES 5-276 THROUGH 5-288 RESERVED]

SECTION 3. AIRCREW PROGRAM DESIGNEES (APD's)

469. GENERAL. This section contains information and guidance to be used by principal operations inspectors (POI's) and inspectors concerning aircrew program designee (APD) responsibilities and the selection, training, supervision, and administrative control of APD's.

471. PRIVILEGES AND RESPONSIBILITIES OF APD's. An aircrew program designee (APD) is authorized to perform airman certification for a specific duty position (pilot or flight engineer) on one type of aircraft. APD's may only examine graduates of specified training programs. While the APD must be employed by the operator, the graduates the APD examines do not have to be employed by that operator. The training program graduates, however, must have been trained in accordance with the operator's entire training program (except the indoctrination segment) and aircraft operating manual. If these conditions are not met, an APD is not authorized to conduct certification of airmen under the terms of the APD designation.

A. *Certification Privileges.* All certification conducted by APD's shall be limited to the privileges of the APD's airman certificate, the APD's certificate of authority, one certificate type (pilot or flight engineer), and one aircraft type. APD's with authorized pilot examination privileges may conduct oral examinations and flight tests for ATP certificates and for category, class, and type ratings added to ATP certificates. Flight engineer APD's may conduct oral examinations and flight tests for flight engineer certificates and for the addition of a class rating to a flight engineer certificate.

B. *Limitations.* An APD's evaluation of any applicant whom the APD has instructed for a certificate or rating to be issued is not encouraged and must be approved by the POI on a case-by-case basis. In addition, APD's may not conduct FAA written tests, special medical evaluations, tests for waivers, or any test for competency under section 609a of the Federal Aviation Act. Applicants for such tests shall be referred to the aircrew program manager (APM) or the local district office.

C. *Designation as an Examiner Outside an Aircrew Designated Examiner (ADE) Program.* The designation as an APD does not preclude an individual from obtaining a designation as an examiner in another program or capacity. When an APD holds a designation, the privileges and limitations that may be exercised outside the ADE program must be specified on the certificate of authority. The privileges and limitations listed on the certificate of authority issued outside an ADE program do not apply to the ADE program.

473. SELECTION OF APD'S.

A. *Prerequisites.* The following prerequisites apply to the selection of APD candidates:

- Must be employed by the operator either full time, part time, or under contract
- Must possess the appropriate airman certificate, class rating, and type rating
- Must be an FAA-approved pilot or flight engineer proficiency check airman for the operator (in the aircraft in which the APD candidate is to perform APD duties)
- Should have served as a check airman for a minimum of 1 year (preferably 6 months as a proficiency check airman) before designation as an APD (Check airman experience in other types of aircraft and for other operators may be credited. Acceptance of past experience, including length of time and type of check airman, is at the discretion of the POI and APM.)
- Must possess above-average knowledge, ability, and experience
- Must have a good record of compliance with the FAR's (isolated and unrelated violations or incidents are not disqualifying)

B. *Evaluation of Qualifications.* The APD candidate shall submit a complete statement of professional qualifications on FAA Form 8710-6, "Examiner Designation and Qualification Record." The APM shall review the qualifications to

determine whether the candidate meets the requirements and standards for an APD designation. If the APD candidate is eligible, the APM may recommend to the POI that the candidate be designated as an APD. An APD selection must be mutually agreed upon by the APM, the POI, and the operator.

475. APD TRAINING AND EVALUATION. The APM shall train and evaluate the prospective APD on APD duties and responsibilities as follows.

A. *Training.* Inspectors should ensure that the APD is trained and evaluated in at least the following areas:

- On knowledge, ability, and skill requirements for the original issuance of the ATP certificate and added ratings, as applicable
- In the procedures, methods, and techniques associated with administering the required certification tests
- In APD responsibilities, authority, and limitations under the FAR's and this handbook
- In the use of FAA forms and job aids associated with the particular APD function
- In the administrative procedures and supervisory relationships that exist in an ADE program

NOTE: POI's and APM's shall stress to prospective APD's that in performing the functions of an APD, they are representatives of, and responsible to, the Administrator. Prospective APD's must understand that company policies, economics, union affiliation, and seniority with the operator, are not relevant issues when determining the qualification of airmen.

B. *Evaluation.* After the formal training, the APD shall be required to observe either the APM or, at the POI's discretion, another APD, as they conduct a complete oral test, flight test, the necessary briefings, and the completion of the certification paperwork. The APM shall then observe and evaluate the prospective APD conduct at least one complete oral test and flight test (simulator and airplane, if applicable), including the necessary briefings and certification paperwork for the certificate or added rating involved.

477. SUPERVISION AND ADMINISTRATIVE CONTROL OF APD'S. The APM assigned to a particular aircraft type is responsible for the supervision of APD's who conduct airman certification activities for that aircraft type. Inspectors should evaluate the supervisory and administrative process, taking into account the following:

A. *Working Relationships.* APM's shall observe and counsel APD's. APM's should emphasize to APD's, appropriate methods for handling applicants, maintaining desired test standards, and accurately completing and processing certification and Program Tracking and Routing Subsystem (PTRS) paperwork. APM's should endeavor to maintain working relationships with APD's which promote the APD's confidence in the performance of their APD duties and in their interactions with their assigned APM. APM's shall conduct regular APD meetings for the purpose of maintaining these effective working relationships. During the APD meetings, a close and continuing dialogue for the clarification of problem areas should be developed. Special APD meetings should be held when there is any change to FAA airman certification requirements, policies, or procedures affecting the particular APD or the program in general. APM's should attend crewmember safety meetings held by the operator.

B. *APD Supplies and Materials.* APM's shall ensure that APD's have access to the following materials and are furnished with current amendments or additional supplies as needed:

- Volume 5 of FAA Order 8400.10, Air Transportation Operations Inspector's Handbook
- All appropriate job aids
- FAA Form 8710-1, "Airman Certification and/or Rating Application"
- FAA Form 8400-3, "Application For An Airman Certificate and/or Rating"
- FAA Form 8060-4, "Temporary Airman Certificate"

- FAA Form 8060-5, "Notice of Disapproval of Application"

- FAA Form 8000-36, "Program Tracking and Reporting Subsystem (PTRS) Data Sheet"

479. CERTIFICATE-HOLDING DISTRICT OFFICE (CHDO) APD ADMINISTRATIVE FILES. The CHDO shall maintain a file on each APD. Inspectors should ensure that the CHDO file contains the following documents for each APD:

- FAA Form 8710-6, "Examiner Designation and Qualification Record" for original issuance and each renewal

- FAA Form 8430-9, "Certificate of Authority" for original issuance and each renewal

- FAA Form 8000-5, "Certificate of Designation"

- Any history of aviation safety analysis system (ASAS) violations

- A summary of annual activity from the PTRS for each renewal (replaces FAA Form 8000-5, "Airman Certification Log")

- Periodic surveillance reports (in PTRS)

- Any pertinent correspondence

481. PROCESSING INITIAL APD DESIGNATIONS.

A. *APM Responsibilities.* When processing an initial APD designation, the APM shall ensure that all requirements for an APD designation have been met. The APM shall then prepare all of the additional, necessary paperwork. The APM shall complete the back of FAA Form 8710-6, "Examiner Designation and Qualification Record," and sign the space labeled, "Inspector's Signature." The APM shall enter the words, "Aircrew Program Designee" and the airplane type in the space labeled, "Type of Designation" under the "Regional Office Action" block. The APM shall record the APD designation number under the space labeled, "Certificate of Authority Issued" in the space titled, "No." The expiration date is the last day of the month that is 1 year from the date of designation. The "DO to Serve Under" space should be left blank by the APM. The APM should cross-out the word "Regional" in the block titled, "Regional Office Action" and substitute the word "District" for the word "Regional" (see figure 5.5.3.1.).

B. *POI Approval.* The POI shall indicate approval by completing the first line of the block labeled, "District Regional Office Action" on FAA Form 8710-6, "Examiner Designation and Qualification Record" and then sign in the appropriate space. POI's shall also sign the FAA Form 8000-5, "Certificate of Designation" and the FAA Form 8430-9, "Certificate of Authority" (see figures 5.5.3.2. and 5.5.3.3.). The originals of these forms shall be issued to the APD and copies shall be retained in the APD's file in the CHDO.

C. *APD Designation Numbers.* The APD designation number is the certificate number associated with the rating that the individual holds to qualify for the designation or authorization. This number is preferably the APD's social security number. In the case where an individual has an older certificate number that is only seven digits, then two zeros must precede that number. It is no longer necessary to identify the region, FSDO, or airline because of the PTRS tracking system.

483. RENEWAL OF APD DESIGNATIONS. APD designations must be renewed every 12 calendar months as follows.

A. *Renewal Date.* The renewal date is 1 month prior to the expiration date. An APD may not conduct certification tests after the expiration date. A designation may be renewed after expiration if the need exists and the individual meets all of the requirements of the designation.

B. *Renewal Application.* In order to renew a designation, an APD must submit the following documentation to the APM:

- The expiring FAA Form 8430-9, "Certificate of Authority"

- A newly-completed FAA Form 8710-6, "Examiner Designation and Qualification Record"

- Evidence of having attended, during the past 12 calendar months, at least one APD safety meeting or a briefing conducted by the APM,

with acceptable evidence (such as a notation on the back of the FAA Form 8430-9, "Certificate of Authority," signed by the APM)

C. *Annual Observation.* At least once within the year preceding the APD's renewal, the examiner must be observed conducting a complete certification by the APM or by another appropriately-rated inspector designated by the APM or POI. Preferably, this observation should take place within the 120-day period before the current designation expires (PTRS code 1672). To complete the observation, the APD shall conduct at least one oral examination and one flight check. When an examiner designation is renewed, the day and month will normally remain the same and only the year will be changed.

NOTE: If it is acceptable in an operator's approved training program for the entire flight check to be accomplished in a simulator, then the APM is not required to observe the APD in the aircraft for a renewal.

D. *APM and POI Responsibility.* Before renewing an APD designation, the APM and POI shall determine whether the APD's services have been satisfactory, whether the APD's level of activity warrants a re-designation, and whether the APD's services continue to be needed. The examiner's level of activity may be determined from the PTRS.

E. *Processing Designation.* The administrative steps for renewal are the same as those outlined for original designation (see paragraph 481).

485. AMENDMENT OF APD DESIGNATIONS. An APD may only be issued one FAA Form 8430-9, "Certificate of Authority." An APD's examining authority shall normally be cancelled when the APD enters transition training on a new aircraft type. The POI may designate a former APD, provided the following actions have been completed:

A. The APD must have completed the operator's approved PIC or flight engineer ground and flight training for the new aircraft. The APM must determine whether the designee has accumulated sufficient experience on the new aircraft to accumulate an above-average knowledge of its systems and operations.

B. The APD must have completed the operator's check airman training and be approved as a proficiency check airman for the new aircraft.

C. The APM for the new aircraft must hold an interview with the APD to establish an appropriate working relationship.

D. The APM for the new aircraft must observe the APD conduct at least one complete oral examination and flight test, appropriate to the certificate or type rating involved, on the new aircraft type.

E. The administrative steps for the issuance of the new designation must be the same as those outlined for initial designation (see paragraph 481).

487. PROCESSING APD CERTIFICATION PAPERWORK. An APD shall forward the airman certification paperwork to the CHDO for review, processing, and transmittal to the Airmen Certification Branch, AVN-460. The paperwork shall only be accepted and processed by the CHDO and not by any other district office.

A. *APD Responsibilities.* APD's must complete the airman certification paperwork in accordance with the requirements of chapters 1, 2, or 3 of this volume, as applicable. The APD must complete the PTRS data sheets for each test conducted. An APD is responsible for the accurate, complete, and timely submission of certification paperwork. An APD's satisfactory fulfillment of this responsibility is a requirement for continued designation as an APD.

B. *APM Responsibilities.* APM's are responsible for training APD's in the correct documentation and in remedial training, when required.

489. REVIEW OF APD DECISION. If an airman is dissatisfied with an APD's decision, the airman may appeal to the APM for a retest. The airman must submit the appeal in writing and indicate the reasons for protesting the APD's decision. The APM shall review the matter and decide if retesting is warranted. If a retest is granted, a new application must be completed, and the entire test must be re-accomplished by an FAA inspector.

491. TERMINATION OF APD DESIGNATIONS. An APD designation may be cancelled by the POI at any time.

A. *Basis for Cancellation.* The cancellation of an APD designation may be based on any of the following conditions:

- The designee's services are no longer required
- A change in the ADE program policy
- Changes in the APD's crewmember assignment, type aircraft, or position with the company
- Voluntary surrender of the designation by the APD upon receipt of a written request for cancellation
- Expiration of an APD authorization without an application for renewal
- Termination of the APD's employment with the operator
- Evidence of malpractice, fraudulent use of the designation, or any actions which discredit the FAA
- Unsatisfactory performance in any phase of the APD's duties or responsibilities, including an unwillingness or an inability to accept or carry out the APM's or POI's instructions
- Evidence indicating that the requirements for the original designation were not met at the time of designation

B. *Cancellation for Administrative Reasons.* The cancellation of an APD designation for administrative reasons, such as an ADE program change, should be handled by an informal meeting between the APD and the APM. If appropriate, the APD may be allowed to complete previously scheduled tests. The APM shall confirm the cancellation of the APD designation by letter. The letter should reflect an appreciation by the FAA commensurate with the APD's level of service, and must include an effective date of cancellation. The letter shall contain a request for the return of the APD's FAA Form 8430-9, "Certificate of Authority," and all unused FAA materials and supplies. The APD's FAA Form 8000-5, "Certificate of Designation," may be retained by the APD after it has been marked, "Cancelled," and dated and signed by the POI.

C. *Cancellation for Cause.* The notification of a cancellation for cause shall be made by registered letter.

D. *Recording the Cancellation.* When an APD designation is cancelled, the APM shall complete the APD's current FAA Form 8710-6, "Examiner Designation and Qualification Record," as follows:

(1) The APM shall stamp or type the word "CANCELLED" in the block titled, "Inspector's Recommendation Action," located in the space labeled, "Justification for Approval/Reasons for Disapproval." In the same space, the APM shall enter an explanation of the reason for the cancellation.

(2) The APM or POI shall sign and date the form under the explanation of the cancellation.

(3) This form shall be retained for at least 2 years in the APD's file in the CHDO.

492. - 502. RESERVED.

[PAGES 5-294 THROUGH 5-304 RESERVED]

CHAPTER 7. AIRCRAFT NAVIGATOR CERTIFICATES

SECTION 1. GENERAL

503. APPLICABILITY. This chapter contains the necessary information, direction, guidance, and procedures to be used by inspectors and examiners for the conduct of aircraft navigator certification.

505. ELIGIBILITY. The eligibility requirements for an aircraft navigator are listed in Subpart C of Part 63. Inspectors should have applicants submit the following documentation for the practical flight test:

- AC Form 8080-2, "Airman Written Test Report"
- Second-class medical certificate (issued within the last 12 months)
- Logbooks verifying flight time
- Evidence substantiating compliance with FAR 63.55 or a statement of graduation from an aircraft navigator course

NOTE: An applicant who meets the special circumstances described in FAR 63.57(b) does not need to present AC Form 8080-2 before taking the navigator practical flight test.

507. APPLICATION PHASE. The inspector should have the applicant complete an FAA Form 8400-3, "Application for an Airman Certificate and/or Rating." This form includes the application for the flight test. The "Instructor's Recommendation" block in section 7 of the form does not have to be completed if the inspector or examiner evaluating the applicant determines that the applicant meets the requirements of FAR's 63.51, 63.53, and 63.55.

509. INDIVIDUALS QUALIFIED TO CONDUCT AIRCRAFT NAVIGATOR FLIGHT TESTS. The aircraft navigator flight test must be conducted by an operations inspector who currently holds an aircraft navigator certificate. Regional offices that do not have qualified inspectors should contact FSDO-13 in the Western Pacific Region or FSDO-15 in the Eastern Region for assistance.

511. CONDUCT OF WRITTEN TEST. Inspectors must have an applicant take the written test before that applicant can be administered the flight test. The exception to this process would be when an applicant fits into the circumstances described in FAR 63.57(b).

513. CONDUCT OF ORAL TEST.

A. *Purpose.* The purpose of the oral test is for the inspector to determine the applicant's familiarity with the equipment to be used during the flight test. The inspector should not instruct the applicant on the use of the equipment.

B. *Content.* During the oral test, the inspector should examine the applicant on basic navigational techniques. The applicant should demonstrate to the inspector that the applicant has adequate knowledge of air communications and navigation regulations relating to aircraft position reporting and variances from planned flight routes. The inspector should also determine if the applicant is familiar with the organized track system in the North Atlantic and Pacific composite separation schemes.

515. CONDUCT OF FLIGHT TEST. The inspector may conduct the flight test on a scheduled or nonscheduled flight. If possible, the inspector should have the flight test conducted over water. Passengers, cargo, or both, may be carried during the flight test if a fully qualified aircraft navigator is a flight crewmember and if the flight route requires an aircraft navigator. The inspector must ensure that the applicant has provided a suitable, properly equipped aircraft for accomplishing the flight test, and, finally during the test, the inspector must measure the applicant's skill in the following:

- Flight planning
- Dead reckoning

- Celestial navigation
- Raw data LORAN navigation
- Use of absolute altimeter

NOTE: Navigational systems which have the capability of performing tasks such as automating fixes and estimating ground speed should not be used during the flight test.

