

VOLUME 4 AIRCRAFT EQUIPMENT AND OPERATIONAL AUTHORIZATIONS**CHAPTER 4 MINIMUM EQUIPMENT LISTS (MEL) AND CONFIGURATION
DEVIATION LISTS (CDL)****Section 1 Minimum Equipment Lists and Configuration Deviation Lists for Part 91K
Program Managers, and Parts 121, 129, and 135 Certificate Holders**

4-621 BACKGROUND. Before any person may take off an aircraft with inoperable instruments or equipment, Title 14 of the Code of Federal Regulations (14 CFR) requires certificate holders and program managers who conduct operations in accordance with 14 CFR parts 91 subpart K (91K), 121, 129 and 135 to have a Federal Aviation Administration (FAA)-approved minimum equipment list (MEL) applicable to that aircraft. An MEL describes the conditions and limitations that apply when a certificate holder or program manager operates an aircraft with certain instruments or equipment inoperative. Certificate holders and program managers must base each MEL on the FAA Master Minimum Equipment List (MMEL) applicable to the aircraft make, model, and series (M/M/S). In addition, each MEL must be based on specific aircraft configurations, operational procedures, and conditions.

4-622 GENERAL. This section contains definitions and a general overview of the MEL. Subsequent sections of this chapter contain detailed guidance regarding the MMEL and MEL development and approval process.

4-623 APPLICABILITY. This section applies to operations of N-registered aircraft in accordance with 14 CFR parts 91 subpart K (91K), 121, 129, and 135. Separate guidance exists for MELs for part 91 in Volume 4, Chapter 4, Section 2 and 14 CFR part 125 certificate holders in Volume 4, Chapter 4, Section 3.

4-624 PRINCIPAL OPERATIONS INSPECTOR (POI) RESPONSIBILITIES. The POI is the primary FAA official responsible for the overall process of evaluating, and approving a certificate holder's MEL document. It is essential that the POI work with the principal maintenance inspector (PMI), the principal avionics inspector (PAI), and other certificate management personnel such as an aviation safety inspector-aircraft dispatcher (ASI-AD) and cabin safety inspector (CSI), as part of the evaluation and approval process. Should the POI require additional technical information related to a specific MMEL or MEL item, he or she should consult the Aircraft Evaluation Group (AEG) Flight Operations Evaluation Board (FOEB) chairman responsible for the aircraft.

4-625 PMI RESPONSIBILITIES. The PMI is the primary FAA official responsible to evaluate and approve a certificate holder's MEL Management Program as prescribed in operations specification (OpSpec)/management specification (MSpec) D095, Minimum Equipment List (MEL) Authorization. It is essential that the PMI work together with the PAI, the POI, as well as other certificate management personnel such as an ASI-AD or CSI, as part of the evaluation and approval process. Should any of the principal inspectors (PI) require additional technical information related to a specific MEL item, he or she should consult the FOEB chairman responsible for that aircraft M/M/S.

4-626 DEFINITIONS. Definitions are used throughout this chapter and referenced in each MMEL. MMEL Policy Letter 25 (PL-025) and Policy Letter 70 (PL-070) contain a master list of MMEL and MEL definitions. If a particular definition does not appear in this section, please refer to the current revision of MMEL PL-025 and MMEL PL-070. The definitions contained in these policy letters define specific items related to an MMEL or MEL. Not all of the MMEL definitions are required to be contained in a certificate holder's/program manager's MEL as some are related to formatting, specific aircraft types, and specific types of operation. MMEL Policy Letters are available on the Flight Standards Information Management System (FSIMS) under the "Publications" tab.

A. Administrative Control Item (ACI). An ACI is listed by the certificate holder in the MEL for tracking and informational purposes. An ACI may be added to a certificate holder's MEL by approval of the POI provided no relief is granted, or provided conditions and limitations are contained in an approved document (e.g., Structural Repair Manual (SRM) or Airworthiness Directive (AD)). If relief other than that granted by an approved document is sought for an ACI, a request must be submitted to the Administrator. If the request results in review and approval by the FOEB, the item becomes an MMEL item rather than an ACI.

B. Aircraft Evaluation Group (AEG). The AEG is the Flight Standards Service (AFS) point of contact (POC) with aircraft certification and is responsible for the development, revision, and publication of an MMEL for those aircraft within its area of responsibility.

C. Airplane Flight Manual (AFM)/Rotorcraft Flight Manual (RFM). The FAA-approved AFM/RFM is the document approved by the responsible FAA Aircraft Certification Office (ACO) during type certification. The approved flight manual for the specific aircraft is listed on the applicable Type Certificate Data Sheet (TCDS). The approved flight manual is the source document for operational limitations and performance parameters for an aircraft. The term "approved flight manual" can apply to either an AFM or an RFM. The FAA requires an approved flight manual for aircraft type certification.

D. Aircraft Maintenance Manual (AMM). The AMM is the source document for aircraft maintenance procedures. The term AMM can apply to either an airplane or a rotorcraft manual.

E. Air Transport Association (ATA) of America Specification 100. ATA Specification 100, Manufacturer's Technical Data, is an international industry numbering standard developed to identify systems and components on different aircraft in the same format and manner.

F. "As Required by FAR." When the MMEL states, "As Required by FAR," the listed item is subject to certain provisions (restrictive or permissive) expressed in the 14 CFR operating rules. The number of items required by the FAR must be operative. When the listed item is not required by the FAR, it may be inoperative for the time specified by repair category. Also, the definition in this section comes directly from MMEL Policy Letter 25 (PL-025).

NOTE: The term “14 CFR” has replaced “FAR” as the current reference to Federal Regulations pertaining to aviation. However, many, if not most, MMELs still contain the acronym “FAR”; therefore, this acronym is retained in PL-025 and this definition.

G. Configuration Deviation List (CDL). Aircraft certified under the provisions of Civil Air Regulations (CAR) 4b, 14 CFR part 23 or 25, and intended for use under part 121 or 135 may be approved for operations with missing secondary airframe and engine parts. The aircraft source document for such operations is the CDL. The ACO grants approval of the CDL under an amendment to the type certificate (TC). For U.S.-certificated aircraft, the CDL is incorporated into the limitations section of the approved flight manual as an appendix.

H. Day of Discovery. This is the calendar-day an equipment/instrument malfunction was recorded in the aircraft maintenance log and/or record. This day is excluded from the calendar-days or flight-days specified in the MMEL for the repair interval of an inoperative item of equipment. This provision is applicable to all MMEL items; i.e., categories A, B, C, and D.

I. Deactivated and Secured. When the MMEL refers to an item as deactivated and secured, the specified component must be put into an acceptable condition for safe flight. An acceptable method of securing and deactivating will be established by the certificate holder.

J. Deleted. “Deleted” in the remarks column after a sequence item indicates that the item was previously listed but is now required to be operative if installed in the aircraft

K. Departure. “Departure” as it applies to the use of an MEL, means the time the aircraft leaves the runway or takeoff surface.

L. Electronic Fault Alerting System. Refer to PL-025 for the current definition and MMEL policy.

M. Extended Range Operations (ER). ER refers to extended range operations (ETOPS) of an airplane with operational approval to conduct ETOPS in accordance with the applicable regulations.

N. Excess Items. Excess items are those items that have been installed that are redundant to the requirements of the 14 CFR.

O. Federal Aviation Regulations (FAR). FAR is the old name for 14 CFR; the applicable portions of the Federal Aviation Act of 1958 (FA Act) and FAR.

NOTE: Refer to the 14 CFR.

P. Fleet MEL. Certificate holders and program managers may have a single MEL for multiple aircraft of the same make and various models if listed on the same MMEL, and authorized in OpSpec/MSpec D095. This is known as a fleet MEL. POIs may approve certificate holders/program managers to use a fleet MEL to reflect all of the equipment that can be applicable to specific aircraft fleet type. Certificate holders and program managers who use fleet MELs must list equipment that is installed on any aircraft in a particular fleet. Certificate holders and program managers do not need to list aircraft identification numbers in a fleet MEL, but they must identify each model and configuration difference when appropriate. The aircraft manufacturer determines the configuration of the aircraft, the equipment installed, and the official parts listed during initial aircraft type certification at the time of manufacture. Any subsequent installation or removal of equipment can only be accomplished through a Supplemental Type Certificate (STC), an Engineering Order (EO), or other approved maintenance procedures. An STC for additional installed equipment must document any applicable MEL relief. (Refer to paragraph 4-637 of this section.)