517. DISPOSITION AND ISSUANCE OF FAA FORM 8060-4, "TEMPORARY AIRMAN CERTIFICATE" OR FAA FORM 8060-5, "NOTICE OF DISAPPROVAL OF APPLICATION."

A. *Unsuccessful Applicant.* If an applicant is not successful in completing the written or oral test, the inspector shall issue the applicant an FAA Form 8060-5, "Notice of Disapproval of Application." The inspector shall then send a copy of the FAA Form 8060-5 and a copy of the applicant's FAA Form 8400-3, "Application for an Airman Certificate and/or Rating," to the Airman Certification Branch, AVN-460, in Oklahoma City.

B. *Successful Applicant.* If the applicant has successfully completed the written test and the flight test, the inspector shall issue the applicant an FAA Form 8060-4, "Temporary Airman Certificate."

(1) After the applicant has received notice of having satisfactorily completed the written test, the applicant should present the following documents to the inspector:

- FAA Form 8400-3, "Application for an Airman Certificate and/or Rating"
- AC Form 8080-2, "Airman Written Test Report"
- FAA Form 8060-5, "Notice of Disapproval of Application," if applicable

(2) After the applicant has presented the documents previously listed in subparagraph (1), the inspector shall issue the applicant an FAA Form 8060-4, "Temporary Airman Certificate." The inspector must date the certificate with the date in which the applicant has satisfactorily completed all of the requirements for the certificate. The inspector shall then send a copy of the applicant's FAA Form 8060-4 to the Airman Certification Branch, AVN-460, in Oklahoma City.

NOTE: An applicant applying under the circumstances described in FAR 63.57(b) who has satisfactorily completed the test, will not be issued a temporary certificate. In this case, the inspector should enter in Item 9 of FAA Form 8400-3 the following statements: "Application made under the provisions of FAR 63.57(b). Temporary Airman Certificate not issued."

519. APPLICANTS UNDER 21 YEARS OF AGE. When an applicant under 21 years of age has successfully passed the written and flight tests for the aircraft navigator certificate, the inspector should issue the applicant a letter of aeronautical competency. The inspector should inform the applicant that the applicant should retain the original letter of aeronautical competency. Once the applicant has reached 21 years of age, the applicant may present the letter of aeronautical competency and a current second-class medical certificate and obtain an FAA Form 8060-4, "Temporary Airman Certificate." The inspector shall then forward the applicant's original letter of aeronautical competency, original FAA Form 8400-3, "Application for an Airman Certificate and/or Rating," and a copy of the applicant's FAA Form 8060-4 to the Airman Certification Branch, AVN-460, in Oklahoma City.

520. - 530. RESERVED.

[PAGES 5-307 THROUGH 5-318 RESERVED]

- Celestial navigation
- Raw data LORAN navigation
- Use of absolute altimeter

NOTE: Navigational systems which have the capability of performing tasks such as automating fixes and estimating ground speed should not be used during the flight test.

517. DISPOSITION AND ISSUANCE OF FAA FORM 8060-4, "TEMPORARY AIRMAN CERTIFICATE" OR FAA FORM 8060-5, "NOTICE OF DISAPPROVAL OF APPLICATION."

A. *Unsuccessful Applicant.* If an applicant is not successful in completing the written or oral test, the inspector shall issue the applicant an FAA Form 8060-5, "Notice of Disapproval of Application." The inspector shall then send a copy of the FAA Form 8060-5 and a copy of the applicant's FAA Form 8400-3, "Application for an Airman Certificate and/or Rating," to the Airman Certification Branch, AVN-460, in Oklahoma City.

B. *Successful Applicant.* If the applicant has successfully completed the written test and the flight test, the inspector shall issue the applicant an FAA Form 8060-4, "Temporary Airman Certificate."

(1) After the applicant has received notice of having satisfactorily completed the written test, the applicant should present the following documents to the inspector:

- FAA Form 8400-3, "Application for an Airman Certificate and/or Rating"
- AC Form 8080-2, "Airman Written Test Report"
- FAA Form 8060-5, "Notice of Disapproval of Application," if applicable

(2) After the applicant has presented the documents previously listed in subparagraph (1), the inspector shall issue the applicant an FAA Form 8060-4, "Temporary Airman Certificate." The inspector must date the certificate with the date in which the applicant has satisfactorily completed all of the requirements for the certificate. The inspector shall then send a copy of the applicant's FAA Form 8060-4 to the Airman Certification Branch, AVN-460, in Oklahoma City.

NOTE: An applicant applying under the circumstances described in FAR 63.57(b) who has satisfactorily completed the test, will not be issued a temporary certificate. In this case, the inspector should enter in Item 9 of FAA Form 8400-3 the following statements: "Application made under the provisions of FAR 63.57(b). Temporary Airman Certificate not issued."

519. APPLICANTS UNDER 21 YEARS OF AGE. When an applicant under 21 years of age has successfully passed the written and flight tests for the aircraft navigator certificate, the inspector should issue the applicant a letter of aeronautical competency. The inspector should inform the applicant that the applicant should retain the original letter of aeronautical competency. Once the applicant has reached 21 years of age, the applicant may present the letter of aeronautical competency and a current second-class medical certificate and obtain an FAA Form 8060-4, "Temporary Airman Certificate." The inspector shall then forward the applicant's original letter of aeronautical competency, original FAA Form 8400-3, "Application for an Airman Certificate and/or Rating," and a copy of the applicant's FAA Form 8060-4 to the Airman Certification Branch, AVN-460, in Oklahoma City.

520. - 530. RESERVED.

[PAGES 5-307 THROUGH 5-318 RESERVED]

SECTION 8. U.S. AIRMAN CERTIFICATES AND SPECIAL PURPOSE AIRMAN CERTIFICATES ISSUED ON THE BASIS OF A FOREIGN AIRMAN CERTIFICATE

805. GENERAL. This section contains information and guidance to be used by inspectors when issuing U.S. airman certificates and special purpose airman certificates that are based on foreign airman certificates issued by an International Civil Aviation Organization (ICAO) contracting member state. This section also contains procedures to amend, surrender, and renew special purpose airman certificates.

807. U.S. AIRMAN CERTIFICATES BASED UPON A FOREIGN CERTIFICATE. The Federal Aviation Regulations (FAR's) allow the holder of a valid pilot certificate or flight engineer certificate issued by an ICAO contracting member state to be issued a restricted U.S. airman certificate. The airman may use the restricted certificate to operate U.S.-registered civil aircraft. The restricted U.S. airman certificate must contain limitations prohibiting the carriage of passengers or cargo and agricultural operations for compensation or hire. See volume II, chapter 29 of FAA Order 8700.1, General Aviation Operations Inspector's Handbook, for procedures for issuing these certificates.

NOTE: There are no provisions in the FAR's for the issuance of U.S. flight instructor, navigator, or dispatcher certificates on the basis of a foreign certificate.

809. SPECIAL PURPOSE AIRMAN CERTIFICATES. With the exception of operations conducted entirely within a foreign country, FAR 61.3(a) and FAR 63.3 require that an airman possess a current U.S. certificate issued under Part 61 or Part 63, as applicable, to act as a flight crewmember on a U.S.-registered aircraft operated within U.S. airspace. FAR 61.77 and FAR 63.23 authorizes the FAA to issue special purpose airman certificates to airman employed by foreign operators. These certificates authorize the airman to act as a flight crewmember on a U.S.-registered aircraft leased to a person who is not a U.S. citizen, carrying persons or property for compensation or hire. The holder of a current foreign pilot, flight engineer, or aircraft navigator certificate issued by an ICAO member state may apply for a special purpose airman certificate containing authorization for the use of a leased U.S.-registered aircraft. Applicants employed by Part 129 operators must apply to the FSDO that maintains the operator's operations specifications (OpSpecs). Usually, the operator represents the employee applicant in this process, which is the practice recommended by the FAA. Principal operations inspectors (POI's) should establish a standard set of procedures for operators to follow in this process. Inspectors should use the following information and guidance when issuing a special purpose airman certificate.

A. *Operations Requiring Special Purpose Airman Certificates*. Special purpose airman certificates are required under the following circumstances:

- When the airplane type has a maximum passenger seat configuration of more than 30 seats (excluding any flight crewmember seat), or a maximum payload capacity of more than 7,500 pounds

- When the airplane is operated between foreign countries or in foreign air commerce, including to or from the U.S. A special purpose airman certificate is required for an airmen to operate a U.S.-registered aircraft leased to a non-U.S. citizen, whenever the aircraft is operated in accordance with the laws of a foreign country to a point outside the country which issued the foreign (ICAO) airman certificate.

NOTE: A special purpose airman certificate may be issued to an applicant who holds an unrestricted U.S. airman certificate.

B. *Documentation Procedures for Special Purpose Airman Certificates.* When an applicant or operator requests a special purpose airman certificate, the inspector should review the applicant's documentation as follows:

(1) *Translation of Documentation.* If the applicant presents any documentation in a language other than English, the inspector must first ensure that this documentation is accompanied by an English translation. Translations do not have to be certified or official to be acceptable, but they should be signed by both the translator and the applicant. It is the applicant's responsibility to ensure that the translations are accurate. A translation which is subsequently found to be misleading or distorted will result in revocation of the applicant's special purpose airman certificate. If the documentation does not meet these criteria, the inspector must return the documentation and inform the applicant of the need for adequate translation.

(2) *Copies of Documentation.* Since the inspector must keep all documentation presented by the applicant or operator, the inspector should inform the applicant or operator to submit copies and not originals of all documentation.

(3) *Review of Documentation.* The inspector shall request the following documentation from the applicant or operator:

(a) *Lessee Letter.* The inspector shall have the applicant or operator present a letter written in English from the lessee that contains the following:

- A statement that the applicant is employed by the lessee
- The airplane type and duty position
- A statement verifying that the applicant has received ground and flight instruction that qualifies the applicant for the assigned duties
- A statement that the applicant can speak and understand English to show compliance with Part 129, Appendix A, section VI, item D

(b) *Foreign Airman Certificate.* The inspector shall have the applicant or operator present a copy of the foreign airman certificate in person or by mail. The applicable foreign airman certificate must contain authorization of the airman privileges for the applicant that are equivalent to those requested in the special purpose airman certificate.

(1) When the titles and ratings shown on the applicable foreign certificate differ from those requested for the special purpose airman certificate, the inspector shall request that the applicant or operator submit documentary evidence substantiating that the applicant holds foreign privileges equivalent to the U.S. privileges sought. For example, some countries issue "Senior Commercial" certificates and place a designation such as "group I" or "group II" on the certificate to indicate a particular rating. The inspector must verify this rating by examining the appropriate documentation as described in subparagraph (2) which follows.

(2) The applicant should document the foreign airman privileges by presenting an excerpt from the issuing country's regulations containing the applicant's authorized privileges based on the applicant's foreign certificates and ratings.

(c) *Medical Qualification.* The inspector shall have the applicant or operator present documentary proof that the applicant meets the same appropriate medical standards in the country of issuance as those medical standards required in the U.S. for similar certificate privileges.

(1) For valid proof of current medical qualification, the applicant should present a currently valid medical certificate or a stamped foreign airman certificate (if the stamp indicates equivalent medical qualification).

(2) A medical certificate issued according to Part 67 is not acceptable unless the applicable foreign state accepts such a certificate as proof of compliance with its requirements. If the inspector is uncertain as to the acceptance of the medical certificate by the foreign state, the applicant or operator must present documentary proof that the foreign state accepts the Part 67 certificate. The most acceptable form of documentation supplied by the applicant or operator is the issuing country's regulations that acknowledge the medical certificate as current and valid.

(d) *Age*. Either the airman or a representative for the airman must present documentation to the inspector that proves that the pilot applicant is not yet 60 years of age. This proof applies to pilot certificates but not to flight engineer certificates. One acceptable form of documentation for date of birth is the birth date shown on the applicant's foreign airman certificate. Another acceptable form of documentation is a copy of applicable pages from the applicant's passport.

C. *Application Procedures for Special Purpose Airman Certificates.* Inspectors shall review the applicant's or operator's application as follows:

(1) *Pilot Applications*. Either the pilot applicant or a representative for the applicant must present a completed FAA Form 8710-1, "Airman Certificate and/or Rating Application" to the inspector to obtain a special purpose airman certificate. The inspector should ensure that the application is signed by the applicant and completed and signed by the reviewing inspector (see figure 5.9.8.1.). Inspectors should be knowledgeable of the following guidance concerning how an FAA Form 8710-1 should be completed.

(a) *Block I*. In block I, "Application Information," the applicant should have checked either the "Airline Transport" or the "Commercial" and "Instrument" blocks. In addition, either the "Airplane Multiengine" or the "Airplane Single-Engine" block must have been checked. For ATP certificates, the "Other" block should have been checked and the correct U.S. type rating designation entered, as in figures 5.1.2.5. and 5.1.2.6. The "Additional Aircraft Rating" block should only be checked when a certificate is reissued to add an additional aircraft type rating. None of the remaining blocks should have been used. The "Reissuance of _____ Certificate" block should have been checked only when application is being made for the renewal of an existing, special purpose airman certificate. In the case of renewal, the particular grade of the new special purpose airman certificate should have been recorded on the "Reissuance of ____ Certificate" line.

(b) *Blocks I Q and I R*. When the foreign medical certificate consists of a stamp on the applicant's foreign airman certificate, the applicant should have checked the "yes" option in block I Q, "Do you hold a Medical Certificate?" The inspector should then have the applicant complete blocks S and T. In this case, the appropriate class of medical or "N/A" may be placed in block I R, "Class of Certificate."

(c) *Block II D*. In block II D, "Holder of Foreign License Issued By," the applicant should have entered the grade, number, and ratings, as shown on the foreign certificate. These may not be identical to those checked in block I. Inspectors and supervisors must ensure that the certificates and ratings applied for in block I are justified by the certificates and ratings shown in block II D (see previous subparagraph (2) for a detailed description of this topic).

(2) *Flight Engineer and Aircraft Navigator Applications*. The inspector should have the applicant or the applicant's representative submit a correctly completed FAA Form 8400-3, "Application for an Airman Certificate and/or Rating" when applying for a flight engineer or aircraft navigator certificate (see figure 5.9.8.2.).

(a) The inspector should have flight engineer applicants place a check mark in the block entitled "Flight Engineer" and in the block indicating selection of the appropriate class rating.

(b) In block 5, "Certificates Held By Applicant," the applicant must check the appropriate block representing the current foreign certificate held by the applicant.

D. *Ineligible Applicant.* If the inspector determines that either the application or documentation is incorrect, incomplete, or inadequate, the inspector shall return the package to the applicant.

E. *Eligible Applicant.* If the inspector determines that the applicant's application and documentation meet all of the requirements, the inspector shall proceed as follows:

(1) Complete FAA Form 8060-4, "Temporary Airman Certificate" in duplicate (see figure 5.9.8.3.). The inspector shall give the copy to the applicant or the applicant's representative. The certificate must bear the following limitations and information in accordance with either FAR 61.77(d)(2) or FAR 63.23(d)(2):

- The phrase, "Valid for U.S.-registered civil type aircraft, leased to Lessee Co. name"
- For pilot certificates, the phrase, "Issued under and subject to the provisions of FAR 61.77"
- For other certificates, the phrase, "Issued under and subject to the provisions of FAR 63.23"
- The phrase, "Subject to the privileges and limitations shown on the holder's foreign (grade and type of) certificate"
- Type of aircraft
- Type of lessee
- Address of company or corporation in lieu of airman's foreign home address
- Expiration date

(2) Complete and sign the "Inspector's Report" section located on the back of FAA Form 8710-1, "Airman Certification and/or Rating Application." The inspector shall check the "Temporary Certificate Issued" block, the "Certificate or Rating Based on" block, and the "Foreign License" block.

(3) Attach the original FAA Form 8060-4 to the application and send the package to AVN-460. Copies of the applicant's foreign airman's certificate, medical certificate, and any other required documentation should be kept at the FSDO and returned to the applicant.

(4) Ensure that this work activity, code 1535, is recorded into the Program Tracking and Reporting Subsystem (PTRS) and returned to the applicant.

F. *Amendment to Special Purpose Airman Certificates.* When an airman is employed on a part-time basis by two foreign operators, the inspector must issue to the airman an amended special purpose airman certificate. The inspect-or must also ensure that both lessees are listed in the limitations section of the certificate.

G. *Surrender of Special Purpose Airman Certificates.* Special purpose airman certificates must be surrendered when the certificates are no longer needed or upon expiration. The operator must surrender the special purpose airman certificate within 7 days after the certificate expiration date to the FSDO having OpSpecs authority . The inspector shall then forward the surrendered certificate to the Airman Certification Branch, AVN-460, in Oklahoma City. A special purpose airman certificate expires under the following circumstances:

- When the lease agreement expires
- When the foreign airman certificate or medical documentation is either suspended, revoked, or no longer valid
- When the pilot certificate holder reaches the age of 60
- When 24 calendar months have passed since the certificate was issued
- When an airman terminates, or is terminated from, employment with a foreign lessee

H. *Renewal of Special Purpose Airman Certificates.* Special purpose airman certificates may be renewed by written application from either the operator or the individual airman to the FSDO having OpSpecs authority. The letter should contain a request that the airman's qualification remain the same and must be signed by the appropriate air carrier authority or the individual airman seeking renewal. If the applicant is not requesting any new authorizations, the applicant does not have to submit the original documentation showing the meaning or translation of foreign certificates and ratings. For any new authorizations, the applicant must submit an application form and appropriate documentation. The inspector must review and sign the letter verifying that the information and request is accurate. The inspector shall forward the letter requesting renewal and a copy of the airman certificate to the Airman Certification Branch, AVN-460, for reissuance of the certificate. The inspector must ensure that this work activity is recorded as code 1357 in the PTRS.