Q. Flight-Day. A flight-day is a 24-hour period (from midnight to midnight) either universal coordinated time (UTC) or local time, as established by the certificate holder/program manager, during which at least one flight is initiated for the affected aircraft.

R. Flight Operations Evaluation Board (FOEB). An FOEB is a board of FAA personnel assigned for each type of aircraft. The FOEB is composed of FAA personnel who are operations, avionics, airworthiness, and aircraft certification specialists. The FOEB develops an MMEL for a particular aircraft type under the direction of the AEG and the Air Transportation Division (AFS-200).

S. Icing Conditions. An atmospheric environment that may cause ice to form on the aircraft (structural) or in the engine(s) (induction).

T. Inoperative. A system and/or component malfunction to the extent that it does not accomplish its intended purpose and/or is not consistently functioning normally within its approved operating limit(s) or tolerance(s).

U. Inoperative Components of an Inoperative System. Inoperative items, which are components of a system that is inoperative, are usually considered components directly associated with and having no other function than to support that system (warning/caution systems associated with the inoperative system must be operative unless relief is specifically authorized per the MMEL).

NOTE: Inoperative items must be placarded to inform and remind the crewmembers and maintenance personnel of the equipment condition. To the extent practical, placards should be located adjacent to the control or indicator for the item affected; however, unless otherwise specified, placard wording and location will be determined by the certificate holder/program manager.

V. Master Minimum Equipment List (MMEL). A list of equipment that the FAA FOEB has determined may be inoperative under certain operational conditions and still provide an acceptable level of safety. The MMEL contains the conditions, limitations, and procedures required for operating the aircraft with these items inoperative. The MMEL is used as a starting point in the development and review of an individual certificate holder's MEL.

W. Minimum Equipment List (MEL). An MEL is an FAA-approved document developed by a certificate holder or program manager which is derived from the MMEL for a particular make and model and series of aircraft. It is a list of instruments and equipment that may be inoperative and is tailored to a certificate holder's or program manager's particular aircraft and operating environment. An FAA-approved MEL constitutes an approved change in the type design of an aircraft.

X. Nonessential Equipment and Furnishings (NEF). NEFs are those items installed on the aircraft as part of the original type certification, STC, or other form of alteration that have no effect on the safe operation of flight and would not be required by the applicable certification rules or operational rules. They are those items that, if inoperative, damaged, or missing, have no effect on the aircraft's ability to be operated safely under all operational conditions. NEF items are not items already identified in the MEL or CDL of the applicable aircraft. They do not include items that are functionally required to meet the certification rule or for compliance with any operational rule.

Y. Notes (in Column 4 of the MMEL). Notes provide additional information for crewmember or maintenance consideration. Notes are used to identify applicable material, which is intended to assist with compliance, but do not relieve the certificate holder of the responsibility for compliance with all applicable requirements. Notes are not a part of the provisos.

Z. Operative. An operative system and/or component will accomplish its intended purpose and is consistently functioning normally within its design operating limit(s) and tolerance(s). When an MMEL item specifies that an item of equipment must be operative, it does not mean that its operational status must be verified (unless specified in the provisions); it is to be considered operative unless reported or known to be malfunctioning. When an MMEL item specifies that an item of equipment must be verified operative, it means that it must be checked and confirmed operative at the interval(s) specified for that MMEL item. When an MMEL item specifies that an item of equipment must be verified but no interval is specified, verification is required only at the time of deferral.

AA. Repair Intervals. All users of an MEL approved under parts 91K, 121, 125, 129, and 135 must effect repairs of inoperative systems or components, deferred in accordance with the MEL, at or prior to the repair times established by the following letter designators:

1) Category A. This category items must be repaired within the time interval specified in the remarks column of the certificate holder's approved MEL.

2) Category B. This category item must be repaired within 3 consecutive calendar-days (72 hours), excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it were recorded at 10 a.m. on January 26th, the 3-day interval would begin at midnight the 26th and end at midnight the 29th.

3) Category C. This category item must be repaired within 10 consecutive calendar-days (240 hours), excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it were recorded at 10 a.m. on January 26th, the 10-day interval would begin at midnight the 26th and end at midnight February 5th.

4) Category D. This category item must be repaired within 120 consecutive calendar-days (2880 hours), excluding the day the malfunction was recorded in the aircraft maintenance log and/or record.

BB. (“-”) Symbol (Column 2 and/or Column 3). Indicates that a variable number (quantity) of the item may be installed. This is common when a fleet MEL is used since aircraft of the same make and model may have differing numbers of specific items installed.

CC. (*)Symbol (Column 1).** Indicates an item which is not required by regulation but which may have been installed on some models of aircraft covered by this MMEL. This item may be included on the certificate holder’s/program manager’s MEL after the approving office has determined that the item has been installed on one or more of the certificate holder’s/program manager’s aircraft. The symbol, however, must not be carried forward into the certificate holder’s/program manager’s MEL. It should be noted that neither this policy nor the use of this symbol provides authority to install or remove an item from an aircraft.

DD. (M) Symbol. This symbol indicates a requirement for a specific maintenance procedure which must be accomplished prior to operation with the listed item inoperative. Normally, these procedures are accomplished by maintenance personnel; however, other personnel may be qualified and authorized to perform certain functions. Procedures requiring specialized knowledge or skill, or requiring the use of tools or test equipment, should be accomplished by maintenance personnel. The satisfactory accomplishment of all maintenance procedures, regardless of who performs them, is the responsibility of the certificate holder/program manager. Appropriate procedures are required to be published as part of the certificate holder’s/program manager’s manual or MEL.

EE. (O) Symbol. This symbol indicates a requirement for a specific operations procedure which must be accomplished in planning for and/or operating with the listed item inoperative. Normally, these procedures are accomplished by the flightcrew; however, other personnel may be qualified and authorized to perform certain functions. The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the certificate holder. Appropriate procedures are required to be published as a part of the certificate holder’s/program manager’s manual or MEL.

FF. System Definitions. System definitions are based on the ATA Specification Number 100 and are numbered sequentially.

1) Item (Column 1). This column depicts the equipment, system, component, or function listed in the “Item” column.

2) Number Installed (Column 2). This column depicts the number (quantity) of items normally installed in the aircraft. This number represents the aircraft configuration considered in developing this MMEL. Should the number be a variable (e.g., passenger cabin items) a number is not required and the “-” symbol is used.

3) Number Required for Dispatch (Column 3). This column depicts the minimum number (quantity) of items required for operation provided the conditions specified in column 4 are met.

NOTE: Where the MMEL shows a variable number required for dispatch, the MEL must reflect the actual number required for dispatch or an alternate means of configuration control approved by the Administrator.

4) Remarks or Exceptions (Column 4). This column includes a statement either prohibiting or permitting operation with a specific number of items inoperative, provisos (conditions and limitations) for such operation, and appropriate notes.

GG. Vertical Bar (Change Bar). Indicates a change, addition, or deletion in the adjacent text for the current revision of that page only. The change bar is dropped at the next revision of that page.

HH. Takeoff. The act of beginning a flight in which an aircraft is accelerated from a state of rest to that of flight. For the purposes of MEL relief, this translates to the point at which the pilot physically begins to apply power to initiate the takeoff from the runway or takeoff surface.

II. Title 14 CFR. The applicable portions of the FAA Act and CFR. The CFR is the codification of the general and permanent rules published in the Federal Register (FR) by the executive departments and agencies of the Federal Government.

JJ. Visual Flight Rules (VFR). VFR is as defined in part 91. This precludes a pilot from filing an Instrument Flight Rules (IFR) flight plan.

KK. Visual Meteorological Conditions (VMC). Visual Meteorological Conditions (VMC) means the atmospheric environment is such that would allow a flight to proceed under the VFRs applicable to the flight. This does not preclude operating under IFRs.

LL. Visible Moisture. An atmospheric environment containing water in any form that can be seen in natural or artificial light; for example, clouds, mist, rain, sleet, hail, or snow.

4-627 PURPOSE OF MEL. Part 23, § 23.1301 and part 25, § 25.1301 state, in part, that each item of installed equipment must function properly. Therefore, an aircraft is not Airworthy if any of its installed equipment is missing or inoperative because it does not conform to its type design. An FAA-approved MEL constitutes an approved change in the type design on an aircraft and allows a certificate holder or program manager to operate an aircraft with certain instruments and equipment inoperative.

A. Title 14 CFR Parts.

1) Part 91K. § 91.1115(a)(2) states, in pertinent part “an approved minimum equipment list, as authorized by the management specifications, constitutes an approved change to the type design without requiring recertification.”