810. - 820. RESERVED.

FIGURE 5.9.8.1.
FAA FORM 8710-1, "AIRMAN CERTIFICATE AND/OR RATING APPLICATION"

TYPE OR PRINT ALL ENTRIES IN INK

Form Approved OMB No: 2120-0021

U.S. Department of Transportation
Federal Aviation Administration

Airman Certificate and/or Rating Application

I Application Information

- ☐ Student
- ☐ Recreational
- ☐ Private
- ☐ Commercial
- ☒ Airline Transport
- ☐ Instrument
- ☐ Additional Aircraft Rating
- ☐ Airplane Single-Engine
- ☒ Airplane Multiengine
- ☐ Rotorcraft
- ☐ Glider
- ☐ Lighter-Than-Air
- ☐ Flight Instructor ____ Initial ____ Renewal
- ☐ Flight Instructor Reinstatement
- ☐ Additional Instructor Rating
- ☐ Ground Instructor
- ☐ Medical Flight Test
- ☐ Reexamination
- ☐ Reissuance of _____ Certificate
- ☐ Other _____

A. Name (First, Middle, Last): JOHN JAY DOE
B. SSN: DO NOT USE
C. Date of Birth (Mo. Day Year): 10 02 46
D. Place of Birth: TOPEKA, KS
E. Address: 10801 EAST RIVER Road
City, State, Zip Code
F. Nationality: ☒ USA ☐ Other _____ Specify
G. Do you read, speak and understand English? ☒ Yes ☐ No
H. Height: 72 in.
I. Weight: 210 Lbs.
J. Hair: BLACK
K. Eyes: BROWN
L. Sex: ☒ Male ☐ Female
M. Do you now hold, or have your ever held An FAA Pilot Certificate? ☒ Yes ☐ No
If yes, has certificate ever been Suspended or Revoked ☐ Yes _____ Date ☒ No
N. Grade Pilot Certificate: COMMERCIAL
O. Certificate Number: 10509907
P. Date Issued: 6-90
Q. Do you hold a Medical Certificate? ☒ Yes ☐ No
R. Class of Certificate: FIRST
S. Date Issued: 6-90
T. Name of Examiner: SAM Patchem, MD
U. Have you ever been convicted for violation of any Federal or State statutes pertaining to narcotic drugs, marijuana, and depressant or stimulant drugs or substances, or motor vehicle operation involving alcohol related offenses? ☒ No ☐ Yes
V. Date of Final Conviction

Glider or Free Balloon Pilots only: *Medical Statement: I have no known physical defect which makes me unable to pilot a glider or free balloon*
W. Signature
X. Date

II Certificate or Rating Applied For on Basis of:

☒ A. Completion of Required Test
1. Aircraft to be used (if flight test required): LEAR Jet
2a Total time in this aircraft: 550 hours
2b Pilot in command: 0 hours

☐ B. Military Competence Obtained In
1 Service
2 Date Rated
3 Rank or Grade and Service Number
4 Has flown at least 10 hours as pilot in command during the past 12 months in the following military aircraft.

☐ C. Graduate of Approved Course
1 Name and Location of Training Agency
2 Agency School Number
3 Curriculum From Which Graduated
4 Date

☐ D. Holder of Foreign License Issued By
1 Country
2 Grade of License
3 Number
4 Ratings

III Record of Pilot time *(Do not write in the shaded areas.)*

	Total	Instruction Rec'd	Solo	Pilot in Command	Second in Command	Cross Country Instruction Received	Cross Country Solo	Cross Country Pilot in Command	Instrument	Night Instr. Rec'd.	Night Take-off/ Landing	Night Pilot in Command	Night Takeoff/ Landing Pilot in Command	Number of Flights	Number of Aero-Tows	Number of Ground Launches	Number of Powered Launches	Number of Free Flights
Airplane																		
Seaplane																		
Gliders																		
Lighter than Air																		
Training Device Simulator	—	—							—									

IV Have you failed a test for this certificate or rating within the past 30 days? ☐ Yes ☒ No

V Applicant's Certification
I certify that the statements made by me on this application are true.
A. Signature: John Jay Doe
B. Date: 9-15-90

FAA Use Only

EMP	REG	D.O.	SEAL	CON	ISS	ACT	LEV	TR	S.H.	SRCH	#RTE		RATING (1)

FIGURE 5.9.8.1. (Cont'd.)
FAA FORM 8710-1, "AIRMAN CERTIFICATE AND/OR RATING APPLICATION" (REVERSE SIDE), INSPECTOR'S REPORT

Instructor's Recommendation

I have personally instructed the applicant and consider this person ready to take the test.

Date	Instructor's Signature	Certificate No:	Certificate Expires

Air Agency's Recommendation

The applicant has successfully completed our _____ course, and is recommended for certification or rating without further _____ test.

Date	Agency Name and Number	Official's Signature / Title

Designated Examiner's Report

☐ Student Pilot Certificate Issued *(Copy attached)*

☐ I have personally reviewed this applicant's pilot logbook, and certify that the individual meets the pertinent requirements of FAR 61 for the pilot certificate or rating sought.

☐ I have personally reviewed this applicant's graduation certificate, and found it to be appropriate and in order, and have returned the certificate.

☐ I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below.

☐ Approved—Temporary Certificate Issued *(Copy Attached)*

☐ Disapproved—Disapproval Notice Issued *(Copy Attached)*

Location of Test (Facility, City, State)	Duration of Test: Ground	Duration of Test: Flight

Certificate or Rating for Which Tested	Type(s) of Aircraft Used	Registration No.(s)

Date	Examiner's Signature	Certificate No.	Designation No.	Designation Expires

Evaluator's Record For Airline Transport Certificate/Rating Only

	Inspector	Examiner	*Signature*	Date
Oral	☐	☐		
Simulator Check	☐	☐		
Aircraft Flight Check	☐	☐		

Inspector's Report

I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below.

☐ Approved—Temporary Certificate Issued ☐ Disapproved—Disapproval Notice Issued

Location of Test *(Facility, City, State)*	Duration of Test: Ground	Duration of Test: Flight

Certificate or Rating for Which Tested	Type(s) of Aircraft Used	Registration No.(s)

☐ Student Pilot Certificate Issued

☐ Examiner's Recommendation

☐ ACCEPTED ☐ REJECTED

☐ Examiner Recommends Retesting

☐ Reissue or Exchange of Pilot Certificate

☐ Special medical test conducted—report forwarded to Aeromedical Certification Branch, AAM-130

☐ Certificate or Rating Based on

☐ Military Competence

☐ Foreign License

☐ Approved Course Graduate

☐ Issued

☐ Denied

☐ Instructor ☐ Flight ☐ Ground

☐ Renewal ☐ Approved

☐ Reinstatement ☐ Disapproved

Instructor Renewal Based on

☐ Activity ☐ Training Course

☐ Acquaintance ☐ Test

Training Course (FIRC) Name	Graduation Certificate No.	Date

Date	Inspector's Signature	FAA District Office

Attachments:

☐ Student Pilot Certificate (copy)

☐ Report of Written Examination

☐ Temporary Pilot Certificate (copy)

☐ Airmans Identification (ID)

Form of ID _____

Number _____

Expiration Date _____

☐ Notice of Disapproval

☐ Superseded Pilot Certificate

☐ Answer Sheet Graded

☐ Answer Sheet Graded (Foreign Instrument)

☆U.S. GPO: 1991—568-185

FIGURE 5.9.8.1. (Cont'd.)
FAA FORM 8710-1, "AIRMAN CERTIFICATE AND/OR RATING APPLICATION" (REVERSE SIDE), INSPECTOR'S REPORT

Instructor's Recommendation

I have personally instructed the applicant and consider this person ready to take the test.

Date	Instructor's Signature	Certificate No:	Certificate Expires

Air Agency's Recommendation

The applicant has successfully completed our _____ course, and is recommended for certification or rating without further _____ test.

Date	Agency Name and Number	Official's Signature / Title

Designated Examiner's Report

☐ Student Pilot Certificate Issued *(Copy attached)*

☐ I have personally reviewed this applicant's pilot logbook, and certify that the individual meets the pertinent requirements of FAR 61 for the pilot certificate or rating sought.

☐ I have personally reviewed this applicant's graduation certificate, and found it to be appropriate and in order, and have returned the certificate.

☐ I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below.

☐ Approved—Temporary Certificate Issued *(Copy Attached)*

☐ Disapproved—Disapproval Notice Issued *(Copy Attached)*

Location of Test (Facility, City, State)	Duration of Test: Ground	Duration of Test: Flight

Certificate or Rating for Which Tested	Type(s) of Aircraft Used	Registration No.(s)

Date	Examiner's Signature	Certificate No.	Designation No.	Designation Expires

Evaluator's Record For Airline Transport Certificate/Rating Only

	Inspector	Examiner	*Signature*	Date
Oral	☐	☐		
Simulator Check	☐	☐		
Aircraft Flight Check	☐	☐		

Inspector's Report

I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below.

☐ Approved—Temporary Certificate Issued ☐ Disapproved—Disapproval Notice Issued

Location of Test *(Facility, City, State)*	Duration of Test: Ground	Duration of Test: Flight

Certificate or Rating for Which Tested	Type(s) of Aircraft Used	Registration No.(s)

☐ Student Pilot Certificate Issued

☐ Examiner's Recommendation

☐ ACCEPTED ☐ REJECTED

☐ Examiner Recommends Retesting

☐ Reissue or Exchange of Pilot Certificate

☐ Special medical test conducted—report forwarded to Aeromedical Certification Branch, AAM-130

☐ Certificate or Rating Based on

☐ Military Competence

☐ Foreign License

☐ Approved Course Graduate

☐ Issued

☐ Denied

☐ Instructor ☐ Flight ☐ Ground

☐ Renewal ☐ Approved

☐ Reinstatement ☐ Disapproved

Instructor Renewal Based on

☐ Activity ☐ Training Course

☐ Acquaintance ☐ Test

Training Course (FIRC) Name	Graduation Certificate No.	Date

Date	Inspector's Signature	FAA District Office

Attachments:

☐ Student Pilot Certificate (copy)

☐ Report of Written Examination

☐ Temporary Pilot Certificate (copy)

☐ Airmans Identification (ID)

Form of ID _____

Number _____

Expiration Date _____

☐ Notice of Disapproval

☐ Superseded Pilot Certificate

☐ Answer Sheet Graded

☐ Answer Sheet Graded (Foreign Instrument)

☆U.S. GPO: 1991—568-185

FIGURE 5.9.8.2. (Cont'd.)
FAA FORM 8400-3, "APPLICATION FOR AN AIRMAN CERTIFICATE AND/OR RATING" (FOR FLIGHT ENGINEERS, FLIGHT NAVIGATORS, AND AIRCRAFT DISPATCHERS) (REVERSE)

10. Practical Test Report

Grading Legend *(All applicable items must be graded S or U)*

Explain in "Remarks" all items which are not graded.

S—Satisfactory

U—Unsatisfactory

Item No.	A. Flight Engineer	Grade: Examiner	Grade: Inspector
1	Equipment Examination *(Oral)*		
2	Preflight Inspection		
3	Normal Operating Procedures		
4	Abnormal Operating Procedures		
5	Performance Data and Cruise Control		
6	Trouble Shooting		
7	Emergency Procedures		
8	Forms and Records		
9	Post Flight		
10	Crew Coordination		
11	Judgement		

Item No.	B. Flight Navigator	Grade: Examiner	Grade: Inspector
1	Equipment *(Oral)*		
2	Equipment Check		
3	Preflight Training		
4	Normal Navigation Procedures		
5	Knowledge of Navigation Methods		
6	Co-ordination of Navigational Methods		
7	Emergency Procedures		
8	Co-ordination of Duties		
9	Crew Co-ordination		
10	Judgement		

Item No.	C. Aircraft Dispatcher	Grade: Examiner	Grade: Inspector
1	Aircraft		
2	Air Routes and Airports		
3	Altimeters		
4	Weather Analysis		
5	Airman's Information Manual		
6	Dispatch and Assistance		
7	Emergency Procedures		

Item No.	D. Control Tower Operator	Grade: Examiner	Grade: Inspector
	VFR TOWER RATING		
1	The Control Tower		
2	The Airport		
3	The Control Zone		
4	Notice to Airmen		
5	Weather Facilities and Procedures		
6	A Demonstration of Ability to Control Air Traffic Under VFR		
	NON-RADAR APPROACH CONTROL TOWER RATING		
1	Air Traffic Control Facilities		
2	Air Navigation Facilities		
3	Use of Airman's Information Manual		
4	Holding Procedures		
5	Approach Procedures		
6	Missed Approach Facilities		
7	Alternate Airports		
8	Search and Rescue Procedures		
9	A Demonstration of Ability to Control Air Traffic Under IFR		
10	Airport Identification		

11. Route Of Flight Check

From	To	Hours: Day	Hours: Night

Remarks

FIGURE 5.9.8.3.
FAA FORM 8060-4, "TEMPORARY AIRMAN CERTIFICATE"

I. UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

II. TEMPORARY AIRMAN CERTIFICATE

III. CERTIFICATE NO. Pending

THIS CERTIFIES THAT IV. Jacques Q. Doe
V. 18, rue Gustave Courbet
Mirabel, Quebec, Canada J7N1A5

DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY VI.
1/24/41	71½ IN.	175	Brn.	Hazel	M	Canadian

IX. has been found to be properly qualified and is hereby authorized in accordance with the conditions of issuance on the reverse of this certificate to exercise the privileges of

Airline Transport Pilot

RATINGS AND LIMITATIONS

XII. Valid for U.S.-registered civil B-747 Aircraft leased to NationAir Canada. Issued under and subject to the provisions of Far 61.77. Subject to the privileges and limitations as shown on the holders Foreign ATP Certificate.

XIII. Expires 6/30/93

THIS IS ☐ AN ORIGINAL ISSUANCE ☐ A REISSUANCE OF THIS GRADE OF CERTIFICATE

DATE OF SUPERSEDED AIRMAN CERTIFICATE

BY DIRECTION OF THE ADMINISTRATOR

X. DATE OF ISSUANCE: 6/28/91

X. SIGNATURE OF EXAMINER OR INSPECTOR: James Greene

EXAMINER'S DESIGNATION NO. OR INSPECTOR'S REG. NO.: AEA-FSDO-15

DATE DESIGNATION EXPIRES

VII. AIRMAN'S SIGNATURE: Jacques Q. Doe

FAA Form 8060-4 (8-79) USE PREVIOUS EDITION

I. UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

II. TEMPORARY AIRMAN CERTIFICATE

III. CERTIFICATE NO. Pending

THIS CERTIFIES THAT IV. Jacques Q. Doe
V. 18, rue Gustave Courbet
Mirabel, Quebec, Canada J7N1A5

DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY VI.
1/24/41	71½ IN.	175	Brn.	Hazel	M	Canadian

IX. has been found to be properly qualified and is hereby authorized in accordance with the conditions of issuance on the reverse of this certificate to exercise the privileges of

Flight Engineer

RATINGS AND LIMITATIONS

XII. Valid for U.S.-Registered Civil B-747 Aircraft leased to NationAir Canada. Issued under and subject to the provisions of Far 63.23. Subject to the privileges and limitations as shown on the holder's Foreign Flight Engineers Certificate.

XIII. Expires 6/30/93

THIS IS ☐ AN ORIGINAL ISSUANCE ☐ A REISSUANCE OF THIS GRADE OF CERTIFICATE

DATE OF SUPERSEDED AIRMAN CERTIFICATE

BY DIRECTION OF THE ADMINISTRATOR

X. DATE OF ISSUANCE: 6/28/91

X. SIGNATURE OF EXAMINER OR INSPECTOR: James Greene

EXAMINER'S DESIGNATION NO. OR INSPECTOR'S REG. NO.: AEA-FSDO-15

DATE DESIGNATION EXPIRES

VII. AIRMAN'S SIGNATURE: Jacques Q. Doe

FAA Form 8060-4 (8-79) USE PREVIOUS EDITION

[PAGES 5-694 THROUGH 5-706 RESERVED]

SECTION 9. INTERNATIONAL CREWMEMBER CERTIFICATES

821. GENERAL. This section contains information and guidance to be used by inspectors when processing international crewmember certificates. The certificates are issued by the Airmen Certification Branch, AVN-460, to U.S. citizens who are crewmembers employed by operators with U.S.-registered aircraft engaged in international air commerce. The international crewmember certificate facilitates the entry and clearance of U.S. crewmembers into and from International Civil Aviation Organization (ICAO) contracting states. Some member states accept international crewmember certificates without an accompanying passport for a crewmember's temporary admission to member airports and cities immediately adjacent to those airports. Pilot certificates do not contain sufficient information to be acceptable for this purpose; therefore, FAR's 121.721, 121.723, and 135.43 provide for the issuance of a crewmember certificate similar to that described in ICAO Annex 9 for U.S. crewmembers working in ICAO contracting states. Paragraphs 3.17 through 3.20.3 of ICAO Annex 9, "Facilitation," contain the standards and practices recommended by ICAO for international crewmember certificates.

823. ELIGIBILITY. U.S. citizens who are employed by U.S. operators as flight crewmembers in international air commerce may apply for international crewmember certificates.

825. APPLICATION. The inspector is responsible for examining and certifying the airman's application and accompanying documents for accuracy and completeness before forwarding the package to the Airmen Certification Branch, AVN-460. A crewmember may apply for an international crewmember certificate either directly through a flight standards district office (FSDO) or through the operator using procedures agreed upon by the POI or assigned geographic inspector. In either case, the inspector's responsibilities remain the same. Inspectors shall use the guidance that follows when reviewing such applications.

NOTE: A copy of this section may be provided to operator personnel responsible for coordinating the application process.

A. *Documentation*. The inspector must initially ensure that the formal application package includes the following documents:

- An FAA Form 8060-6 (OMB No. 04-R0070), "Crewmember Certificate Application," with parts I and II completed (see figure 5.9.9.1.)
- Two 1 1/4 inch square, identical photographs of the applicant's full face, head, and shoulders only (The clearly printed name of the applicant must be on the back of each picture.)
- Documents that contain proof of U.S. citizenship (see paragraphs 827 and 831)
- A marriage certificate, if applicable (When the applicant's married name is different from the name shown on the proof of U.S. citizenship documents, a copy of the marriage certificate must be forwarded with the application.)

NOTE: If an applicant previously held a crewmember certificate number with any operator, the applicant should submit the old certificate number to expedite processing.

B. *Processing*. The inspector must attach the documentation described in previous subparagraph A to FAA Form 8060-6, "Crewmember Certificate Application," along with any other documents required to complete the application package. The inspector shall not allow photostatic copies to be used, other than those issued under the seal of the appropriate registrar. AVN-460 will return all documentary evidence, except for birth affidavits and altered or mutilated documents, to the operator.

827. PROOF OF BIRTH FOR PERSONS BORN IN THE U.S. For persons born in the U.S., the inspector must ensure that the application includes primary evidence of birth. Documents that are commonly used as proof of birth are discussed as follows:

A. *Birth Certificate*. Whenever possible, the applicant

should present a birth certificate issued under the authority of the appropriate registrar of births. To be acceptable, the inspector must ensure that the certificate bears the written signature of the registrar or another custodian of birth records and the impressed, embossed, raised, or multi-colored seal of the legally responsible state, province, or city office. The birth certificate must also contain: the applicant's given name as a child; the applicant's surname as a child; the date and place of birth; and an indication that the original birth record was filed within 1 year after the date of birth.

NOTE: Documents entitled, "Notification of Birth Registration" or "Birth Announcement" are not acceptable as evidence since these documents are merely notifications that a birth certificate should be recorded.

B. *Delayed Birth Certificate*. A birth certificate which does not contain either the original report of birth which was filed within 1 year after the birth occurred, or the filing date of the original report of birth, but which meets the other requirements listed in previous subparagraph A, may be acceptable. This certificate shall contain evidence that the report of birth was filed by a person who had a personal knowledge of the birth or that the report of birth was supported by evidence that the birth occurred in the U.S. and that the report of birth is acceptable for passport purposes. The inspector shall ensure that the description or nature of the supporting evidence is shown on the certificate itself and is the same supporting evidence as that described in the following subparagraphs C(1) or C(2). If acceptable evidence is not shown on the certificate, the applicant may submit for consideration the same supporting evidence described in subparagraphs C(1) or C(2).

C. *Secondary Evidence of Birth*. If a birth certificate is not obtainable, the inspector shall request that the applicant submit the best secondary evidence available. The secondary evidence of birth may be considered only when it is submitted with either a statement or letter of "no record" from the appropriate registrar of records. A letter of "no record" contains a statement that there is no birth record on file. Other acceptable types of secondary evidence of birth include the following:

(1) *Public Records*. The applicant may submit, for consideration, a combination of other records created as near as possible to the date of birth. Examples are baptismal certificates, certificates of circumcision, hospital birth records, and newspaper files reporting the birth.

(2) *Affidavits of Personal Knowledge*. Affidavits of live birth may also be submitted for consideration. The affidavits may be completed by a parent, older blood relative, the physician, nurse, or midwife who attended the birth. The inspector reviewing an affidavit must ensure that it contains the name, date, and place of birth of the applicant. The inspector shall ascertain as to how the applicant acquired knowledge of these facts.

NOTE: An affidavit should also be accompanied by at least one other document of the type described in previous subparagraph C(1).

829. PROOF OF CITIZENSHIP FOR PERSONS BORN ABROAD WHO ACQUIRED U.S. CITIZENSHIP THROUGH A PARENT. In the case of an applicant born abroad who acquired U.S. citizenship through a parent, the applicant must present either a certificate of U.S. citizenship issued by the Immigration and Naturalization Service or Form 240, "Report of Birth Abroad of a Citizen of the United States of America," or a certification of birth issued by the U.S. Department of State. If the applicant has not submitted any of these documents, then the inspector should direct the applicant to apply to the appropriate U.S. passport office for direction.

831. PROOF OF CITIZENSHIP FOR NATURALIZED CITIZENS. The inspector shall ensure that an applicant who is a naturalized citizen submits the certificate of naturalization along with the application.

NOTE: The U.S. Passport Office has changed its procedures and now requires that all evidence used to establish U.S. citizenship be submitted with the application. The U.S. Passport Office has confirmed that passports and certificates of naturalization will be returned to the applicant.

833. COMPLETION AND DISPOSITION OF FILE.

A. *Proof of Identification*. The inspector receiving a

formal application for an international crewmember certificate shall examine the applicant's personal identification cards, photograph, and other required documents to verify the applicant's identity and citizenship.

B. *Completion of FAA Form 8060-6, "Crewmember Certificate Application."* When the inspector has verified the identification and citizenship of the applicant, the inspector shall complete Part III, "Evidence of Citizenship," on FAA Form 8060-6. The inspector shall also ensure that the applicant's name is clearly written on the back of the applicant's two photographs. The inspector shall attach the two identical photographs and all submitted documents to the applicant's FAA Form 8060-6.

C. *Disposition of File.* The flight standards district office (FSDO) shall forward the applicant's file to the Airmen Certification Branch, AVN-460, P.O. Box 25082, Oklahoma City, Oklahoma 73125-4940. The inspector should inform the applicant that confirmation of citizenship from the Department of State is required for the issuance of the international crewmember certificate by the Airmen Certification Branch, AVN-460.

835. ISSUANCE OF INTERNATIONAL CREWMEMBER CERTIFICATE BY AVN-460. After receiving FAA Form 8060-6, "Crewmember Certificate Application," and the verification of the applicant's U.S. citizenship from the U.S. Department of State, the Airmen Certification Branch, AVN-460, shall process the certificate as follows. AVN-460 shall number the crewmember certificate consecutively starting with number 100. AVN-460 shall then attach the crewmember's picture to the upper left-hand corner of the FAA Form 8060-42, "Crewmember Certificate," and emboss it with the FAA seal. AVN-460 will then forward the finished certificate, including the evidence of U.S. citizenship, directly to the applicant's operator with instructions to deliver the certificate and the attached documents to the applicant.

837. SURRENDER AND REISSUANCE OF INTERNATIONAL CREWMEMBER CERTIFICATE. International crewmember certificates are issued solely for the convenience of the crewmember and the operator while the crewmember is assigned to international duty. When a crewmember is temporarily assigned to another division or other duties with the intention of returning to international flight duty, the international crewmember certificate does not have to be surrendered. The certificate must be surrendered to AVN-460 by the operator, however, immediately after the dismissal of the employee or upon permanent removal of the employee from the international flight assignment. The international crewmember certificate shall be mailed to the Airmen Certification Branch, AVN-460, P.O. Box 25082, Oklahoma City, Oklahoma 73125-4940. The Airmen Certification Branch shall retain the international crewmember certificate for reissuance if the individual is re-employed or reassigned to crewmember duties in international air transportation.

839. REPLACEMENT OF LOST CERTIFICATES. Duplicate certificates may not be issued in the field. Applicants must apply for duplicate certificates directly, by written application, to the Airmen Certification Branch, AVN-460, P.O. Box 25082, Oklahoma City, Oklahoma 73125-4940. After the lost certificate has been replaced, the Airmen Certification Branch shall mail the duplicate certificate to the operator with instructions to deliver the certificate to the crewmember. The application package to replace a lost certificate must contain the following:

- The crewmember's full name, the original certificate number, and date of birth
- A statement, signed by the applicant, about the circumstances surrounding the original certificate
- Two recent photographs (as required in paragraph 825.A of this section)
- A $2.00 processing fee (as of 1992) for reissuing the certificate

841. REISSUANCE OF INTERNATIONAL CREWMEMBER CERTIFICATE FOR A NAME CHANGE. When a crewmember requests the reissuance of an international crewmember certificate because of a new name due to marriage or a court-ordered name change, the operator is responsible for applying directly to the Airmen Certification Branch, AVN-460. The operator shall have the crewmember complete a new FAA Form 8060-6, "Crewmember Certificate Application," containing the crewmember's new name, any change of address, the crewmember's certificate number, and a notation that the application is for reissuance in either

the crewmember's new married name or new court-ordered name, as applicable. The operator shall attach the crewmember's current international crewmember certificate to the application, as well as a copy of either the crewmember's marriage certificate or court documents, as applicable. The operator shall ensure that Part II, "Air Carrier Certification," on the application has been completed so that the reissued certificate in the crewmember's new name can be returned for distribution to the crewmember. Two new photographs of the crewmember are required for the reissued certificate. The operator shall forward the reissuance package to the Airmen Certification Branch, AVN-460, P.O. Box 25082, Oklahoma City, Oklahoma 73125-4940. There is no processing fee for this service.

842. - 852. RESERVED.

FIGURE 5.9.9.1.
FAA FORM 8060-6, "CREWMEMBER CERTIFICATE APPLICATION" (FRONT)

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FORM APPROVED.
OMB NO. 04-R0070

CREWMEMBER CERTIFICATE APPLICATION

All Information MUST BE TYPEWRITTEN in BLACK CAPITAL LETTERS Keep type clean.

☐ ORIGINAL ISSUE *("X" One)* ☐ REISSUE

Submit two clear photos of yourself 1-¼" x 1-¼", full face and shoulders, with this application.

Be sure to sign your name on the back of the photos

PART I – APPLICANT'S STATEMENT

I hereby make application for a Crewmember Certificate in order that recognition of this document will be afforded by ICAO Contracting States in accordance with Annex 9, as amended, to the Convention on International Civil Aviation.

I certify that the information given by me in this application is true and correct.

1. NAME *(First, middle, (maiden), last)* | Crewmember Certificate NO.

2. PERMANENT MAILING ADDRESS *(No., Street, City, State, ZIP Code)*

3. DATE OF BIRTH | 4. PLACE OF BIRTH *(City or County, State (or foreign country))*

HEIGHT IN.	WEIGHT	HAIR	EYES	SEX	POSITION

EMPLOYED BY *(Name of Air Carrier/Commercial Operator)* | DATE OF THIS APPLICATION

SIGNATURE OF HOLDER

No certificate may be issued unless a completed application form has been received (14 C.F.R. 121-).

PART II – AIR CARRIER CERTIFICATION

This certifies that the applicant named above is employed by this certificated United States Air Carrier/Commercial Operator and has been assigned U.S. registered aircraft engaged in international air transport, as provided in Annex 9, as amended, to the Convention on International Civil Aviation as a:
(Crewmember Position) _____

NAME AND ADDRESS OF AIR CARRIER/COMMERCIAL OPERATOR

(FOR FAA USE ONLY)

DATE OF ISSUE

CERTIFYING OFFICIAL *(Type and sign)*
NAME

TITLE

SIGNATURE

FAA Form 8060-6 (8-76) SUPERSEDES PREVIOUS EDITION AND FAA FORM 8060-9

FIGURE 5.9.9.1. (Cont'd.)
FAA FORM 8060-6, "CREWMEMBER CERTIFICATE APPLICATION"
(REVERSE SIDE)

PART III – EVIDENCE OF CITIZENSHIP

("X" one of the first three boxes and box 4)

☐ 1. PASSPORT (Current or expired)

or –

☐ 2. CERTIFICATE OF NATURALIZATION

or –

☐ 3. BIRTH CERTIFICATE OR OTHER DOCUMENTARY EVIDENCE OF CITIZENSHIP

and –

☐ 4. PHOTOGRAPHS (2) SUBMITTED HEREWITH

FAA Inspector's Certification

I certify that this application has been examined; the name of the applicant has been verified with the personal identifications, his/her photograph, and the documents submitted and am satisfied that he/she is the person described thereon.

DATE _____ INSPECTOR'S SIGNATURE _____ OFFICE NO. _____

All items of documentation presented as evidence of citizenship must be forwarded to the Passport Office with this application. All evidence will be returned to the applicant with the completed Crewmember Certificate.

PART IV

PASSPORT OFFICE
DEPARTMENT OF STATE
WASHINGTON, D.C. 20520

TO: FEDERAL AVIATION ADMINISTRATION

The Department has examined its records and/or the documentary evidence submitted with this application and determined that the person identified on the reverse hereof is a citizen of the United States.

(DATE) _____ (SIGNATURE) _____
Director, Passport Office

[PAGES 5-713 THROUGH 5-724 RESERVED]

FIGURE 5.9.9.1. (Cont'd.)
FAA FORM 8060-6, "CREWMEMBER CERTIFICATE APPLICATION"
(REVERSE SIDE)

PART III – EVIDENCE OF CITIZENSHIP

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or –

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or –

☐ 3. BIRTH CERTIFICATE OR OTHER DOCUMENTARY EVIDENCE OF CITIZENSHIP

and –

☐ 4. PHOTOGRAPHS (2) SUBMITTED HEREWITH

FAA Inspector's Certification

I certify that this application has been examined; the name of the applicant has been verified with the personal identifications, his/her photograph, and the documents submitted and am satisfied that he/she is the person described thereon.

DATE _____ INSPECTOR'S SIGNATURE _____ OFFICE NO. _____

All items of documentation presented as evidence of citizenship must be forwarded to the Passport Office with this application. All evidence will be returned to the applicant with the completed Crewmember Certificate.

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Director, Passport Office

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SECTION 5. OPERATOR TRIP RECORDS INSPECTIONS (PTRS CODE 1628)

181. GENERAL. The primary objective of trip records inspections is for inspectors to ensure that operators meet the regulatory requirements of Part 121 or Part 135, as applicable, for the proper use, documentation, and retention of operational trip records. Inspectors can evaluate trip records to reconstruct a particular flight or a series of flights by examining flightplans, dispatch or flight releases, loading and weight documents, weather documents, and other related flight information retained by the operator. Trip record surveillance includes an evaluation of the quality of the recorded data, a check of the calculations for accuracy, and a check of the operator's compliance with the FAR's and company procedures. This section contains Part 121 and Part 135 requirements for operator trip records and also guidance to be used by inspectors when evaluating and conducting an inspection of an operator's trip records.

183. PART 121 OPERATOR TRIP RECORDS REQUIREMENTS. Inspectors should ensure that, in the subject areas that follow, Part 121 operators meet the following requirements:

A. *Load Manifests, Dispatch Releases, and Flightplans.* Part 121 domestic or flag operators are required by FAR 121.695 to retain for at least 3 months the originals, copies, or electronic versions of the completed load manifest (or information from it, except information concerning cargo and passenger distribution); the dispatch release; and the flightplan. Inspectors should review these records as follows:

(1) *Load Manifest.* Inspectors should ensure that the operator's load manifest contains the following information:

- *Individual* weights of the aircraft, fuel and oil, cargo and baggage, passengers, and crewmembers
- Maximum allowable takeoff weight: runway to be used, runway-limit, and climb limit, en route performance limits, destination landing weight limits, and destination or alternate landing distance limits
- Total aircraft takeoff weight (as computed under approved procedures)
- Documentation that the aircraft is properly loaded with the center of gravity within approved limits
- Passenger names (unless such information is maintained elsewhere by the operator)

(2) *Dispatch Release.* Inspectors should ensure that the operator's dispatch release contains the following information:

- Aircraft identification number ("N" number)
- Trip number
- Departure airport, intermediate stops, destination airports, and alternate airports
- A statement of the type of operation (IFR or VFR)
- Minimum fuel required
- Weather reports and forecasts for the destination airport, each intermediate stop, and any alternate airport that is the latest information available at the time the release is signed

(3) *Flightplan.* Inspectors must ensure that the operator's flightplan contains at least the following information (as required by FAR's 91.153 and 91.169):

- Aircraft identification number ("N" number)

- Type of aircraft
- Flight number
- Name of the pilot-in-command (PIC) (usually found on the dispatch release)
- Point and proposed time of departure
- Proposed route, cruising altitude (or flight level), and true airspeed at the cruising altitude
- Point of first-intended landing and the estimated elapsed time until over that point
- Amount of fuel on board (in hours)
- An alternate airport - if the first point of intended landing does not have a prescribed standard instrument approach procedure, or the weather at that airport for at least 1 hour before and 1 hour after the estimated time of arrival (ETA) indicates the ceiling will be at least 2000 feet above the airport elevation and the visibility will be at least 3 miles
- Number of persons in the aircraft, except where that information is otherwise readily available to the FAA
- Any other information that either air traffic control (ATC) or the PIC finds necessary for ATC purposes

B. *Types of Flights Requiring Dispatch Releases and Flightplans.* For Part 121 domestic and flag operators, a dispatch release must be signed and a flightplan must be executed by both the PIC and the aircraft dispatcher for the following types of flights:

- All scheduled flights
- All extra-section (unscheduled) flights
- All charter flights
- All ferry flights (except those ferry flights authorized under Part 91)
- All proving flights
- All flights undertaken to reposition an airplane after landing at an unscheduled airport

C. *Requirements for Part 121 Supplemental Operators.* Part 121 supplemental operators are required by FAR 121.697 to retain, for at least 3 months, originals, copies, or electronic versions of the load manifest; the flight release; the airworthiness release; the pilot route certification; and the flightplan. Inspectors should review these documents as follows:

(1) *Load Manifest.* Inspectors must ensure that the load manifest contains the information in previous subparagraph A (1).