2) Part 121. § 121.628(a)(2) states, in pertinent part, “An approved Minimum Equipment List, as authorized by the operations specifications, constitutes an approved change to the type design without requiring recertification.”

3) Part 129. § 129.14 states, in pertinent part, “An approved minimum equipment list, as authorized by the operations specifications, constitutes an approved change to the type design without requiring recertification.”

4) Part 135. § 135.179 (a)(2) states, in pertinent part “An approved Minimum Equipment List, as authorized by the operations specifications, constitutes an approved change to the type design without requiring recertification.”

B. Experience. Experience and history have shown that the redundancy designed into modern aircraft provides for an acceptable level of safety when certain instruments and equipment become inoperative. Certificate holders and program managers conducting operations in accordance with parts 91K, 121, 129, and 135 may continue to operate an airplane with certain inoperative instruments and equipment provided:

- The certificate holder/program manager has an FAA-approved MEL Management Program;
- The certificate holder/program manager has an FAA-approved MEL for each aircraft they operate; and
- The certificate holder/program manager adheres to the applicable conditions and limitations set forth in each FAA-approved MEL and MEL Management Program.

C. PIs with Oversight Responsibility. PIs with oversight responsibility of these certificate holders and program managers will approve an MEL Management Program by issuing OpSpec/MSpec paragraph D095 (refer to Volume 3, Chapter 18, Section 6, OpSpec/MSpec D095). POIs will approve the actual MEL.

D. Operations. In accordance with §§ 135.179(a)(2) and 121.628(a)(2), an approved MEL, authorized in a certificate holder's OpSpec, constitutes an approved change to the type design without requiring recertification. PIs approve a certificate holder's MEL by issuing OpSpec D095.

4-628 ITEMS LISTED ON THE MEL. The certificate holder's MEL may contain three categories of items:

- MMEL items,
- NEFs, and
- ACIs.

A. MMEL Items. The MEL will list all of the MMEL items for which the certificate holder/program manager seeks relief and that are appropriate for its operation. The certificate holder/program manager, at its discretion, may choose not to list certain items in its MEL, and thus may be more restrictive than the MMEL. At no time may a certificate holder's/program manager's MEL be less restrictive than the MMEL.

B. ACIs. An ACI is an item that is not part of an MMEL. However, a certificate holder/program manager may list an ACI in their MEL for tracking and informational purposes. For example, an ACI may be used to track ETOPS accomplishment of the required auxiliary power unit (APU) cold-soak or in-flight verification starts. A certificate holder or program manager may add an ACI to their MEL with the approval of the POI. POIs may authorize the listing of an ACI in an MEL, provided no relief is granted or any conditions or limitations associated with the ACI are contained in an approved document (e.g., SRM, AD, etc.). Refer to MMEL PL-034 for a preamble description of an ACI.

NOTE: NEFs are discussed in Volume 4, Chapter 4, Section 11.

4-629 TIMELY REPAIR OF ITEMS THAT ARE INOPERATIVE. The intent of an MEL is to permit a certificate holder/program manager to continue to operate an aircraft for a limited period of time with certain instruments and equipment inoperative until repairs can be made.

A. Repair Interval. Certificate holders and program managers must make repairs within the time period specified by the MEL. Although the MEL might permit multiple days of operation with certain inoperative equipment, certificate holders and program managers must repair the affected item as soon as possible.

B. Day of Discovery. The Day of Discovery is defined in paragraph 4-626 of this section, and in PL-025. Certificate holders and program managers must establish a reference time at which the calendar day begins and ends 24 hours later; for example, 0000-2359 UTC.

C. Continuing Authorizations (Extensions). A certificate holder or program manager who has the authorization to use an FAA-approved MEL also has the authority to use a continuing authorization to approve a single extension to the maximum repair interval for category B or C items (3 days and 10 days respectively), provided the certificate holder/program manager notifies the responsible FAA field office (e.g., Flight Standards

District Office (FSDO) or certificate management office (CMO)) within 24 hours of the certificate holder's exercise of extension authority. A certificate holder or program manager may not continue to extend the maximum repair interval for a particular category B or C item unless the authorization to apply additional time extensions has been granted in its FAA-approved MEL Management Program. A certificate holder/program manager is not authorized to extend the maximum repair time for category A and D items, as specified in the approved MEL. Misuse of the continuing authorization may result in an amendment of the certificate holder's/program manager's OpSpecs/MSpecs by removing the certificate holder's authority to use an MEL.

4-630 TAKEOFF WITH INOPERABLE INSTRUMENTS AND EQUIPMENT.

Title 14 CFR prohibits any person from taking off an airplane with inoperable instruments or equipment unless an approved MEL exists for that airplane and the procedures relating to its use are followed. Takeoff is defined as when an aircraft is accelerated from a state of rest to that of flight. For the purposes of MEL relief, this translates to the point at which the pilot physically begins to apply power to initiate the takeoff from the runway or takeoff surface.

A. Responsibility for Airworthy Aircraft—Part 121. Section 121.605 prohibits anyone from dispatching or releasing an aircraft unless it's Airworthy. Therefore, not only is the certificate holder (the air carrier) responsible for operating its aircraft in an Airworthy condition, but so are the pilot in command (PIC) and the dispatcher (domestic and flag) or person authorized to exercise operational control and issue flight releases (supplemental). Due to this regulatory responsibility, POIs must ensure that certificate holders have a method of ensuring that all MEL information is made available to the PIC and dispatcher (or person designated to exercise operational control) prior to an aircraft's departure.

1) Dispatch or Flight Release. It is a common practice for certificate holders to use a dispatch or flight release to relay MEL information. Dispatch and flight releases are legal documents that specify the provisions, conditions, and limitations under which a flight may be conducted. Therefore, POIs, PMIs, and PAIs should require all certificate holders to include information regarding inoperative instruments and equipment and the applicable conditions and limitations contained in the MEL, in the dispatch or flight release, and any subsequent amendments as part of their MEL Management Program.

NOTE: If an MEL item is applied to an aircraft after a dispatch or flight release has been issued, POIs must ensure that the certificate holder has policies and procedures in place that require the dispatcher, person authorized to exercise operational control, and/or the PIC to amend the release. The individual who first becomes aware of the MEL should be the one to initiate the amendment.

2) Verification of Airworthiness by Dispatchers and Persons Authorized to Exercise Operational Control. Certificate holders must have a means whereby dispatchers and other persons authorized to exercise operational control can verify the airworthiness of an aircraft. Unlike PICs and maintenance personnel, dispatchers and persons authorized to exercise operational control are not typically located in an area where the aircraft is located. This means it is usually impossible for these individuals to verify the airworthiness of an aircraft by reviewing the actual aircraft maintenance logbook or airworthiness release. In

addition, the only way these individuals can be aware of inoperable instruments and equipment is if a person who has actual access to the aircraft and the maintenance logbook advises them. Therefore, certificate holders must provide an alternate means for these individuals to fulfill their regulatory responsibility to ensure an aircraft is not dispatched or released unless it is Airworthy. This is often accomplished through the use of a Maintenance Control Organization whose responsibility it is to provide MEL information and verification that an aircraft is Airworthy to the dispatcher or person authorized to exercise operational control, before the aircraft is entered into service and departs.

B. Instrument and Equipment Failures that Occur After an Aircraft Leaves the Gate or Ramp Area (Pushes Back or Taxis)—Certificate Holders and Program Managers other than Part 121. Certificate holders and program managers must have a means to address instrument and equipment failures that occur after an aircraft leaves the gate or ramp area (but prior to takeoff) in their MEL Management Programs. PIs must ensure that each program manager's and each certificate holder's MEL Management Program contains a means to ensure an aircraft does not take off with inoperable instruments or equipment.

C. Instrument and Equipment Failures that Occur After an Aircraft Leaves the Gate or Ramp Area (Pushes Back or Taxis)—Part 121. Certificate holders conducting part 121 operations must have policies and procedures that address instrument and equipment failures that occur after the time an aircraft leaves the gate or ramp area (but prior to takeoff) in their MEL Management Program. POIs must ensure that each certificate holder's MEL Management Program has procedures for the PIC to communicate with the dispatch (or operational control for supplemental operations) and maintenance organizations prior to takeoff to review each situation and determine whether the flight should:

1) Return for Repairs. If for any reason (e.g., weather, route of flight, aircraft weight, item not listed in MEL) an inoperative item (instrument or equipment) would prevent a flight from operating with safety, the aircraft would have to return to the gate or ramp area for repairs.