(2) *Flight Release.* Inspectors must ensure that the flight release contains the following information:

- Company or organization name
- Make, model, and registration number of the aircraft being used
- Flight or trip number, and date of flight
- Name of each flight crewmember, flight attendant, and pilot designated as PIC
- Departure airport, destination airport, alternate airports, and route
- Minimum fuel supply
- A statement of the type of operation (IFR or VFR)
- Weather reports and forecasts for the destination airport, each intermediate stop, and any alternate airport that is the latest information available at the time the release is signed

(3) *Airworthiness Release.* Inspectors must ensure that the airworthiness release has been prepared in accordance with the procedures set forth in the operator's manual. The release must also include a statement of certification that the following conditions have been met:

- Any work performed on the aircraft was performed in accordance with the requirements of the operator's manual
- All items required to be inspected were inspected by an authorized person who determined that the work was satisfactorily completed
- No known condition exists that would make the aircraft not airworthy
- Concerning the work performed, the aircraft is in condition for safe operation

NOTE: The airworthiness release must be signed by an authorized certified mechanic, repairman, or an authorized official of a repair station that is responsible for the completed work. A certified repairman may sign the release or entry only for the work for which he is employed and certified to accomplish. Additionally, the operator may state in the operator's manual that the signature of an authorized certified mechanic or repairman constitutes certification that the preceding conditions have been met, thus making it unnecessary to include a restatement of all of the required conditions.

(4) *Pilot Route Certification.* Inspectors must ensure that the PIC has certified to having examined all applicable en route and destination information as required by FAR 121.697A (4). This information includes such items as: weather information, navigation facilities, communication procedures, terrain and obstructions, minimum flight levels, instrument approach procedures, airport diagrams, and NOTAM's. If the flight is to be conducted through an area or to an airport, either of which is designated as a "special airport" or a "special area" by the FAA, the PIC must be qualified to conduct the flight (as required by FAR 121.445).

(a) To meet the "special airport" qualification requirements, the PIC must have accomplished, within the preceding 12 calendar months, the following:

- Made an entry to that airport (including a takeoff and landing) while serving as a pilot crewmember (PIC or second-in command (SIC))
- Qualified by using pictorial means acceptable to the FAA for the airport

(b) To meet the "special area" qualification requirements, the PIC must have, within the preceding 12 months, become or remained qualified for the route to be flown by adequately demonstrating one of the following methods:

- Flying over the route or area as PIC using the applicable navigation system
- Flying over the route or area as PIC under the supervision of a check airman, using the applicable navigation system
- Completing an approved Class II navigation training program

(5) *Flightplan.* Inspectors must ensure that the flightplan includes the information in subparagraph A(3).

185. PART 135 OPERATOR TRIP RECORDS REQUIREMENTS. Part 135 operators who operate multiengine aircraft are required by FAR 135.63 to prepare a load manifest in duplicate for each flight conducted. Copies of these load manifests must be retained by the operator for at least 30 days at the operator's principal base of operations or at another location approved by the FAA. A load manifest must contain the following information:

- Total number of passengers
- Total weight of the loaded aircraft

- Maximum allowable takeoff weight for that flight
- Center of gravity limits
- Center of gravity of the loaded aircraft or an entry on the manifest that the aircraft center of gravity is within limits according to an approved loading schedule or method
- Aircraft registration number ("N" number) or flight number
- Origin and destination of the flight
- All crewmember names and position assignments

187. TRIP RECORDS INSPECTION AREAS. During a trip records inspection, the inspector should not consider any one inspection area to be more important than any other inspection area. Five general inspection areas have been identified as areas to be evaluated during trip records inspections (see figure 6.2.5.1. for job aid). These areas are: general; flightplan; dispatch/flight release; load manifest; and, other required documents. A definition of, and applicable guidance for, these inspection are as follows:

A. *General Inspection Area.* This inspection area refers to those inspection elements that are common to all trip records. Inspectors should evaluate such items as record availability, legibility, currency, and content, as they relate to regulatory recordkeeping requirements.

B. *Flightplan Inspection Area.* This inspection area refers to the flight planning requirements for Part 121 operators. Inspectors should evaluate such items as flightplan content, listing of alternate airports, and fuel loads. Many Part 121 operators incorporate the flightplan and the dispatch/flight release into one document. This is acceptable and reduces the duplication of information that may be required by both documents.

C. *Dispatch/Flight Release Inspection Area.* This inspection area refers to the Part 121 requirements for domestic and flag or supplemental operators, respectively.

D. *Load Manifest Inspection Area.* This inspection area refers to the regulatory requirements of both Parts 121 and 135. Inspectors must inspect and validate the operator's loading documents to ensure accuracy and compliance with the FAR's.

E. *Other Required Documents Inspection Area.* This inspection area refers to such items as pertinent weather forecasts, NOTAM's, fuel slips, and other documents that are issued to flight crewmembers before each flight.

189. GENERAL INSPECTION PRACTICES AND PROCEDURES. Trip records inspections are usually conducted at the operator's principal base of operations. Some operators have established a system where line stations forward all trip record information to one central location where the information is retained for the required time period. Some operators have most of their trip record information stored in a computerized format. Inspectors should use the following general, procedural guidelines when conducting an inspection of an operator's trip records.

A. *Pre-Planning Inspection.* Before conducting the actual inspection, inspectors should familiarize themselves with the operator's trip records procedures, formats, and means of disseminating information to flightcrews. Inspectors should pre-plan the inspection by deciding which specific areas should be concentrated upon, such as listing alternate airports, accurate fuel loads, dispatch release time versus actual blockout time, and accurate and timely weather information.

B. *Initial Contact With Operator.* Inspectors should contact the operator's personnel responsible for maintaining trip record files and advise them that an inspection shall be conducted. Upon arriving at the recordkeeping location, the inspector should properly identify one's self and request records for a specific series of trips. This ensures that the operator has an effective means of storing record information and is capable of retrieving specific trip information at the FAA's request. Inspectors should also request space at the operator's facility to conduct the inspection.

NOTE: If an operator uses electronic records, it is important that the inspector become familiar with the system before conducting the surveillance.

C. *Examination of Documents.* During the conduct of the actual inspection, inspectors should examine all of the available documents for each flight and cross-check the information between the trip records. For example, the fuel

load on a dispatch release for a domestic Part 121 operator should be the same as the fuel load on the load manifest, the flightplan, and the fuel slip within the operator's specified tolerance.

191. SPECIFIC INSPECTION PRACTICES AND PROCEDURES. When conducting trip records inspections, inspectors should use the Air Carrier Trip Records Inspection Job Aid (see figure 6.2.5.1.). This job aid contains all of the required trip record information for each type of air carrier. Items annotated with an asterisk (*) on the job aid provide additional guidance to the inspector for the evaluation of specific trip records items, such as the information that must be contained in an airworthiness release. For all trip records inspections, the inspector should, as a minimum, evaluate the operator's records for the following:

A. *Accuracy and Completeness.* Inspectors should ensure that each trip record package they examine contains all of the required information according to the job aid (figure 6.2.5.1.) and also pertaining to the actual flight it represents. Each document should have a flight number or a trip number and an aircraft identification number ("N" number) which clearly identifies the applicable flight.

B. *Aircraft Weight Information.* Each trip records package, regardless of the type of operator, must contain aircraft weight, balance (CG), and loading information. Passenger and cargo weight information must be accurately reflected on the load manifest. When evaluating this information, inspectors should take into account the following:

(1) Many operators have approved systems which result in weight and balance "finals" being transmitted to the flightcrew via air-ground passive communication systems (ACARS) or company radio frequencies after the aircraft has departed the gate or ramp area. This information, which normally consists of adjusted takeoff gross weight and trim settings, is critical to the crewmembers for the accurate determination of the takeoff data. Inspectors should ensure that the information contained on the load manifest accurately portrays the actual passenger and cargo weights.

(2) Load manifests must contain, as a minimum, two weight and balance notations:

- The maximum allowable takeoff weight
- The actual takeoff gross weight for the particular flight

NOTE: Inspectors should ensure that these two weight figures are clearly annotated on the load manifest document.

C. *Minimum Fuel Required.* Inspectors should examine Part 121 operator trip records to ensure that they include an annotation of the minimum fuel required to conduct the flight. Although not specifically required by regulation, many operators will provide a breakdown of fuel loads, such as trip fuel, alternate fuel, reserve fuel, and holding fuel. When examining fuel figures, inspectors should cross-check the dispatch or flight release fuel quantity (or weight in pounds) with the load manifest fuel quantity (or weight in pounds) to ensure that the figures are the same. Additionally, inspectors must ensure that the operator's flightplan includes the amount of fuel on board (in hours), and that this figure matches, within the operator's allowable tolerance, the fuel figures shown on the flight release and the load manifest.

NOTE: Inspectors may obtain a close estimate of hourly fuel burn information from the cruise control charts in the applicable aircraft operating manual.

D. *Dispatch/Flight Release Information.* FAR 121.593 requires a domestic operator to issue a new dispatch release if the flight is delayed for more than 1 hour from the intermediate airport. FAR's 121.595 and 121.597 require that flag or supplemental operators re-issue a dispatch or flight release respectively, if the flight is delayed on the ground for more than 6 hours. To ensure that the operator is re-releasing flights as required, inspectors should determine the actual departure times from company logs, ATC tower logs, or some other means, and then compare those times with the dispatch or flight release times (as applicable). This requirement is often observed during operations in adverse weather conditions.

E. *PTRS Input.* Inspectors should record the evaluation of an operator's trip records as an activity using PTRS activity code 1628.

192. - 200. RESERVED.

FIGURE 6.2.5.1.

AIR CARRIER TRIP RECORDS INSPECTION JOB AID

PTRS ACTIVITY: 1628 DATE:	AIR CARRIER:	PT 121 DOMESTIC/FLAG:O PT 121 SUPPLEMENTAL: O	PT 135 COMMUTER:O PT 135 NONSCHED:O
RECORDS LOCATION:	RECORDS MANAGER:	PHONE NUMBER:	HB REF: VI.2.14

U = UNACCEPTABLE; P = POTENTIAL; I = INFORMATION; E = EXCEEDS

GENERAL	
RETENTION	301
PROCEDURES	303
CONTENT/INFO	307
CURRENCY	309
AVAILABILITY	311
LEGIBILITY	--
OTHER/REMARKS	399
FLIGHTPLANS	**763**
A/CIDENTIFICATION#	--
A/C TYPE	--
FLIGHT NUMBER	--
NAME OF PIC * May be listed on dispatch/flight release (as applicable)	--
POINT OF DEPARTURE	--
TIME OF DEPARTURE	--
PROPOSED ROUTING	--
CRUISE ALTITUDE/FL	--
TAS AT ALTITUDE	--
POINT OF 1ST LNDG AND ESTIMATED ELAPSED TIME UNTIL OVER THAT POINT	--
AMOUNT OF FUEL ON BOARD (HRS): _____	
DISPATCH RELEASE: PT 121 DOM/FLAG OPERATR	**765**
AIRCRAFT ID NO.	--
TRIP NUMBER	--
DEPARTURE AIRPORT	--
INTERMEDIATE STOP	--
DESTINATION AIRPT	--
ALTERNATE AIRPORT (IF REQUIRED) TYPE OF OPERATION (IFR OR VFR)	
MIN FUEL REQ: ____	--
* Trip Fuel	--
* Alt Fuel	--
* Holding Fuel	--
* Reserve Fuel	--
* Taxi Fuel	--
* Contngcy Fuel	--
* No Alternate Available Fuel (Flag Carriers)	--
* Tankered Fuel	--
WEATHER REPORTS AND NOTAM's	757
* Destination	--
* Intermediate Stops	--
* Alternates	--
FIGHT RELEASE: PART 121 SUPPL. OPERATORS	**765**
COMPANY NAME	--
A/C MAKE, MODEL, & REGISTRATION NO.	--
FLIGHT/TRIP NO.	--
DATE OF FLIGHT	--
CREWMEMBER NAMES * PIC	--
* EACH OTHER CREW MEMBER NAME	--
DEPARTURE AIRPORT	--
DEST. AIRPORT	--
ALTERNATE AIRPORT	--
ROUTE OF FLIGHT	--
MIN FUEL REQ: ____	--
* Trip Fuel	--
* Alt Fuel	--
* Holding Fuel	--
* Reserve Fuel	--
* Contngcy Fuel	--
* No Alternate Available Fuel	--
* Tankered Fuel	--
TYPE OF OPERATION: (IFR OR VFR)	--
LOAD MANIFEST: ALL PART 121 OPERATORS	**613**
INDIVIDUAL WEIGHTS	--
* Aircraft	--
* Fuel and Oil	--
* Cargo/Baggage Weight (With Compartment Location)	
* Passenger Weight	
MAX ALLOWABLE T/O WEIGHT	
* Runway-Limited	
* Climb-Limited	
* For En route Climb/Cruise Requirements	
* For Destination Landing Limits	
ACTUAL TOTL A/C WT	
CG WITHIN LIMITS	
TRIM SETTING	
PAX LIST OF NAMES (Unless a list is retained elsewhere)	
OTHER PART 121 SUPP REQUIRED DOCUMENTS	**729**
AIRWORTHINESS REL	--
* Work Performed/ Inspection Items	--
* Authorized Sig	--
PILOT ROUTE CERT	--
PART 135 LOAD MANIFEST	**613**
TOTAL NUMBER OF PAX	[ ]
TOTAL GTOW	[ ]
MTOW FOR THAT FLT	[ ]
AIRCRAFT CG LIMITS	[ ]
CG FOR THAT FLIGHT (Or Statement That The Aircraft is Loaded According To An Approved Loading Schedule)	[ ]
A/C REGISTRATION # OR FLIGHT #	
FLIGHT ORIGIN	--
FLIGHT DESTINATION	--
CREWMEMBER NAMES AND DUTY POSITIONS	--

[PAGES 6-187 THROUGH 6-198 RESERVED]

SECTION 6. MANUALS INSPECTIONS (PTRS CODE 1621)

201. GENERAL. The FAR's require operators to prepare and keep current various manuals and checklists for the direction and guidance of flight and ground personnel conducting air transportation operations. Each operator is required to maintain a complete manual (or set of manuals) at its principal base of operations and to furnish a complete manual (or set of manuals) to the FAA certificate-holding district office (CHDO). An operator's manual must be reviewed by principal operations inspectors (POI's) and other qualified inspectors to ensure adequate content and compliance with applicable regulations, safe operating practices, and the operator's operations specifications (OpSpecs). While inspectors are encouraged to provide guidance and advice to operators in the preparation of their manuals, the development and production of an acceptable manual is solely the responsibility of the operator. This section contains information about the definitions and regulations concerning different manuals and direction and guidance to be used by inspectors when conducting manuals inspections of Part 121 and Part 135 operators.

203. BACKGROUND DEFINITIONS. Inspectors should have knowledge of the following regulations, definitions, and guidance concerning the various types of manuals and guidance materials.

A. *Flight Manual.* FAR 121.141 or FAR 135.81(c) (as applicable), and FAR 91.9(b) require that an FAA-approved flight manual be carried aboard each aircraft for the guidance of crewmembers when conducting flight operations. A flight manual is any manual approved by the FAA that an operator uses to comply with this requirement. A flight manual may either be an approved Airplane Flight Manual (AFM), an approved Rotorcraft Flight Manual (RFM), or an approved Company Flight Manual (CFM). POI's must review an operator's flight manuals to ensure that the manuals contain adequate direction and guidance for those operations the operator conducts and for the environment in which the operations are conducted (see volume 3, chapter 15, section 4).

B. *General Manual.* FAR 121.133 and FAR 135.21 require that each operator (except Part 135 single pilot operators and those operators granted a deviation from this requirement) prepare and keep current a manual providing guidance for all categories of flight and ground personnel conducting air transportation operations. The manual required by FAR 121.133 and FAR 135.21 is termed the General Manual. The operator's general manual must include the duties and responsibilities of each category of employee. The general manual must also include adequate policy, direction, and guidance for the safe and efficient performance of the duties assigned to each category of employee. In practice, a system of manuals is required to meet both operational and airworthiness regulatory requirements, even for relatively simple operations. When the general manual is subdivided into more than one part, the segment of all portions applicable to operations is termed the General Operations Manual (GOM).

C. *Guidance Material.* Inspectors should become thoroughly familiar with the contents of volume 3, chapter 15, "Manuals, Procedures, and Checklists" in this handbook before conducting a manuals review. Inspectors should direct particular attention to section 2 of Chapter 15, "Approval and Acceptance of Manuals and Checklists." Inspectors should also review figures 2.1.1.1. through 2.1.1.3. in volume 2 for the required content of manuals.

205. PROCEDURES FOR REVIEWING OPERATIONS MANUALS. A principal inspector or an assigned representative must review an operator's manuals before issuing an operating certificate and periodically thereafter. Inspectors should use the following procedures when reviewing the manuals:

A. *Initial Review.* A comprehensive review of flight manuals and the GOM must be conducted by the POI and other assigned inspectors before the initial certification of an applicant. During the initial review of these manuals, POI's must ensure that the operator has addressed the applicable topics discussed in volume 3, chapter 15, sections 3 and 4 of this handbook. In addition, those items in the operator's final compliance statement which require the operator to develop a policy statement, system, method, or procedure, must be addressed in these manuals. If user manuals are furnished, those topics which apply to the specific user must

be addressed. Each topic must be presented with enough detail to ensure that the user can properly carry out the portion of the policy or procedure for which the user is responsible. To record this function in the Program Tracking and Reporting Subsystem (PTRS), the inspector should enter activity code 1302, with a "1202" in the tracking field.

NOTE: If an inspector from another district office reviews the manual for the POI, the inspector must enter it in the PTRS as code 1302, and as 1245 in the tracking field.

B. *Review of Changes to Manuals.* The POI or a designated inspector must review each revision or proposed revision to a manual, checklist, or procedure (see volume 3, chapter 15, paragraphs 2103 and 2105) and use the applicable guidance that follows:

(1) *Approval of Manual Changes.* Changes to manuals or sections of manuals or checklists which require approval must be approved by the FAA in writing before the operator can use the change. POI's should endeavor to review approved material in a timely manner.

(2) *Acceptance of Manual Changes.* Only a portion of an operator's manuals are "approved" by the FAA, while the remaining portions are "accepted" by the FAA. The operator may begin using accepted portions of a manual once the change is delivered to the CHDO. POI's should attempt to review changes to accepted portions of manuals promptly, but may need to delay the review of accepted material due to higher priority work. If the POI subsequently concludes that an accepted section of a manual is not acceptable, the POI shall formally notify the operator of the deficiency. Upon notification, the operator must take action to resolve the deficiency.

(3) *Other Considerations for Manual Changes.* Inspectors shall not limit manual reviews to a strict consideration of the change itself but shall also consider the impact of the change on the operator's overall manual system, training program, and type of operations. Changes in OpSpecs should be accompanied by a review of applicable sections of the operator's manual.

(4) *PTRS Input.* This activity is considered to be organizational technical administration, and the inspector should record it in the PTRS system as activity code 1303.

C. *Manual Reviews During En Route Surveillance.* Inspectors conducting en route inspections and ramp inspections should review the flight manual and those portions of the GOM carried by the flightcrew for completeness and currency. When a flight is long enough to make it practical, inspectors should review these manuals more in-depth, particularly those sections that are operationally relevant to the flight in progress. An inspector conducting both cockpit and cabin inspections should check the personal manuals of crewmembers to ensure that all required revisions have been made. Even if a thorough manuals check has been accomplished during an en route surveillance, only one PTRS code may be used. In this case, the code would be 1624 because that is the primary activity. Inspectors should record any discrepancies found with the manuals in section IV, "Comments," on the PTRS Data Sheet.

207. PERIODIC REVIEW OF MANUALS. The continual review of an operator's manuals by inspectors is necessary because both the aviation environment and the operations conducted by the operator are constantly changing. Each POI is responsible for developing a surveillance plan for the operator's manual system. At least one major portion of the operator's manual system should be reviewed annually, and the entire manual system should be reviewed over a period of 1 to 3 years (depending on the complexity of the operation). This periodic review should be planned as a distinct event according to the direction given by the National Program Guidelines (NPG's). This periodic review should be coordinated between principal inspectors and other inspectors, including geographic, to ensure an appropriate exchange of information and to avoid redundant reviews. This activity is considered to be a surveillance function; therefore, inspectors should enter it as 1621 in the PTRS system.

208. - 218. RESERVED.

[PAGES 6-201 THROUGH 6-212 RESERVED]

SECTION 7. OVERWATER EN ROUTE INSPECTIONS (PTRS CODE 1624)

219. GENERAL. This section contains information, direction, and guidance to be used by inspectors when conducting overwater en route inspections. This section contains background information on the general navigational principles with which the operator and flightcrews must comply, definitions of relevant terminology, and specific guidance to be used by inspectors when observing flightcrews as they conduct Class II navigation. Inspectors should refer to section 4 of this chapter for information and guidance related to cockpit en route inspections.

221. BACKGROUND. Although navigation errors are infrequent, human errors have accounted for most incidents involving navigation. In most cases, the errors have occurred when the navigation equipment was functioning normally, but the prescribed operating procedures were either inadequate or not followed. Advisory Circular (AC) 90-79, "Recommended Practices and Procedures for the Use of Long-Range Navigation Equipment," contains guidance to be used by operators for developing adequate procedures. Before receiving approval to conduct Class II long-range navigation, operators must demonstrate competence by using these procedures in validation tests. Operators must develop programs that effectively train flightcrews in long-range navigation. The operator's line check programs must ensure a high degree of cockpit discipline. Operators may develop individual practices and procedures to comply with the standards of AC 90-79. Inspectors should, therefore, become familiar with the operator's specific procedures.

223. DEFINITION OF TERMS. The following definitions appear in AC 90-79 and other publications, such as the Airman's Information Manual (AIM), and are repeated for inspectors using this handbook for both convenience and clarity:

- *Standard Service Volume*: That airspace in which navigation signal coverage is provided from standard International Civil Aviation Organization (ICAO) navigational aids (such as VOR, DME, and NDB).

- *Long-Range Class II Navigation*: Navigation conducted outside the ICAO standard service volume. Class II navigation requires either a properly qualified flight navigator and the use of celestial navigation equipment or electronic long-range equipment, such as LORAN, INS, DOPPLER, OMEGA, or IRS.

- *Gateway*: A specific fix at which a transition from Class I to long-range Class II navigation occurs, or vice versa. A gateway must be established so that a positive fix can be established by ICAO Class I navigational aids.

- *MNPS Airspace*: Minimum navigational performance standards (MNPS) airspace is that airspace located outside the ICAO standard service volume in which minimum standards for adhering to track are required by international agreement. These standards contain minimum separation between parallel tracks. Operations within MNPS airspace require special training, navigation equipment, and adherence to specified procedures besides those required for Class II navigation.

NOTE: The FAA North Atlantic MNPS Operations Manual contains details on MNPS operations.

- *Dead Reckoning*: Navigation conducted solely by calculating the effect of known or estimated winds to predict drift, groundspeed, track, and time en route.

- *Fix*: A measurement that establishes an aircraft's position at a specific time. A fix may be taken by range and bearing from a standard navigational aid, location by an electronic long-range navigational device, or location by a celestial observation.

- *Waypoint*: A point in space specified for navigation, flight planning, and ATC reporting purposes. A waypoint differs from a checkpoint in that it does not necessarily represent a distinguishable landmark.

- *Cross-Checking*: Cross-checking is the act of verification. Cross-checking involves matching a set of test data against a set of master data to detect deviations in sequence or content.

- *Track Messages*: In the North Atlantic track system, the bulk of air traffic flows east-to-west early in the day and west-to-east in the latter part of the day. As a result, early in the day most of the available tracks are east-to-west, and later in the day most of the available tracks are west-to-east. The assigned tracks also move north and south to take advantage of, or to avoid, winds. Available tracks for both eastbound and westbound flights vary approximately every 12 hours. Air Traffic Control (ATC) selects track coordinates and publishes them in a "track message." Track messages provide track coordinates, available flight levels, and gateways. An aircraft that operates on the organized track system must have a copy of the track message for the current period in the cockpit.

225. FLIGHT PLANNING. AC 90-79, "Recommended Practices and Procedures for the Use of Long-Range Navigation Equipment," requires that one copy of a flightplan be designated as the master flightplan. All information related to navigation of the flight must be recorded on this document. When evaluating this area, inspectors should use the following guidance:

A. *Computerized Flightplans.* Even though most operators use computerized flightplans, all flightplans must still be carefully checked to ensure accuracy. The routing on flightplans must be cross-checked against navigational charts and track messages. Flightplans must also be legible.

B. *Waypoint Numbering.* After a flightplan is checked, the waypoints should be numbered. Many automatic navigation systems can accept only nine waypoints. Waypoints may be numbered sequentially initially starting with 1 and going up to 9; then the tenth waypoint can be numbered 1, the eleventh 2, and so on. Other navigation systems, such as flight management systems (FMS), can accept 100 or more waypoints. In such cases it is acceptable for waypoints to be numbered progressively. When more than one type of navigational device is in use (for example INS and FMS), the waypoints must be numbered so that they correspond to both devices. In this example, one acceptable practice is to number the first nine waypoints in the FMS as 11 through 19, and the second set of waypoints as 21 through 29, and so on.

C. *Plotting Chart.* The planned route must be drawn on a plotting chart of appropriate scale (1 inch to 120 nautical miles). All waypoints on the plotting chart must be cross-checked against the master flightplan.

D. *NOTAM's and PIREP's.* Current Notices to Airmen (NOTAM's) must be available and checked to ensure that the required stations are in service for OMEGA and LORAN operations. Pilot reports (PIREP's) must also be checked to ensure that the actual winds are the same as the winds in the forecast.

227. COCKPIT SET-UP. Cockpit set-up begins with the crewmembers turning the navigation computers on according to the flight manual procedures. Inspectors should observe crewmembers during cockpit set-up and be aware of the following:

A. *Software and Modification Status.* Before loading the initial present position and waypoints, crewmembers should verify that the procedures they are using are compatible with the software loaded in the computer. Flight management systems (FMS) data bank dates should be checked to ensure that they are current.

B. *Present Position and Waypoint Entry.* One crewmember should find and enter the initial present position into the navigation computers. A record of this action must be made on the master flightplan. An acceptable method of making this record is for the crewmember to copy the coordinates displayed after the entry sequence and mark them "initial present position." An acceptable method for recording waypoint entry is to circle the waypoint on the master flightplan.

C. *Cross-Checking Initial Set-Up.* A second crewmember must independently find the initial present position and verify that all of the navigation computers are correctly programmed. The second crewmember must then verify the accuracy of each waypoint as follows:

(1) Verification must be recorded by the crewmember on the master flightplan. An acceptable means of recording verification is for the crewmember to draw a diagonal line through the initial present position and each waypoint as it is checked.

(2) When the remote feature is used, the crewmember must independently check the present position and waypoints in each computer. It is possible for data to be

lost during the transfer since the remote computer may not have received the same data that was transmitted.

D. *ZD Check.* After the waypoints have been entered and verified by the crewmember, the crewmember must compare the track bearing and zone distance (ZD) shown by the computer with that shown in the flightplan. A track bearing or distance that varies by more than ± 2 should be investigated.

E. *Pre-Takeoff Checks.* Some manufacturers of navigation equipment recommend the completion of preflight navigation checks. For example, a manufacturer may recommend that after the crewmember places the "NAV Mode" selector switch to "NAV" on an Inertial Navigation Set (INS), and before moving the aircraft, the crewmember should check the ground speed. Any indication of more than a few knots may indicate a bad system. With systems such as INS and OMEGA that navigate during ground operation, a taxi check may also be recommended. Current present position and ground speeds should be cross-checked to confirm correct operation. Inspectors should observe flight crewmembers making the checks required by the operator's procedures.

229. GATEWAY PROCEDURES. Flights must not proceed beyond the gateway unless the correct functioning of the navigation computers can be verified. Inspectors should observe the flightcrew performing gateway checks and should ensure that flight crewmembers are following the operator's procedures. A typical set of operator procedures with some guidance for inspectors evaluating such procedures follows:

A. After crossing the gateway, a crewmember should record the time and present position of each navigation computer. Preferably, the crewmember should use the hold feature on the computer to freeze the present position display. This position must be compared to the known position of the gateway and to the deviation of each computer established. This gateway check detects errors that may have accrued in position information, and it also provides an opportunity for updating if required, as well as establishing, the most accurate computer.

B. Usually, the time and distance to the next waypoint is displayed on the computer that is supplying steering signals. This computer may be set up to use triple mixing, if this feature is available. A second computer should be set to display cross-track (XTK) and track angle error (TKE). The operator's procedures for triple mixing should be in accordance with the manufacturer's recommendations.

C. A crewmember should record the actual winds for the purpose of comparing them with preflight planning and to use them in case the flight must reverse course.

231. WAYPOINT CHANGEOVER PROCEDURES. When conducting an overwater en route inspection, inspectors should ensure that an operator's waypoint changeover procedures include the following:

A. *Inbound.* When approaching a waypoint, a crewmember should cross-check the coordinates of the subsequent waypoint against the flightplan.

B. *Outbound.* After passing a waypoint, a crewmember should confirm that each computer has switched to the next leg and that the aircraft is tracking along the desired track. Waypoint passage must be recorded by a crewmember on the master flightplan. One acceptable means of doing this is for the crewmember to place a second diagonal line through the circle surrounding the waypoint number. The crewmember must record both the time that the waypoint was passed and the fuel on board, as well as compute an estimated time of arrival (ETA) at the next waypoint for ATC reporting.

C. *Course Plot.* Plotting procedures reduce course deviation incidents and should be used by crewmembers when navigation is done solely by long-range navigation computers. Approximately 10 minutes after passing each waypoint, a crewmember should record the present position and then place that position on the plotting chart. This plotted position should fall on the track line.

233. AFTER ARRIVAL PROCEDURES. Inspectors should ensure that, after arrival, a crewmember determines the distance from the actual position to the present position displayed on each computer. Crewmembers should record these observations in accordance with the operator's procedures.

235. NAVIGATION CONTINGENCY PROCEDURES. Inspectors must ensure that an operator's training programs, manuals, and check airman programs contain procedures for partial and total navigation systems failure. Specific procedures depend upon the type of equipment being used and

the area in which operations are being conducted. Inspectors must be aware that the improper application of these procedures can result in a collision with another aircraft. Inherent in these procedures is the requirement that the crewmembers contact ATC whenever the flight is unable to continue according to the current ATC clearance. This includes situations in which the aircraft is off-course or is unable to maintain assigned altitude. The flightcrew's command of this information must allow for an immediate application in an emergency. The crewmember should have knowledge of the first actions to take without having to reference flight information documents. Flightcrews must be knowledgeable of where these procedures are published and must be able to locate them expeditiously when needed.

237. AIRCRAFT PERFORMANCE. Inspectors should be aware of the one-engine and two-engine inoperative performance requirements for extended overwater operations (see volume 4, chapter 3). When conducting an extended overwater inspection, inspectors should evaluate the operator's methods of complying with these rules and the flightcrew's knowledge of these procedures. Inspectors should also take into account the guidance that follows when evaluating engine failure procedures.

A. *ETP's.* Operators often use Equal Time Point (ETP) computations to show compliance with engine-out performance requirements. When evaluating this area, inspectors should consider the following:

(1) *Proficiency.* Flight crewmembers are often assigned the responsibility for computing ETP's, and must be proficient in making them. Whether or not flight crewmembers perform the calculations, they must be familiar with the conditions for them as well as the meaning of these calculations.

(2) *Use of Alternate Airports.* Operators may use en route alternate airports and compute multiple ETP's to show compliance with engine-out performance rules. For example, on a flight from San Francisco to Tokyo, an operator might designate Seattle, Anchorage, and Adak as en route alternate airports. To do so, each alternate airport must be listed on the flight release. Flightcrews must be knowledgeable in the procedures they must follow should an engine fail.

B. *Fuel Dumping and Driftdown.* Engine failure procedures normally require driftdown, fuel dumping, or both. Flightcrews must be aware of how to make these determinations. Often, aircraft weight and altitude information is presented in tabular format; therefore, flightcrews must be competent in interpreting these presentations.

239. FLIGHT RELEASE RULES. Inspectors should be thoroughly familiar with the rules for releasing flights in an extended overwater operation (see volume 3, chapter 6 for a discussion of these rules). Inspectors should ensure that operators and flightcrews comply with these rules, which include the following:

A. *Weather Minimums.* Inspectors should ensure that the flightcrews are thoroughly familiar with the minimum weather requirements for destination and alternate airports. Flightcrews should be aware of the required procedures to follow when the weather at a destination or alternate airport goes below the minimums while the flight is en route.

B. *Special Operations.* Since the operations specifications (OpSpecs) contain several restrictions on special operations, inspectors should pay particular attention to operations using special fuel reserves under OpSpecs paragraph B43 or planned re-release operations under OpSpecs paragraph B44.

241. INSPECTOR ASSISTANCE. For more assistance on the conduct of overwater en route inspections, navigation and dispatch specialists are available. Inspectors may contact these specialists at the following offices:

A. *East Coast.* FSDO-15, Valley Stream, NY
FTS: 667-1848.

B. *West Coast.* FSDO-03, San Francisco, CA
FTS: 466-2771.

C. *Headquarters.* AFS-400, Washington, DC
FTS: 267-3722.

242. - 252. RESERVED.

[PAGES 6-217 THROUGH 6-228 RESERVED]

SECTION 8. PROFICIENCY AND COMPETENCY CHECK INSPECTIONS (PTRS CODE 1632)

253. GENERAL. Part 121 and certain Part 135 operators are required to establish a check airman program for conducting the proficiency and competency checks required by the Federal Aviation Regulations (FAR's). Principal operations inspectors (POI's) have the surveillance responsibility for an operator's check airman program. This function can be accomplished directly for small operators and indirectly through coordination with APM's and/or geographic units for large, complex operators. POI's or their representatives are authorized to observe these checks at any time as a check airman surveillance job function and if aircraft qualified to administer proficiency and competency checks. This section contains information, direction, and guidance to be used by POI's and inspectors when observing or conducting a proficiency or competency check inspection.