2) Return to Accomplish (M) Procedures and (O) Procedures. PICs, dispatchers, or persons authorized to exercise operational control may determine that an inoperative item may be deferred and the appropriate (M) and/or (O) procedures accomplished, in accordance with the certificate holder's approved MEL and MEL Management Program, or

3) Flightcrew Accomplishment of Certain MEL Procedures. POIs may approve procedures that permit flightcrew members to accomplish certain MEL deferrals in coordination with the certificate holder's dispatch and maintenance organizations without returning to the gate or ramp area. POIs must coordinate with the PMI and PAI to approve such procedures. POIs must not approve these types of procedures unless they contain enough detail to ensure that all of the applicable (M) and/or (O) procedures are accomplished by qualified persons, and that the certificate holder has a means to ensure that they satisfy all of the conditions and limitations associated with each MEL. PIs (POI, PMI, and PAI) will ensure that certificate holders document these procedures in their FAA-approved MEL Management Program.

NOTE: Coordination between flightcrew members and the maintenance organization must not involve directed troubleshooting or other forms of system fault diagnosis beyond what is specifically authorized in the certificate holder's MEL Management Program procedures. Unless otherwise authorized, troubleshooting or fault diagnosis necessary to determine suitable MEL relief must be performed by qualified maintenance personnel.

NOTE: If the conditions and limitations contained in an MEL affect the aircraft performance or flight operation (e.g., fuel penalties or restrictions to flight level), the dispatcher or person authorized to exercise operational control will have to recalculate (compute) a new flight plan and issue a new or amended dispatch or flight release.

4-631 MULTIPLE ITEMS THAT ARE INOPERATIVE. MEL-specific conditions and limitations are designed to address the failure of one particular type of equipment system or component. If an aircraft has multiple inoperative items, any certificate holder or person operating that aircraft must consider the interrelationships between the inoperative items and the effect on the aircraft operation and crewmember workload, including consideration of possible additional instrument or equipment failure occurring en route. The MMEL preambles contain guidance on multiple inoperative items.

NOTE: MMEL preambles are available in the MMEL Policy Letters located on FSIMS under the "Publications" tab.

4-632 RECORDKEEPING. When an item of equipment becomes inoperative, the certificate holder must report it by making an entry in the aircraft maintenance record, as prescribed by parts 91K, 121, and 135 require:

- All mechanical irregularities occurring during flight time are entered in the maintenance log of the airplane.
- Records identifying the inoperable instruments and equipment and the information that provides for the operation of the airplane with certain instruments and equipment in an inoperable condition must be available to the pilot.

4-633 REVISIONS. Refer to Volume 4, Chapter 4, Section 6.

4-634 ACCESS TO MEL. The 14 CFRs require that the MEL be carried aboard the aircraft or that the flightcrew has direct access to the MEL information prior to flight. Other means of direct access require approval through OpSpecs/MSpecs.

4-635 MMEL REMARKS OR EXCEPTIONS THAT MUST BE SPECIFICALLY DEFINED IN AN MEL.

A. General Remarks or Exceptions. Some systems (ATA chapters) listed in an MMEL contain general "Remarks or Exceptions." These "Remarks or Exceptions" are located in column 4 of an MMEL (Refer to PL-025). Some examples are listed below:

- 1) “May be inoperative provided procedures do not require its use.”
- 2) “May be inoperative or missing if alternate procedures are established and used.”

3) “May be inoperative unless required by FAR” or “As required by FAR.” This statement in particular is clearly prohibited by MMEL Policy Letter 70 (PL-070). Statements of this nature must be replaced with the appropriate 14 CFR requirement. See Figure 4-39A, MMEL General Remarks or Exceptions as Defined in an MEL, as an example.

B. Purpose of the General MMEL “Remarks or Exceptions.” MMEL “Remarks or Exceptions” are purposely included in MMELs to accommodate a variety of entities, including certificate holders and program managers who conduct operations under a variety of operating rules. Therefore, the policy must be broad enough to cover a wide range of operations. The FAA’s intent, however, is that each certificate holder’s and program manager’s MEL contains the necessary procedures, and/or identifies the appropriate 14 CFR requirements for their particular type of operation. POIs must not approve MELs that contain a restatement of the general MMEL “Remarks or Exceptions” as described in subparagraph 4-635A, without further definition and elaboration. See Figure 4-39A as an example.

C. MEL Remarks or Exceptions May Contain Manuals References. In lieu of including an actual procedure in an MEL “Remark or Exception,” a certificate holder or program manager may include a reference to the manual chapter and/or section that contains specific procedures for the “Remark or Exception.” See Figure 4-39B, Remarks or Exceptions Containing References to Manuals.

NOTE: Anytime a certificate holder or program manager includes a reference to a particular manual chapter and/or section in their FAA approved MEL, that chapter and/or section of the referenced manual is also required to be approved by the FAA. This is true even if the manual itself is only required to be accepted by the FAA.

Figure 4-39A. MMEL General Remarks or Exceptions as Defined in an MEL

NOTE: This figure is not meant to be an actual depiction of a certificate holder's/program manager's MEL. This example is only meant to demonstrate the difference between an MMEL General "Remark or Exception" versus a specific MEL "Remark or Exception."

MMEL General Remark/Exception

21	AIR CONDITIONING				Remarks or Exceptions
62.	Ozone Converter	D	3	0	(O) As required by FAR.

MEL Specific Remark/Exception

21	AIR CONDITIONING				Remarks or Exceptions
62.	Ozone Converter 1) Passenger Configuration	D	3	0	(O) In order to ensure compliance with 121.578, dispatch with one or more ozone converters inoperative or not installed is allowed provided aircraft is not operated above FL320.

MMEL General Remark/Exception

23	COMMUNICATIONS				Remarks or Exceptions
43-01	Flight Deck To Ground Interphone System	B	1	0	(O) May be inoperative provided alternate procedures are established and used.

MEL Specific Remark/Exception

23	COMMUNICATIONS				Remarks and Exceptions
43-01	Flight Deck To Ground Interphone System	B	1	0	(O) May be inoperative provided the following procedures are followed: 1. Verify to ground crew personnel before main cabin door is closed that ECAM message NW STRG DISC is displayed. 2. Use company hand signals as required (see Ramp Operations Manual Chapter 1 a complete list of company hand signals).

Figure 4-39B. MEL Remarks or Exceptions Containing References to Manuals**MEL Specific Remark/Exception**

23	COMMUNICATIONS				Remarks and Exceptions
43-01	Flight Deck To Ground Interphone System	B	1	0	1. (O) May be inoperative provided the flightcrew follows the procedures contained in GOM chapter 3, section 2.

NOTE: Anytime a certificate holder or program manager includes a reference to a particular manual chapter and/or section in their FAA-approved MEL, that chapter and/or section of the referenced manual is also required to be approved by the FAA. This is true even if the manual itself is only required to be accepted by the FAA.

NOTE: Prior to approving an MEL, PIs (POI, PAI, and PMI) must research the appropriate regulations to ensure that the certificate holder's MEL contains the appropriate regulatory requirements for MMEL items that contain a statement such as, "As Required by FAR." In order to assist PIs, certificate holders, and program managers in determining the appropriate regulatory requirements, the AEGs in conjunction with the MMEL Industry Group (MMEL IG) updated MMEL PL-025 to include an appendix that contains a list of 14 CFRs associated with a particular ATA chapter. The appendix is for guidance only, and any question regarding the applicability of a particular regulation must be resolved by thoroughly reviewing that regulation. The FOEB chairman can answer M/M/S-specific questions.

4-636 CONFLICT WITH OTHER FAA-APPROVED DOCUMENTS. An MEL may not conflict with other FAA-approved documents such as the AFM limitations or ADs. The certificate holder's MEL may be more restrictive than the MMEL, but under no circumstances may the certificate holder's MEL be less restrictive.

4-637 STC MMEL RELIEF PROCESS.

A. Inoperative Systems/Components. Relief for inoperative systems/components installed by STC, other than what is provided in AFM supplements, may only be granted through the FOEB process, which requires coordination and approval by the FOEB chairman. Relief for inoperative instruments and/or equipment installed by STC must first be published in an MMEL before it can be adopted into a certificate holder's or program manager's MEL. It is the FOEB's goal to provide appropriate MMEL relief upon certification of the STC.

B. Certification of an STC. The certificate holder involved in the certification of an STC should submit a request to the FOEB chairman for MMEL relief early in the certification process to allow MMEL evaluation concurrent with the certification process.

4-638 MEL FOR PART 129 FOREIGN AIR CARRIERS.