255. OBJECTIVES OF PROFICIENCY AND COMPETENCY CHECK INSPECTIONS. The surveillance of an operator's proficiency and competency checks provides the FAA with information about the effectiveness of the operator's training and qualification programs. The objectives of a POI or an inspector conducting a proficiency or competency check inspection are as follows:

- To evaluate individual airmen performing their duties and responsibilities
- To evaluate individual check airmen performing their duties and responsibilities
- To assess the effectiveness of the operator's training program
- To identify operational procedures, manuals, or checklists which are deficient
- To assess the effectiveness of the operator's simulators and equipment
- To evaluate the effectiveness of the operator's trend analysis, standardization, and quality control program

257. PROFICIENCY AND COMPETENCY CHECK INSPECTION PROCEDURES AND GUIDANCE. Before conducting a proficiency and competency check inspection, inspectors must become thoroughly familiar with the operator's manuals. Inspectors may also be required to qualify in the operation of the aircraft, simulators, or training devices. While conducting proficiency and competency checks, inspectors and check airmen should also use the direction and guidance in chapters 1 through 3 of volume 5 of this handbook that pertain to the conduct of certification checks. Inspectors should use the following guidance when conducting proficiency and competency check inspections:

A. *Areas of Familiarization.* Inspectors must be familiar with the following areas before conducting proficiency and competency check inspections:

- Inspector, safety pilot, and crew qualification for simulators, flight training devices, and aircraft
- Acceptable methods for presenting the maneuvers and events of the check in simulators, flight training devices, and aircraft
- Acceptable standards of performance for proficiency and competency checks

B. *Inspection Areas.* Inspectors should use the following guidance pertaining to specific inspection areas during a proficiency or competency inspection:

(1) *Airman Competency.* This inspection area applies to the knowledge, ability, and proficiency of the airman receiving the check. An airman must perform specific events in an aircraft, an aircraft simulator, a flight training device, or a combination thereof, during a proficiency or competency check. Through observation of the check ride, the inspector can determine if the airman has an acceptable level of aircraft systems knowledge and is competent in the performance of normal, abnormal, and emergency flight procedures. In addition, the inspector can observe whether the airman complies with company policy, possesses current

manuals, and possesses appropriate certificates and ratings.

(2) *Check Airman Competency.* The POI or a qualified representative must periodically observe company check airmen conducting proficiency or competency checks. These observations enable the POI to evaluate both the individual check airman performing check airman duties and the company's entire check airman program. This inspection area applies to the manner in which a check airman conducts the check, the accuracy and completeness of the check airman's observations, and the validity of the outcome. Inspectors should evaluate the following areas when determining a check airman's competency:

(a) *Responsibilities.* The check airman is responsible for: ensuring that all required flight test events are completed in a realistic flight scenario; providing adequate preflight and postflight briefings for the airman being checked; and objectively evaluating the airman's performance. An evaluation of the check airman's ability to actually perform the flight events of the proficiency or competency check is not normally part of a check airman inspection. POI's and APM's must place emphasis on the competence of each check airman as an evaluator.

(b) *Qualification.* A check airman must maintain basic qualification in the duty position in accordance with Part 121 or Part 135, as applicable. Should a question concerning the check airman's basic qualifications arise, a separate inspection under Section 609 of the Federal Aviation Act must be conducted to evaluate the airman's basic skills.

NOTE: Whenever a question concerning a check airman's competency arises, the matter must be brought to the attention of the POI or APM. The most direct means (telephone) should be used to apprise the POI or APM of the problem. Once the supervising FAA inspector has been notified, the observing inspector shall use the PTRS system to document the problem. If required, a check airman inspection shall be scheduled as soon as possible.

(c) *Tracking.* Through the PTRS system, POI's and APM's must track and manage check airman inspections. Before designation, each check airman must be observed performing those duties which will be authorized after designation. After approval, and when resources permit, each check airman shall be observed annually. When resources do not permit annual observations, observations shall be conducted as frequently as possible. Priority should be placed on observing those check airmen who have not been observed for the longest period of time. POI's and APM's should work closely with the geographic units at the district offices to ensure the VIS contains current information. It is the POI's and/or APM's responsibility to ensure that the check airman's VIS file is current.

(d) *Evaluation of the Operator's Training Program.* The analysis of proficiency or competency check inspection results is an excellent means for a POI to ensure the continued effectiveness of an operator's training program. The PTRS system provides a standardized way for POI's to collect and retrieve inspection results. When deficient areas are identified through the PTRS system, the areas should be rectified by changes in the operator's training program. For example, if inspection comments repeatedly indicate deficiencies in the area of nonprecision approaches, the POI should require the operator to emphasize that event in the operator's flight training curriculum segments.

(e) *Manuals, Procedures, and Checklists.* Inspectors can use the data from proficiency or competency checks, combined with data from other inspections (such as cockpit, en route, and ramp inspections), to identify deficiencies in manuals, procedures, or checklists previously approved or accepted by the FAA. Checklist procedures, MEL/CDL procedures, and specific flight maneuvers and procedures are operational areas that may require change to ensure compliance with the FAR's or safe operating practices.

(f) *Equipment.* This inspection area refers to the condition of the aircraft, simulators, or training devices used during the check. When evaluating the equipment, inspectors should determine the following:

- Whether the required inspections have been conducted
- Whether the observed discrepancies were recorded on maintenance logs

- Whether the equipment is in an adequate state of repair
- Whether the equipment operates properly

NOTE: Equipment malfunctions that have an affect on the outcome of the check should be recorded in the comment section on the same PTRS. The inspection of simulators and/or training devices, however, is a separate surveillance activity (activity code 1630) from a check airman observation. If a comment on the equipment is required as the result of a check airman surveillance, inspectors should not generate another PTRS entry.

(g) *Effectiveness of an Operator's Trend Analysis, Standardization, and Quality Control Program.* Operators should collect, record, and analyze the results from proficiency and competency checks to detect and correct deficiencies in training programs, procedures, and checklists. POI's shall encourage operators with more than 10 crewmembers in any duty position to establish trend analysis. POI's shall evaluate the effectiveness of these programs. Inspectors conducting a series of proficiency and competency checks will, over time, observe changes being made by the operator. Through the PTRS system, the POI has a direct measure of the effectiveness of these changes and the operator's quality control program.

259. INSPECTOR RESPONSIBILITIES DURING CHECK AIRMAN OBSERVATIONS. When a proficiency check or competency check is conducted by a company check airman and observed by an inspector, the inspector should evaluate both the airman being checked and the competency of the check airman administering the check. The check airman is responsible for completing all required checking events, for providing suitable briefings before and after the session, and for fairly and objectively evaluating the airman being checked. After the check is completed, the inspector is responsible for debriefing the check airman and the airman being checked (should the check airman's debriefing be inadequate).

A. The inspector's primary responsibility is to observe and evaluate the overall conduct of the check. The inspector must refrain from: asking questions of the airman being checked, attempting to control the type or sequence of checking events, and from interfering in any way with the manner in which the check airman conducts the check.

B. It is the check airman's responsibility to conduct a complete and proper check. The inspector's responsibility is to evaluate the performance of both the airman being checked and the check airman and to properly record the inspection results. Should the check airman's performance be unsatisfactory, the inspector shall inform the POI using the most expeditious means available. Should the check airman fail to complete all required items on a check (which has been satisfactory to that point), the inspector shall bring this fact to the attention of the check airman and ensure that all events are completed.

261. DEFICIENCIES. While certain training benefits are gained during proficiency or competency checks, the purpose of a check is to have the airman's state of proficiency evaluated and to ensure that the last training conducted was sufficient to ensure the airman's proficiency throughout the interim period. If the check airman conducting the check observes minor deficiencies (and believes that minor instruction may correct the situation) the check airman may suspend the check temporarily, conduct remedial training, and then resume the check.

A. *Repeating Events.* FAR 121.441(e) and FAR 135.301(b) authorize check airmen to give additional training to an airman who fails to satisfactorily complete an event on a check. The additional training must be given prior to repeating the event. Problems have occurred in instances where check airmen have merely repeated events until the airman performed those events within tolerances. This practice is not acceptable and is an abuse of training to proficiency. In one case, FAA inspectors discovered that an operator's check airman routinely continued checks for several sessions without a record being made of the airman's unsatisfactory performance. As a result, important data about the effectiveness of the training program and the need for additional training was lost. When a proficiency or competency check is interrupted to conduct training, that check must still be completed within the timeframe the operator originally scheduled for the check. If training is so extensive that the check cannot be completed in the allotted

timeframe, the check airman must consider the check to be unsatisfactory and place the airman in requalification training.

B. *Unsatisfactory Performance.* Inspectors shall not conduct airman training during proficiency or competency checks. If an event is unsuccessful, the inspector should complete as much of the remaining flight events as possible or terminate the check. The check must be recorded as unsatisfactory.

C. *Recording Remedial Training Time on the PTRS.* Inspectors shall record the time required to complete checks in the activity time field on the PTRS Data Sheet. The amount and type of remedial training conducted while the check was suspended should be recorded in section IV on the PTRS report form.

263. RECORDING PROFICIENCY AND COMPETENCY CHECK SURVEILLANCE ON THE PTRS SYSTEM. The intent of this section is to eliminate any manual tracking of the check airman surveillance by field offices and to provide offices with the capacity for analyzing an operator's check airman program. The inspector must enter the data into the computer and may either retain or discard the PTRS Data Sheet as desired. The following italicized titles correspond to the data fields on the PTRS Data Sheet as applicable to check airmen. This information parallels the information found in the PTRS Procedures Manual. Inspectors should record the check airman surveillance using the guidance that follows:

A. *SECTION I. Activity Elements.*

(1) "*Inspector Name Code.*" A valid inspector name code must be entered on each sheet before the data is entered into the computer.

(2) "*Record ID.*" The "P" or "R" Record ID number should be entered. If the surveillance was not a programmed activity, an ID number can be obtained when making the data entry.

(3) "*Activity Number.*" The "1632" activity code should be entered.

(4) "*FAR.*" Either 121 or 135 should be entered, as applicable.

(5) "*NPG.*" This element only has to be filled in if it is applicable.

(6) "*Status (COP).*" Inspectors shall enter "C" in this field.

(7) "*Call-up Date.*" This element only has to be filled in if appropriate. It is usually left blank.

(8) "*Start Date.*" This element only has to be filled in if appropriate. It is usually left blank.

(9) "*Results (ACEFISTX).*" An "S" shall be entered in this field if the test phase has been completed, regardless of whether the applicant has been successful or not. If the test phase has been terminated with a failure, the test phase is complete and an "S" or "I" shall be entered in this field. When a test phase is terminated before completion and the applicant's performance is satisfactory up to the point of termination, a "T" shall be entered in the results field. In this case, the inspector should enter a short explanation in the "Comment Text" field in Section IV such as: "Flight test terminated due to malfunction of simulator visual system."

(10) "*Pass/Fail (P/F).*" Inspectors must always make an entry in this field. The inspector shall enter an "F" in this field when the test phase is unsatisfactory, or a "P" in all other cases, whether or not the phase is complete.

(11) "*Completion Date.*" The date of the event must always be entered in this field.

(12) "*Designator.*" The airline or operator code must be entered in this field.

(13) "*Airman Cert #.*" The check airman's core certificate number (not the applicant's name) without any prefix or suffix should be entered in this field.

(14) "*Airman Name/Other.*" The check airman's name should be entered when the observation is of a check airman, otherwise, the entry should be of the airman

receiving the check. Inspectors should refer to the instructions for "Section II - Personnel" for related information and guidance.

(15) *"Aircraft Reg #: N."* The inspector should enter the aircraft N-number, if applicable. Inspectors should leave this field blank for simulator, oral, and other test phases.

(16) *"Make-Model-Series."* Inspectors should make an appropriate entry for all test phases in this field.

(17) *"LOC/Departure Point."* The inspector shall enter the three-character or four-character location identifier for all activities. If the location has no identifier, the nearest appropriate airport should be entered in the field.

(18) *"Arrival Point."* This field is optional. It should be used when applicable, but it may be left blank.

(19) *"Flight #."* This field is optional. Inspectors should use it when applicable, but it may be left blank.

(20) *"Investigation #."* This field would normally not be used for a check airman observation. If the surveillance finding requires an investigation for enforcement, a code of "E" should be entered in the results field. Inspectors must then enter EIR numbers in this field for tracking purposes.

(21) *Activity Time.* This is the actual time required to complete the check, including any repeated events or training.

NOTE: The remaining fields in Section I are provided for regional and/or district office use, special programs, and future requirements. In the absence of any guidance, these fields should be left blank.

B. *SECTION II - Personnel (Unlimited).*

(1) *"Personnel Name."* The airman receiving the check shall be entered under "personnel name", using the format of: last name, first name, middle initial.

(2) *"Position."* The terms PIC, SIC, or F/E shall be entered in this field, as appropriate.

(3) *"Base."* This an optional entry used for identifying the closest airport to where the person identified in the "personnel name field" is stationed or works.

(4) *"Remarks."* The applicant's certificate number shall be entered in this field.

C. *SECTION III - Equipment (Unlimited).* Entries in the fields in this section are optional.

D. *SECTION IV - Comment Section (Unlimited).* Inspectors are encouraged to make entries in this field. A topic such as the reasons and circumstances surrounding the failure of an applicant should be commented upon. Comments should not be limited to this type of topic. Inspectors should leave a blank line between each separate comment.

264. - 274. RESERVED.

FIGURE 6.2.8.1.

PART 121 PILOT PROFICIENCY CHECK JOB AID

DATE:	AIRMAN NAME:	CHECK AIRMAN NAME:	N #:	MAKE/MOD/SER
DESIGNATOR:	CERTIFICATE #:	PTRS: 1632 FAA-OBSERVED PTRS: 1538 FAA-CONDUCTED	RESULTS: P or F	DUTY POS:

[]-REQUIRED EVENT [W]-WAIVERABLE EVENT #-SPECIFIED CONDITION *-ITEM TO OBSERVE

AIRMAN BEING CHECKED	
KNOWLEDGE	101
ABILITY/PROFICIENCY	103
QUAL/CURRENCY	105
CERT/RATINGS	109
BRIEFINGS	111
MANUAL CURRENCY	203
USE OF CHECKLIST	605
[] NORMAL PROC.	--
[] ABNORMAL PROC.	--
[] EMERGENCY PROC.	--
[] SYSTEM KNOWLEDGE	--
[] CREW MANAGEMENT	--
PROFICIENCY CHECK	
EQUIPMENT EXAM (Oral or Written)	--
PREFLIGHT	721
[w] Preflight Inspection (Ext)	--
[] Prestart Checks	--
[] Radio Checks	--
[] Nav/Comm Setup	--
[] Flight Control Checks	--
[] Starting Procedures	--
* Abnormal Starts	--
[] TAXIING	725
* Procedures	--
[] TAKEOFF-Normal	725
* Smooth Power Application	--
* Centerline Tracking	--
* Callouts	--
* Adherence to T/O Speeds	--
* Use of Flight Director	--
[] TAKEOFF (INSTMT)	725
# At or Before 100 Feet HAA	--
* Heading Control	--
[] TAKEOFF (XWIND)	725
# Conditions Permitting	--
* Runway tracking	--
* Heading Control After Rotation	--
[w] TAKEOFF (REJ)	725
* Procedures	--
* Max Braking/Rev	--
* Brake Energy Procedures	--
* Emerg/Evac	--
[] TAKEOFF (V1CUT)	--
# >V1<V2	--
* Procedures	--
* Speed Control	--
* Heading Control	--
* Clean Up	--
* Airstart	--
[w] AREA DEPARTURE	727
* Procedures	--
[] NAVAID Tracking	--
* Speed/Hdg Cntrl	--
[w] HOLDING	--
[] Procedures	--
* Wind Correction	--
[] ILS (NORMAL)	733
* Procedures	--
* Loc/GS Tracking	--
* Callouts	--
* Speed Control	--
* Actions at DH	--
[] ILS (ENG-OUT)	733
# Manually Controlled	--
# Engine Failure Before FAF	--
* Procedures	733
[] MAP (FROM ILS)	
# Complete Procedure	--
* Procedures	733
[] NONPRECISION APPROACH (1ST)	733
[] NONPRECISION APPROACH (SUBS)	733
* Procedures	--
[] ADDITIONAL MISSED APPROACH	733
# PIC Only	--
# May be Engine Out	
[w] CIRCLING APP	733
# If Approved for Operator	--
# Lndg Rwy Must be at Least 90 Deg From App Course	--
# Max 30 Deg Bank	--
[w] STEEP TURNS	--
# Min 45 Deg Bank	--
# Min 180 Deg Turn	--
[w] APP TO STALLS	
# T/O, Clean, Lndg Configurations (3)	--
# Two May be Waived	--
# One Must be Done at Bank Angle of 15 Deg to 30 Deg	--
[] LANDING (NORMAL)	735
* Procedures	--
[] LANDING-FROM ILS	735
[] LANDING (XWIND)	735
# Conditions Permitting	735
* Xwind Technique	--
[] LANDING-ENG-OUT	735
# On 3-Eng A/C, 2 Eng's Sim Failed	--
# On All Other A/C 50 % Failure on One Side	--
[] LANDING (REJ)	--
# 50'Over Rwy Thld	--
CHECK AIRMAN	
[] BRIEFINGS	
[] CONDUCT	
[] COACHING	
[] EVALUATION	

FIGURE 6.2.8.2.