A. Operating Under Part 129. In accordance with part 129, § 129.14, all foreign air carriers operating U.S.-registered aircraft under an FAA-approved maintenance program must have an FAA-approved MEL Management Program in order to obtain and use an FAA-approved MEL.

B. Time Allowance. Part 129 foreign air carriers will be given 6 months to develop, submit, and obtain FAA approval for their MEL Management Program. The FAA grants this approval to a foreign air carrier by issuing OpSpec D095. The requirements of the MEL Management Program are described below:

C. MEL Management Program. Foreign air carriers must develop and maintain a comprehensive program for managing the repair of items listed in the approved MEL. Foreign air carriers must include in a document or in its manual a description of the MEL Management Program. The MEL Management Program must include at least the following provisions:

1) Method of Tracking. A method that provides for tracking the date and, when appropriate, the time an item was deferred and subsequently repaired. The method must include a supervisory review of the number of deferred items per aircraft and a supervisory review of each deferred item to determine the reason for any delay in repair, length of delay, and the estimated date the item will be repaired.

2) A Plan for Repair. A plan for bringing together parts, maintenance personnel, and aircraft at a specific time and place for repair.

3) Review of Items Deferred Due to Unavailability of Parts. A review of items deferred because of the unavailability of parts so that a valid backorder exists with a firm delivery date.

4) Duties and Responsibilities. A description of specific duties and responsibilities, by job title of personnel, who manage the MEL Management Program.

D. Continuing Authorizations (Extensions). A part 129 foreign air carrier who has the authorization to use an FAA-approved MEL also has the authority to use a continuing authorization to approve a single extension to the maximum repair interval for category B or C item (3 and 10 days respectively), provided the foreign air carrier notifies the responsible FAA field office (e.g., FSDO, International Field Office (IFO) or International Field Unit (IFU)) within 24 hours of air carrier's exercise of extension authority. A part 129 foreign air carrier may not continue to extend the maximum repair interval for a particular category B or C item unless the authorization to apply additional time extensions has been granted in its FAA-approved MEL Management Program. A part 129 foreign air carrier is not authorized to extend the maximum repair time for category A and D items, as specified in the approved MEL. Misuse of the continuing authorization may result in an amendment of the foreign air carrier's OpSpecs by removing the certificate holder's authority to use an MEL.

4-639 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Operations: 1321 (initial), 1322 (revision).

B. Maintenance: 3312 (initial), 3313 (revision).

C. Avionics: 5312 (initial), 5313 (revision).

4-640 ACTIVITIES RECORDED IN THE AIR TRANSPORTATION OVERSIGHT SYSTEM (ATOS) DATABASE.

A. Operations: 3.2.3 (Safety Attribute Inspection (SAI) and Element Performance Inspection (EPI)).

B. Airworthiness: 1.3.5 (SAI and EPI).

RESERVED. Paragraphs 4-641 through 4-655.

VOLUME 4 AIRCRAFT EQUIPMENT AND OPERATIONAL AUTHORIZATIONS
CHAPTER 10 EVALUATE OPERATOR'S APPLICATION TO CONDUCT FLIGHT IN
REDUCED VERTICAL SEPARATION MINIMUM AIRSPACE

Section 1 Evaluate an Operator's Application to Conduct Flight in Reduced Vertical
Separation Minimum Airspace

4-1331 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY
CODES.

A. Operations: 1411 and 1413.

B. Maintenance: 3411 and 3413.

C. Avionics: 5411 and 5413.

D. Air Transportation Oversight System (ATOS) Element: 5.1.9.

4-1332 OBJECTIVE. This chapter provides guidance for evaluating applications for an operator to conduct flight in airspace where Reduced Vertical Separation Minimum (RVSM) is applied; evaluating and approving RVSM maintenance programs associated with an application; and issuing operations specifications (OpSpecs) or a letter of authorization (LOA), as appropriate. Both OpSpecs and LOAs are issued using the Web-based Operations Safety System (WebOPSS) (see Volume 3, Chapter 18, Section 2).

4-1333 GENERAL.

A. Requirements. The current regulation in Title 14 of the Code of Federal Regulations (14 CFR) part 91 appendix G states the requirements an operator and the operator's aircraft must comply with in order for a person to operate a civil aircraft of U.S. registry in RVSM airspace.

B. Authorization. Aircraft and operators must be authorized by the Administrator to conduct operations in RVSM airspace. The criteria evaluated to issue this authorization consist of three basic elements:

1) An aircraft must be determined to comply with the requirements of part 91 appendix G, section 2.

2) The operator's maintenance program must be found to comply with the requirements of part 91 appendix G, section 3.

3) The operator must be found to have adopted RVSM operating policies and procedures for pilots (and, if applicable, dispatchers) that are acceptable to the Federal Aviation Administration (FAA).

C. Responsibilities.

1) The appropriate Flight Standards District Office (FSDO) or certificate-holding district office (CHDO) manager, in coordination with avionics/maintenance Airworthiness aviation safety inspectors (ASI) and Operations ASIs, should coordinate the evaluation of the aircraft RVSM eligibility, RVSM maintenance program, and operator's RVSM program. The principal avionics inspector (PAI) and the principal maintenance inspector (PMI) will make the determination of an aircraft's compliance. Either the PAI or PMI will evaluate the operator's maintenance program for approval by the Administrator. The principal operations inspector (POI) will evaluate and accept the required program operational elements. The FSDO or CHDO, will issue an OpSpecs or LOA, as appropriate, to authorize an operator to conduct flight in RVSM airspace.

NOTE: The ASI may become knowledgeable of any other existing authorizations or specifications issued to a specific aircraft using the Operator Aircraft Viewer Report, available in the WebOPSS.

2) The applicant will obtain and submit all documents that establish the eligibility of its aircraft. The applicant will submit to the FAA evidence that it is capable of operating and maintaining each aircraft or aircraft group for which it applies, and an RVSM maintenance program for approval. The applicant will establish that each pilot has adequate knowledge of RVSM requirements and procedures. The applicant may also be required to submit for acceptance RVSM policy and procedures, and its initial and recurring pilot training requirements.

4-1334 AIRCRAFT ELIGIBILITY.

A. Compliance for Authorization. An aircraft may be authorized to conduct RVSM operations if the Administrator finds that it complies with the requirements of part 91 appendix G, section 2. Aircraft may be produced RVSM-compliant or brought into compliance through the application of FAA-approved Service Bulletins (SB), Service Letters (SL), or Supplemental Type Certificates (STC) that apply to the specific aircraft type or group and, if applicable, the specific aircraft serial number.

B. Requirements for Eligibility. The PAI or PMI makes the determination of aircraft RVSM eligibility after reviewing substantiating documents developed to meet the following applicable requirements.

1) Aircraft not produced under type certificate (TC) in accordance with 14 CFR part 21, § 21.123 to meet requirements as stated in part 91 appendix G. The PAI and the PMI ensure that the inspections and/or modifications required to meet the specified performance have been performed and documented. At a minimum, these items should include STC installation on the specific serial numbered aircraft; Aircraft/Airplane Flight Manual Supplement (AFMS) (AFMS statement of RVSM capability); instructions for continued airworthiness (ICA); and aircraft logbook information that reflects the STC installation and ICA compliance.

2) Aircraft produced under TC in accordance with § 21.123 to meet requirements as stated in part 91 appendix G. The PAI/PMI ensures that the Aircraft Flight Manual (AFM) or aircraft Type Certificate Data Sheet (TCDS) denotes the RVSM eligibility and that the appropriate Manufacturing Inspection District Office (MIDO) has performed the initial finding of conformity with type design.

NOTE: The PAI/PMI may accomplish the determination that an aircraft is RVSM-compliant through the examination of only documents and/or data. Physical inspection of an airframe may not be required if the submitted documentation is sufficient.

C. RVSM-Compliant Aircraft. Upon determination that an aircraft is RVSM-compliant, the PAI/PMI will make the appropriate PTRS entry and notify the applicant in writing. The U.S. RVSM Approvals database lists aircraft found to be RVSM-compliant. Refer to paragraph 4-1241 for a complete explanation of PTRS entry content and the associated job aid.

4-1335 MAINTENANCE PROGRAM.

A. Application for Authorization. The application for authorization to operate within RVSM airspace must include an approved RVSM maintenance program. This program must outline procedures to maintain aircraft in accordance with the requirements of part 91 appendix G.

B. Develop and Obtain Approval. Operators without an approved aircraft maintenance program are required to develop and obtain approval of an RVSM maintenance program. The approved RVSM maintenance program is not required to include elements not related to RVSM maintenance. Inspection programs such as an Approved Aircraft Inspection Program (AAIP) or manufacturer's recommended inspection program do not satisfy the RVSM requirements because they do not contain procedures to maintain RVSM aircraft. Operators who maintain their aircraft under a Continuous Airworthiness Maintenance Program (CAMP) may choose to incorporate the RVSM maintenance requirements into the program. Part 121 operators currently under ATOS should develop RVSM maintenance programs using the Safety Attribute Inspection (SAI) job aid 5.1.9.

C. Approval. The ASI will indicate approval of the RVSM maintenance program. The approved RVSM maintenance program elements are specific to the operator and aircraft for which they are approved and are not transferable.

D. RVSM Maintenance Components. Each RVSM maintenance program must include the following:

1) Identification of RVSM critical components and identification of structural areas noted as RVSM critical areas.

2) The name or title of the responsible person who will ensure that the aircraft is maintained in accordance with 14 CFR part 43 under the approved program.

3) The method the operator will use to ensure that all personnel performing maintenance on the RVSM system are properly trained, qualified, and knowledgeable of that specific system.

4) The method the operator will use to notify the crew if the aircraft has been restricted from RVSM, but is Airworthy for an intended flight.

5) The method the operator will use to ensure conformance to the RVSM maintenance standards including the use of calibrated and appropriate test equipment, and a quality assurance (QA) program for ensuring the continued accuracy and reliability of test equipment, especially when outsourced.

6) The method the operator will use to verify that components and parts are eligible for installation in the RVSM system, as well as preventing ineligible components or parts from being installed.

7) The method the operator will use to return an aircraft to service after an appropriately rated person has performed maintenance on an RVSM component/system or after the aircraft was determined to be noncompliant.

NOTE: Maintenance providers may use built-in test equipment (BITE) testing of RVSM components and systems recommended by manufacturers and design holders in appropriate ICAs for return to service (RTS) determinations.

8) Periodic inspections, functional flight tests, and maintenance and inspection procedures with acceptable maintenance practices for ensuring continued compliance with the RVSM aircraft requirements.

NOTE: The operator may list these elements in detail or describe them by reference to an acceptable program that identifies and controls through a revision or issue number.

NOTE: Functional flight testing, if required by the ICAs, may be accomplished through monitoring heightkeeping performance.

NOTE: The RVSM minimum monitoring requirements described in paragraph 4-1236 are operational requirements and are not considered part of the aircraft maintenance program.

9) The maintenance requirements listed in the ICA associated with any RVSM associated component or modification.

10) Any other maintenance requirement that the operator needs to incorporate to ensure continued compliance with RVSM requirements.

E. RVSM Requirements. Operators using the services of part 145 certificated repair stations (CRS) must include provisions to ensure that the repair station meets the requirements of their RVSM programs.

4-1336 OPERATOR EVALUATION.

A. Obtain Authorization. To obtain authorization from the Administrator to conduct operations in RVSM airspace, the Administrator must find the operator to have adopted RVSM operating policies and procedures for pilots (and, if applicable, dispatchers) and ensure each pilot has adequate knowledge of RVSM requirements, policies, and procedures. The minimum equipment list (MEL), if used, must incorporate the required changes stated in Master Minimum Equipment List (MMEL) GC-59 (formerly Policy Letter PL-84), dated August 15, 1997. The operator must provide a procedure for initial aircraft monitoring and meeting RVSM minimum monitoring requirements.

B. Required Monitoring. Operators are required to conduct initial monitoring within 6 months of the date of issue and must conduct monitoring every 2 years or within intervals of 1,000 flight-hours per aircraft, whichever period is longer, in accordance with the aircraft categories as presented in the current edition of the (North American) RVSM Minimums Monitoring Requirements Chart. The FAA has posted the RVSM Minimum Monitoring Requirements Chart to the FAA RVSM Documentation Web site at https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/enroute/rvsm in the section titled, "Monitoring Requirements and Procedures."

C. Coordination. The appropriate FSDO or CHDO manager, in coordination with the PAI, PMI, and POI, will issue the OpSpecs or LOA after determination of aircraft compliance; approval of the RVSM maintenance program; and acceptance of operator policies and procedures. Upon issuance, the POI will make the appropriate PTRS entry (see Table 4-23). The U.S. RVSM Approvals database lists authorizations issued to operators.

NOTE: A PAI, PMI, or POI may sign for the manager (when authorized) OpSpecs and LOA paragraphs issued using the OPSS.

D. Approval. An applicant who operates under 14 CFR part 121 or 135 must submit for approval the initial and recurrent pilot training requirements and RVSM policies and procedures that will enable it to conduct RVSM operations safely.

4-1337 COORDINATION REQUIREMENTS. This task requires coordination between Airworthiness and Operations ASIs.

4-1338 REFERENCES, FORMS, AND JOB AIDS.**A. References (current edition):**

- Title 14 CFR Parts 43, 91, 121, 125, 135, and 145.
- Advisory Circular (AC) 91-85, Authorization of Aircraft and Operators for Flight in Reduced Vertical Separation Minimum Airspace.
- Volume 4, Chapter 1, Section 5, Special Navigation Areas of Operation.

B. Forms. None.

C. Job Aids:

- SAI Job Aid 5.1.9.
- PTRS RVSM Data Entry Job Aid (see Figure 4-87).

4-1339 PROCEDURES.**A. Determination of Aircraft Compliance.**

1) Determine if the aircraft meets the requirements of part 91 appendix G, section 2 and is RVSM-compliant.

2) Review the substantiating documentation for the aircraft and its associated systems to identify references to RVSM capability. To meet requirements as stated in part 91 appendix G for aircraft not produced under a TC in accordance with § 21.123, ensure that all required elements of the Aircraft Certification Office (ACO)-approved data through which RVSM airworthiness approval is sought have been applied. Data may consist of FAA- or foreign-approved SBs, SLs, or STCs. To meet requirements as stated in part 91 appendix G for aircraft produced under TC in accordance with § 21.123, either the aircraft TCDS or AFM will state RVSM compliance.

3) If sufficient documentation is available, the PAI/PMI may make a determination of compliance entirely through examination of the documents and/or data.

B. Evaluation and Approval of Operator's RVSM Maintenance Program. Review the RVSM maintenance program to ensure that it contains the elements described in subparagraph 4-1235D.

4-1340 TASK OUTCOMES.**A. Determine Aircraft RVSM Compliance.**

1) If it is determined that an aircraft is RVSM-compliant, the PAI or PMI will complete the PTRS record with the date of modification or RVSM compliance date in the "Comments" field and will notify the applicant in writing. The activity code for this work function will be 3411 (maintenance) or 5411 (avionics) for initial airframe acceptance (determination of compliance). Either PTRS entry will result in the aircraft being listed as RVSM-compliant in the U.S. RVSM Approvals database.

2) If it is determined that an aircraft is not RVSM-compliant, advise the operator/applicant by letter of the determination with an explanation.

B. Approve or Reject Aircraft Maintenance Program/Revision.

1) Upon approval or rejection of the applicant's RVSM program, the PAI or the PMI will make an entry in the PTRS and notify the applicant. The activity code for this work function will be 3413 (maintenance) and 5413 (avionics).

2) If it is determined that the RVSM maintenance program or revision meets all of the regulatory requirements, the approval process is as follows:

a) Approved maintenance programs must include a List of Effective Pages (LEP) and a revision log to document as the applicant incorporates future revisions.

b) Indicate approval of RVSM maintenance program elements that the applicant will incorporate into an existing accepted or approved program for each element or group of elements by the inspector's signature, date of approval, office name, number, and location.

c) Indicate approval of RVSM maintenance programs submitted as standalone on the cover page of the program together with the date of approval, inspector's signature, office name, number, and location. Stamp each succeeding page of the program with the district office stamp and date and initial it.

d) The PAI/PMI may use other approval controls.

3) If the PAI/PMI determines that the aircraft maintenance program/revision is not acceptable, advise the operator/applicant by letter that the program has been rejected. The inspector must return the program/revision to the operator/applicant with the reasons for the rejection.

4-1341 PTRS DATA ENTRY JOB AID FOR RVSM.

A. RVSM PTRS Data Entry Job Aid. Figure 4-87 is a job aid that is intended to aid inspectors in making PTRS data entries for RVSM and standardize RVSM PTRS data.