PART 121 F/E PROFICIENCY CHECK JOB AID

DATE:	AIRMAN NAME:	CHECK AIRMAN NAME:	N #:	MAKE/MOD/SER
DESIGNATOR:	CERTIFICATE #:	PTRS: 1632 FAA-OBSERVED PTRS: 1538 FAA-CONDUCTED	RESULTS: P or F	DUTY POS:

[]-REQUIRED EVENT [W]-WAIVERABLE EVENT #-SPECIFIED CONDITION *-ITEM TO OBSERVE

AIRMAN BEING CHECKED	
KNOWLEDGE	101
ABILITY/PROFICIENCY	103
QUAL/CURRENCY	105
CERT/RATINGS	109
PERS. EQUIPMENT	111
MANUAL CURRENCY	203
USE OF CHECKLIST	605
[] NORMAL PROC.	--
[] ABNORMAL PROC.	--
[] EMERGENCY PROC.	--
[] SYSTEM KNOWLEDGE	--
[] CREW MANAGEMENT	--
PROFICIENCY CHECK	
[] EQUIPMENT EXAM (Oral or Written)	--
[] PREFLIGHT	721
* Logbook Proced.	--
* Safety Checks	--
* Cabin/Interior	--
* Ext. Walkaround	--
* MEL/CDL Proced.	--
* O2 Preflight	--
[] PERFORMANCE DATA	--
* T/O Lndg Data	--
* Airport Analysis	--
* Wt & Balance	--
[] PREDEPARTURE	723
* Procedures	--
* Panel Setup	--
* Starting Proced. and Limitations	--
* Comm/ACARS	--
[] TAXI/TAKEOFF	725
* Procedures	--
* Powerplant Cntrl and Limitations	--
* System Monitoring	--
* Checklist Completion	--
[] TAKEOFF (REJ)	725
* Brake Energy	--

* Emerg/Evac	--
[] T/O (ENG.FAIL.)	725
* Recognition	--
* Fuel Mgmt/Dump	--
* Elect/Pneumatic Systems Mgmt.	--
* Other Systems	--
* Airstart Proced	--
* Landing Data	--
* Completion of Checklists	--
* Crew Coord.	--
[] CLIMB	727
* Power Settings	--
* Fuel Management	--
* Air Condx and Pressurization	--
* Maximum/Optimum Altitude for Wt	--
[] CRUISE	729
* Powerplant Shutdown and Airstart	--
* Electrical Malfunctions	--
* Hydraulic Malfunctions	--
* Pneumatic Malfunctions	--
* Air Condx/Press Malfunctions	--
* Nav/Comm Malfunctions	--
* Flight Control Malfunctions	--
* Engine Failure/ Drift Down	--
* Hi Alt. Perf.	--
[] DESCENT	731
* Fuel Management Procedures	--
* Pressurization Procedures	--
* Area Awareness	--
* Checklist Completion	--

[] APPROACHES	733
* Review of SIAP and Approach Monitoring	--
* Fuel Mgmt	--
* Checklist Completion	--
[] APPROACHES(MALF)	733
* Engine Out	--
* Electrical Malfunctions	--
* Aircraft Fires	--
* Hydraulic Malfunctions	--
* Flight Control Malfunctions	--
* Flap/Slat Malfunctions	--
* Landing Gear Malfunctions	--
* Nav/Comm Malfunctions	--
* Other System Malfunctions	--
[] LANDING (NORMAL)	735
* Procedures	--
* Completion of Checklist	--
* Restraints Fastened	--
* Rvrs Monitoring	--
[] LANDING (W/MALF)	735
* Procedures	--
* Completion of Checklist	--
* Crew Coordination	--
[] LANDING (REJ)	735
* Procedures	--
CHECK AIRMAN	
[] BRIEFINGS	
[] CONDUCT	
[] COACHING	
[] EVALUATION	

FIGURE 6.2.8.3.

PART 135 PILOT COMPETENCY/INSTRUMENT PROFICIENCY CHECK JOB AID

DATE:	AIRMAN NAME:	CHECK AIRMAN NAME:	N #:	MAKE/MOD/SER
DESIGNATOR:	CERTIFICATE #:	PTRS: 1632 FAA-OBSERVED PTRS: 1538 FAA-CONDUCTED	RESULTS: P or F	DUTY POS:

[] -REQUIRED EVENT [W] -WAIVERABLE EVENT #-SPECIFIED CONDITION *-ITEM TO OBSERVE

	AIRMAN BEING CHECKED	
	KNOWLEDGE	101
	ABILITY/PROFICIENCY	103
	QUAL/CURRENCY	105
	CERT/RATINGS	109
	BRIEFINGS	111
	MANUAL CURRENCY	203
	USE OF CHECKLIST	605
	[] NORMAL PROC.	--
	[] ABNORMAL PROC.	--
	[] EMERGENCY PROC.	--
	[] SYSTEM KNOWLEDGE	--
	[] CREW MANAGEMENT	--
	COMPETENCY CHECK	
	EQUIPMENT EXAM (Oral or Written)	--
	PREFLIGHT	721
	[w] Preflight Inspection (Ext)	--
	[] Prestart Checks	--
	[] Radio Checks	--
	[] Nav/Comm Setup	--
	[] Flight Control Checks	--
	[] Starting Procedures	--
	* Abnormal Starts	--
	[] TAXIING/SAILING	725
	* Procedures	--
	[] TAKEOFF-Normal	725
	* Smooth Power Application	--
	* Centerline Tracking	--
	* Callouts	--
	* Adherence to T/O Speeds	--
	* Use of Flight Director	--
IC	[] TAKEOFF (INSTMT)	725
	# At or Before 100 Feet AGL	--
	[] TAKEOFF (XWIND)	725
	# Conditions Permitting	--
	* Runway tracking	--
	* Heading Control After Rotation	--
	[w] TAKEOFF (REJ)	725
	* Max Braking	--
	* Brake Energy Procedures	--
	* Emerg/Evac	--
	[] TAKEOFF (MULTI)	--
	# Eng Fail >VMC	--
	* Speed Control	--
	* Heading Control	--
	* Clean Up	--
	* Airstart	--
IC	[w] AREA DEPARTURE	727
	* Procedures	--
	[] NAVAID Tracking	--
	* Speed/Hdg Cntrl	--
IC	[w] HOLDING	--
	[] Procedures	--
	* Wind Correction	--
IC	[] ILS (NORMAL)	733
	* Procedures	--
	* Loc/GS Tracking	--
	* Callouts	--
	* Speed Control	--
	* Actions at DH	--
IC	[] ILS (ENG-OUT)	733
	# Manually Flown	--
	# Engine Failure Before FAF	--
	* Procedures	733
IC	[] MAP (FROM ILS)	
	# Complete Procedure	--
	* Procedures	733
IC	[] NONPRECISION APPROACH (1ST)	733
IC	[] NONPRECISION APP(2nd)-PIC	733
	* Procedures	--
	[] ENGINE-OUT MAP MULTIENGINE A/C	733
	# Full MAP Procedure	--
IC	[w] CIRCLING APP	733
	# If Approved for Operator	--
	# Lndg Rwy Must be at Least 90 Deg From App Course	--
	# Max 30 Deg Bank	--
IC	[w] STEEP TURNS	--
	# 45 Deg Bank Min	--
	[w] APP TO STALLS	
	# T/O, Clean, Lndg Configurations (3)	--
	# Two May be Waived	--
	# One Must be Done at Bank Angle of 15 Deg to 30 Deg	--
	[] LANDING (NORMAL)	735
	* Procedures	--
IC	[] LANDING-FROM ILS	735
	[] LANDING (XWIND)	735
	# Conditions Permitting	735
	* XWind Technique	--
	[] LANDING-SEA A/C	735
	# Glassy Water	--
	# Rough Water	--
	[] LANDING-ENG OUT MULTIENGINE A/C	735
	[] LANDING (REJ)	--
	# 50'Over Rwy Thld	--
	CHECK AIRMAN	
	[] BRIEFINGS	
	[] CONDUCT	
	[] COACHING	
	[] EVALUATION	

IC - Events that are conducted on IFR Proficiency Check

FIGURE 6.2.8.4.

PART 135 HELICOPTER PILOT COMPETENCY/INSTRUMENT PROFICIENCY CHECK JOB AID

DATE:	AIRMAN NAME:	CHECK AIRMAN NAME:	N #:	MAKE/MOD/SER
DESIGNATOR:	CERTIFICATE #:	PTRS: 1632 FAA-OBSERVED PTRS: 1538 FAA-CONDUCTED	RESULTS: P or F	DUTY POS:

[]-REQUIRED EVENT [W]-WAIVERABLE EVENT #-SPECIFIED CONDITION *-ITEM TO OBSERVE

	AIRMAN BEING CHECKED	
	KNOWLEDGE	101
	ABILITY/PROFICIENCY	103
	QUAL/CURRENCY	105
	CERT/RATINGS	109
	BRIEFINGS	111
	MANUAL CURRENCY	203
	USE OF CHECKLIST	605
	[] NORMAL PROC.	--
	[] ABNORMAL PROC.	--
	[] EMERGENCY PROC.	--
	[] SYSTEM KNOWLEDGE	--
	[] CREW MANAGEMENT	--
	COMPETENCY CHECK	
	EQUIPMENT EXAM (Oral or Written)	--
	PREFLIGHT	721
	[w] Preflight Inspection (Ext)	--
	[] Prestart Checks	--
	[] Radio Checks	--
	[] Nav/Comm Setup	--
	[] Flight Control Checks	--
	[] Starting	
	* Abnormal Starts	--
	* Rotor Engagement	--
	[] TAXIING/SAILING	725
	[] GROUND HOVER	725
	[] TAKEOFF-Normal	725
	* Smooth Power Application	--
	* Obstacle Clearance	--
	* Running (Hi Alt)	--
	[] TAKEOFF-CAT "A"	725
	* Procedures	--
	* Use of Flight Director	--
IC	[] TAKEOFF (INSTMT)	725
	# At or Before 100 Feet AGL	--
	[] TAKEOFF (XWIND)	725
	# Conditions Permitting	--
	* Runway tracking	--
	* Heading Control After Rotation	--
	[w] TAKEOFF (REJ)	725
	# Rapid Deceleration Procedures	--
	* Emerg/Evac	--
	[] TAKEOFF/ENG OUT	725
	# Eng Fail <CDP	--
	# Eng Fail >CDP	--
	* Procedures	--
	* Touchdown	--
	* Emer. Checklist	--
IC	[w] AREA DEPARTURE	727
	* Procedures	--
	[] NAVAID TRACKING	--
	* Speed/Hdg Cntrl	--
IC	[w] HOLDING	--
	[] Procedures	--
	* Wind Correction	--
IC	[] ILS (NORMAL)	733
	* Procedures	--
	* Loc/GS Tracking	--
	* Callouts	--
	* Speed Control	--
	* Actions at DH	--
IC	[] ILS (ENG OUT)	733
	# Manually Flown	--
	# Engine Failure Before FAF	--
	* Procedures	733
IC	[] MAP (FROM ILS)	
	# Complete Procedure	--
	* Procedures	733
IC	[] NONPRECISION APPROACH (1ST)	733
IC	[] NONPRECISION APPR(2nd)-PIC	733
	* Procedures	--
	[] ENGINE-OUT MAP MULTIENGINE A/C	733
	# Full MAP Procedure	--
IC	[w] CIRCLING APPR	733
	# If Approved for Operator	--
	# Lndg Rwy Must be at Least 90 Deg From App Course	--
	# Max 30 Deg Bank	--
IC	[w] STEEP TURNS	--
	# 45 Deg Bank Min	--
	[] AUTOROTATIONS	733
	# Autorotative Glide	--
	# Power Recovery	--
	# Hovering Autorotations	--
	# Settling w/Power	--
	[] LANDING (NORMAL)	735
	* Procedures	--
IC	[] LANDING-FROM ILS	735
	[] LANDING (XWIND)	735
	# Conditions Permitting	735
	* XWind Technique	--
	[] LANDING-SEA A/C	735
	# Glassy Water	--
	# Rough Water	--
	[] LANDING-ENG OUT MULTIENGINE A/C	735
	[] LANDING (REJ)	--
	# 50'Over Rwy Thld	--
	CHECK AIRMAN	
	[] BRIEFINGS	
	[] CONDUCT	
	[] COACHING	
	[] EVALUATION	

IC - Events that are conducted on IFR Proficiency Check

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FIGURE 6.2.8.4.

PART 135 HELICOPTER PILOT COMPETENCY/INSTRUMENT PROFICIENCY CHECK JOB AID

DATE:	AIRMAN NAME:	CHECK AIRMAN NAME:	N #:	MAKE/MOD/SER
DESIGNATOR:	CERTIFICATE #:	PTRS: 1632 FAA-OBSERVED PTRS: 1538 FAA-CONDUCTED	RESULTS: P or F	DUTY POS:

[]-REQUIRED EVENT [W]-WAIVERABLE EVENT #-SPECIFIED CONDITION *-ITEM TO OBSERVE

	AIRMAN BEING CHECKED	
	KNOWLEDGE	101
	ABILITY/PROFICIENCY	103
	QUAL/CURRENCY	105
	CERT/RATINGS	109
	BRIEFINGS	111
	MANUAL CURRENCY	203
	USE OF CHECKLIST	605
	[] NORMAL PROC.	--
	[] ABNORMAL PROC.	--
	[] EMERGENCY PROC.	--
	[] SYSTEM KNOWLEDGE	--
	[] CREW MANAGEMENT	--
	COMPETENCY CHECK	
	EQUIPMENT EXAM (Oral or Written)	--
	PREFLIGHT	721
	[w] Preflight Inspection (Ext)	--
	[] Prestart Checks	--
	[] Radio Checks	--
	[] Nav/Comm Setup	--
	[] Flight Control Checks	--
	[] Starting	
	* Abnormal Starts	--
	* Rotor Engagement	--
	[] TAXIING/SAILING	725
	[] GROUND HOVER	725
	[] TAKEOFF-Normal	725
	* Smooth Power Application	--
	* Obstacle Clearance	--
	* Running (Hi Alt)	--
	[] TAKEOFF-CAT "A"	725
	* Procedures	--
	* Use of Flight Director	--
IC	[] TAKEOFF (INSTMT)	725
	# At or Before 100 Feet AGL	--
	[] TAKEOFF (XWIND)	725
	# Conditions Permitting	--
	* Runway tracking	--
	* Heading Control After Rotation	--
	[w] TAKEOFF (REJ)	725
	# Rapid Deceleration Procedures	--
	* Emerg/Evac	--
	[] TAKEOFF/ENG OUT	725
	# Eng Fail <CDP	--
	# Eng Fail >CDP	--
	* Procedures	--
	* Touchdown	--
	* Emer. Checklist	--
IC	[w] AREA DEPARTURE	727
	* Procedures	--
	[] NAVAID TRACKING	--
	* Speed/Hdg Cntrl	--
IC	[w] HOLDING	--
	[] Procedures	--
	* Wind Correction	--
IC	[] ILS (NORMAL)	733
	* Procedures	--
	* Loc/GS Tracking	--
	* Callouts	--
	* Speed Control	--
	* Actions at DH	--
IC	[] ILS (ENG OUT)	733
	# Manually Flown	--
	# Engine Failure Before FAF	--
	* Procedures	733
IC	[] MAP (FROM ILS)	
	# Complete Procedure	--
	* Procedures	733
IC	[] NONPRECISION APPROACH (1ST)	733
IC	[] NONPRECISION APPR(2nd)-PIC	733
	* Procedures	--
	[] ENGINE-OUT MAP MULTIENGINE A/C	733
	# Full MAP Procedure	--
IC	[w] CIRCLING APPR	733
	# If Approved for Operator	--
	# Lndg Rwy Must be at Least 90 Deg From App Course	--
	# Max 30 Deg Bank	--
IC	[w] STEEP TURNS	--
	# 45 Deg Bank Min	--
	[] AUTOROTATIONS	733
	# Autorotative Glide	--
	# Power Recovery	--
	# Hovering Autorotations	--
	# Settling w/Power	--
	[] LANDING (NORMAL)	735
	* Procedures	--
IC	[] LANDING-FROM ILS	735
	[] LANDING (XWIND)	735
	# Conditions Permitting	735
	* XWind Technique	--
	[] LANDING-SEA A/C	735
	# Glassy Water	--
	# Rough Water	--
	[] LANDING-ENG OUT MULTIENGINE A/C	735
	[] LANDING (REJ)	--
	# 50'Over Rwy Thld	--
	CHECK AIRMAN	
	[] BRIEFINGS	
	[] CONDUCT	
	[] COACHING	
	[] EVALUATION	

IC - Events that are conducted on IFR Proficiency Check

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APPENDIX 3. HANDBOOK BULLETINS - FILING INSTRUCTIONS

Inspectors must retrieve the latest handbook bulletins from the FAA.MAIL 8400.10 Bulletin Board and file them behind this page. When new handbook bulletins are issued on the Handbook Bulletin Board, a notice will be issued by FAA.MAIL. An updated listing of all current bulletins will be posted at the beginning of the 8400.10 Bulletin Board.

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