1) Aircraft Status for RVSM Monitoring. Many operators have aircraft monitored immediately after the completion of RVSM required modifications and/or inspections. The information in the job aid will enable the Separation Standards Analysis Branch (ANG-E61) to confirm that the aircraft was RVSM-compliant when the RVSM monitoring flight was conducted. (ANG-E61 responsibilities are detailed below.)

NOTE: It is imperative that inspectors update the PTRS in a timely manner.

2) RVSM Approvals Database. The ANG-E61 team at the William J. Hughes Technical Center (ACT) retrieves PTRS information to maintain a database of U.S. RVSM aircraft and operator approvals. This database is used to complete RVSM safety assessment and safety oversight tasks. The data is used with periodic traffic samples to identify unapproved operations in RVSM airspace. The database is also forwarded to international bodies tasked with tracking RVSM aircraft/operator approval and conducting safety analyses.

NOTE: This information is being used to find and investigate aircraft that fly at RVSM flight levels (FL), but are not RVSM-approved. The database of RVSM approvals is *not*, however, used in real-time to grant or deny clearance into RVSM airspace.

B. Separate PTRS Entries. Inspectors must make separate PTRS entries as follows:

1) When the inspector determines that operator aircraft are RVSM-compliant, the inspector must update the PTRS in accordance with Section IV of the job aid shown in Figure 4-87.

2) When the inspector approves the operator's RVSM maintenance program, the inspector must update the PTRS.

3) For aircraft manufactured RVSM-compliant, the AFM and/or TCDS will show RVSM compliance. In accordance with Table 4-23, Activity Numbers for Section I, Block 3 and Figure 4-87, PTRS RVSM Data Entry Job Aid, the date entered will be the date that the aircraft Airworthiness Certificate was issued.

4) When OpSpecs or an LOA is issued, the inspector must update the PTRS.

5) The inspector *must update* "other" actions. "Other" actions include, but are not limited to:

- N-number change;
- Withdrawal of RVSM approval due to transfer of airframe to a different operator;
- Investigation of heightkeeping error report; and/or
- Notification from operator of successful height-monitoring to comply with the RVSM minimum monitoring requirements.

C. Fax or Email to ANG-E61. If there are questions in regard to PTRS inputs, inspectors can contact the U.S. Operator/Aircraft RVSM Approvals Database and Monitoring Coordinator, Wayne Smoot, by:

- Phone: 609-485-5475,
- Fax: 609-485-5078, or
- Email: wayne.smoot@faa.gov.

D. System Update. The FSDO or CMO will update the system, as a minimum, with the specific items listed in Table 4-23 and Figure 4-87.

E. Specific Entries for the PTRS RVSM Data Entry Job Aid. Inspectors should enter the information below in the sections of the data sheet as shown:

1) Section I—Transmittal RVSM Approval.

- a) Block 3, Activity Number: See Table 4-23.
- b) Block 4, CFR: 91, 121, 125, or 135.
- c) Block 11, Designator: 4-letter code for parts 121, 125, and 135 operators.

- d) Block 14, Aircraft Reg #: Aircraft registration number.
- e) Block 20. Make, Model, and Series (M/M/S): Aircraft M/M/S.
- f) Block 24. Non-Cert Activity Name/Company: Aircraft operator name.
(Required only for part 91 operators. Prohibited for parts 121, 125, and 135 operators).
- g) Block 42. National Use: RVSM.

2) **Section III—Equipment.** Block 55, Aircraft Serial Number #.

3) **Section IV—Method of Compliance/Comments.** Section IV of Figure 4-87 provides inputs for the primary area, key words, opinion code, and text.

NOTE: The first three rows of Section IV provide options to describe the work accomplished to bring the aircraft into RVSM compliance. The inspector should complete the line that best describes the action taken.

Table 4-23. Activity Numbers for Section I, Block 3

	Inspector Determination of Aircraft Reduced Vertical Separation Minimum (RVSM) Compliance	RVSM Maintenance Program Approval	Letter of Authorization (LOA) or Operations Specification (OpSpecs) Granted	Other Actions
Operations Activity Code	None	None	1411	1413
Airworthiness Activity Code	3411	3413	None	3413
Avionics Activity Code	5411	5413	None	5413

Figure 4-87. PTRS RVSM Data Entry Job Aid

PTRS RVSM Data Entry Job Aid (April 20, 2004) (One PTRS Record Required for Each Aircraft)		
Section I—Transmittal RVSM Approval		
(1) Inspector Name Code: (initials)		
(2) Record ID: (generated by system)	(3) Activity Number: See Table 4-23.	(4) 14 CFR: (91/121/125/135)
(5) NPG: (not used)	(6) Status:	(7) Callup Date: (not used)
(8) Start Date: (as appropriate)	(9) Results: (as appropriate)	(10) Closed Date: (as appropriate)
(11) Designator: (4-letter code for part 121/125/135)	(12) Affiliated Designator: (not used)	(13) OTNA: (not used)

(14) Aircraft Reg #:		(15) Location /Departure Point: (not used)		(16) Location/Arrival Point: (not used)	
(20) Make, Model, and Series (M/M/S):				(21) Incident #: (not used)	
(24) Non-Cert Activity Name/Company: (aircraft operator name, part 91 only)				(25) Accident #: (not used)	
(40) Local Use:		(41) Regional Use:		(42) National Use: (RVSM)	
Section III—Equipment					
Manufacturer (53)		Model (54)	Serial # (55)	Remarks (23 Characters) (56)	
Section IV—Method of Compliance/Comments					
(57) Primary Area	(58) Key Word	(59) Opinion Code	(60) Text		
F or G	617	I	<i>Option 1. Service Bulletin(s) (SB), Other Document Scenario.</i> Date (mmddyyyy) aircraft modified and/or inspected per SBs (<i>number(s)</i>) or other approved RVSM document(s) by (<i>name</i>) repair station or other modification facility.		
F or G	617	I	<i>Option 2. STC(s) Scenario.</i> Date (mmddyyyy) aircraft modified/inspected per STC(s) (<i>number(s)</i>) by (<i>name</i>) repair station or other modification facility.		
F or G	617	I	<i>Option 3. Aircraft Manufactured RVSM-Compliant.</i> Date (mmddyyyy) aircraft airworthiness certificate issued.		
F or G	617	I	<i>FSDO or CMO Determination of Aircraft RVSM compliance.</i> Date (mmddyyyy) FSDO or CMO inspector determined aircraft to be RVSM compliant, including TCAS II Version 7.0 incorporated (<i>if aircraft TCAS II equipped</i>).		
F or G	801	I	<i>RVSM Maintenance Program Approval.</i> Date (mmddyyyy) RVSM maintenance program approved.		
A	643	I	<i>OpSpecs Date.</i> Date (mmddyyyy) OpSpecs issued.		
B	643	I	<i>LOA Number and Dates.</i> LOA number, date (mmddyyyy) LOA issued, <i>and</i> date (mmddyyyy) LOA expires.		
B	643	I	<i>D098 Date.</i> Date (mmddyyyy) issued and date expires (mmddyyyy).		
A or B	643	I	<i>Operations comments.</i> For example: Name of agent for service; company phone number; other.		
A or B	643	I	<i>Avionics and/or Maintenance Comments.</i>		
A or B	719	I	<i>LOA or OpSpecs Withdrawal.</i> LOA or OpSpecs withdrawn on date (mmddyyyy) due to (<i>reason</i>).		
(61) Date: Office:		Originator:			
Inspector Signature:					
Supervisor Initials:					

4-1342 FUTURE ACTIVITIES. None.

RESERVED. Paragraphs 4-1243 through 4-1260.

VOLUME 5 AIRMAN CERTIFICATION

CHAPTER 2 TITLE 14 CFR PART 61 CERTIFICATION OF PILOTS AND FLIGHT INSTRUCTORS

Section 3 Flight Reviews and Competency Checks

5-256 GENERAL. This section contains guidance on the background and conduct of various flight reviews and competency checks required by Title 14 of the Code of Federal Regulations (14 CFR) part 61. These reviews are in addition to airman certification tasks and include:

- Flight review,
- High performance airplane competency check,
- Instrument proficiency check, and
- Pilot-in-command proficiency check for aircraft requiring more than one pilot.

5-257 INSPECTOR PARTICIPATION. The flight reviews and competency checks listed above are required by part 61 and are usually conducted by certificated flight instructors, designated pilot examiners (DPE), or pilot proficiency examiners. If, however, a pilot has obtained a flight review or competency check and, in that pilot's opinion, the outcome of the check was not satisfactory, the pilot may request a flight review or competency check from another instructor, an examiner, or a Federal Aviation Administration (FAA) inspector. If an inspector conducts the flight review or competency check and finds the pilot does not meet the standards for the original issuance of the pilot certificate or ratings that the pilot holds, the inspector should request the pilot to appear for a subsequent reexamination practical test. In this event, the inspector should follow the guidelines in Volume 5, Chapter 7, Section 1.

5-258 APPLICATION FOR A FLIGHT REVIEW OR COMPETENCY CHECK.

Inspectors shall require airman applying for any proficiency review or competency check to complete the top portion of FAA Form 8410-1, Airman Proficiency/Qualification Check (Figure 5-21). Maneuvers listed on the form that are not applicable to the review given (e.g., a flight review for a visual flight rules (VFR)-only pilot would not include "instrument procedures") would not be graded; the boxes would be left blank. The FAA Form 8410-1 should be kept in the appropriate district office file. Copies can be provided to employers, if applicable, or to the airman.

5-259 COMBINING FLIGHT REVIEWS AND COMPETENCY CHECKS. A pilot may elect to combine required flight reviews and checks. For example, a pilot who satisfactorily demonstrates competency in an aircraft requiring more than one pilot (part 61, section (§) 61.58) may also use this demonstration to meet the flight review requirement of part 61, § 61.56. For the purposes of the flight review, a single showing of competency in any aircraft shall suffice for all other categories or classes of aircraft for which the pilot is rated. Demonstrations of competency may also be associated with proficiency checks required by 14 CFR part 121 or 135, or when the airman is applying for an additional category or class of pilot certificate or for a type rating.

5-260 EVALUATING THE FLIGHT REVIEW. The word “satisfactory” is used under § 61.56, even though a flight review is not considered to be a practical test. The term is used only to provide the person giving the flight review a minimum standard on which to base judgment and comment as described in the regulation. If a pilot is denied a satisfactory endorsement for flight review, the pilot may continue to exercise certificate privileges, provided the time period prescribed by the regulation has not elapsed since the last flight review. However, if the review has been conducted by an inspector, the pilot would not be able to exercise the certificate privileges until successfully completing a reexamination practical test under Title 49 of the United States Code (49 U.S.C.) § 44709.

5-261 LENGTH OF REVIEW. A flight review consists of the general operating and flight rules of 14 CFR part 91 and those maneuvers and procedures that are necessary for the pilot to demonstrate the safe exercise of the privileges of the pilot certificate. There are no specific requirements for the particular items or maneuvers to be reviewed. These matters are left to the discretion of the person giving the flight review.

A. Minimum Training Time. The flight review consists of a minimum of 1 hour of ground instruction and 1 hour of flight instruction, except as provided for in § 61.56(d) and (e). A flight review may require more than 1 hour of ground instruction and 1 hour of flight instruction to complete a flight review. The regulations do not restrict the review to the minimum hour requirement. The person conducting the review determines whether more than 1 hour of flight and 1 hour of ground instruction are required for the review, depending on the experience and skills of the applicant.

B. Current Flight Instructor. Part 61, § 61.197(a)(2)(iii) states in pertinent part that “the person has successfully completed an approved flight instructor refresher course consisting of ground training or flight training, or both.” Thus, flight instructor applicants who have successfully completed an approved flight instructor refresher clinic (FIRC) do not need to have accomplished the 1 hour of ground training as required by § 61.56 for the flight review. Additionally, if the approved FIRC required at least 1 hour of flight training and the flight instructor applicant successfully completed that flight training, then the applicant does not need to complete the 1 hour of flight training as required by § 61.56 for the flight review. Otherwise, the applicant would be required to complete the 1 hour of flight training as required by § 61.56 for the flight review.

5-262 LOGBOOK ENDORSEMENTS.

A. Logbook Endorsement When Satisfactory. When a pilot has satisfactorily accomplished a flight review or competency check, the pilot’s logbook or personal record must be endorsed by the person who gave the review. That endorsement should read substantively as follows: MR./MS. [insert name of airman as it appears on airman certificate], HOLDER OF PILOT CERTIFICATE NO. [insert number as it appears on the airman certificate], HAS SATISFACTORILY COMPLETED A [insert type of review or competency check] ON [insert date] IN A [insert type of aircraft].

B. Logbook Endorsement When Unsatisfactory. If, in the opinion of the person conducting the flight, the pilot has not accomplished a flight review satisfactorily, that person shall endorse the pilot's logbook only to indicate the training received. There is no provision in the regulation for the failure of a flight review; therefore, there should be no logbook endorsement reflecting a failure.

5-263 RECENT INSTRUMENT EXPERIENCE, TITLE 14 CFR SECTION 61.57.

Section 61.57 requires a pilot to perform certain instrument tasks (in lieu of the old rule that required performance of minimum recurrency time requirements). The tasks required are six instrument approaches, holding procedures, and intercepting and tracking courses through the use of navigation systems. Section 61.57 specifically does *not* identify the kinds of approaches or navigation systems to be used. To maintain instrument currency for glider rated pilots, the rule remains unchanged. In accordance with § 61.57(c)(2), glider rated pilots are required to have performed and logged under actual or simulated instrument conditions at least 3 hours of instrument time in-flight, of which 1-1/2 hours may be acquired in an airplane or a glider if no passengers are to be carried. If passengers are to be carried, the rule requires 3 hours of instrument time in-flight in a glider.

A. Failure to Meet Instrument Currency. A pilot not meeting the instrument recency of experience requirement may not exercise the privileges of the instrument rating until the requirements are met. If the pilot fails to meet this recency of instrument experience for a period of 1 year, the pilot must pass an instrument proficiency check in the category of aircraft involved.

B. Instrument Proficiency Check. An instrument proficiency check must be accomplished in a category of aircraft in which the pilot is rated and shall consist of one or all of the procedures and maneuvers from the instrument pilot practical test standards (PTS). (See the Rating Task Table on page 16 of FAA-S-8081-4D, under the column labeled Instrument Proficiency Check in the Instrument Rating PTS.) The instrument proficiency check must be given by:

- An FAA inspector,
- An instrument pilot examiner,
- A certificated instrument flight instructor, or
- An authorized U.S. Armed Forces instrument examiner when conducted as an instrument proficiency check.

C. Proficiency Check Unsatisfactory. If, in the opinion of the person conducting the instrument proficiency check, the pilot has not performed satisfactorily, no logbook endorsement is required. Flight instructors should be aware that the regulations do not provide for the failure of an instrument proficiency check; therefore, persons conducting instrument proficiency checks should not endorse a pilot's logbook to reflect failure. If the instrument proficiency check is overdue, the pilot shall not conduct instrument flight rules (IFR) operations until an instrument check is satisfactorily accomplished.

D. Flight Training Devices (FTD) or Simulators. Any FAA inspector may, at the request of the pilot involved, authorize the use, or partial use, of an FTD or simulator that meets the requirements of § 61.4, for all or part of the instrument proficiency check only, provided the device is authorized by the FAA for such use.

5-264 HIGH PERFORMANCE AIRPLANE CHECK, TITLE 14 CFR

SECTION 61.31(F). If a person has not logged flight time as pilot in command (PIC) of a high-performance airplane (an airplane with an engine of more than 200 horsepower) before August 4, 1997, the pilot must have received and logged ground and flight training from an authorized instructor in a high-performance airplane, or in a flight simulator or FTD that is representative of a high-performance airplane, and have been found proficient in the operation and systems of the airplane. Additionally, the person must have received a one-time endorsement in the pilot's logbook from an authorized instructor who certifies the person is proficient to operate a high-performance airplane.

5-265 COMPLEX AIRPLANE CHECK, TITLE 14 CFR SECTION 61.31(E). If a person has not logged flight time as PIC of a complex airplane (an airplane that has a retractable landing gear, flaps, and a controllable pitch propeller; or, in the case of a seaplane, flaps and a controllable pitch propeller), before August 4, 1997, the pilot must have received and logged ground and flight training from an authorized instructor in a complex airplane, or in a flight simulator or FTD that is representative of a complex airplane, and have been found proficient in the operation and systems of the airplane. Additionally, the person must have received a one-time endorsement in the pilot's logbook from an authorized instructor who certifies the person is proficient to operate a complex airplane.

5-266 SELF-LAUNCHING OR POWERED SAILPLANE FLIGHT CHECKS.

Self-launching sailplanes, powered sailplanes, motorized sailplanes, or motor gliders have become an increasingly common and popular type of aircraft for use in aviation sport flying. As a result of the revision to § 61.31(j), the glider rating will no longer contain limitations on the person's pilot certificate. In place of the limitations, the new § 61.31(j) requires a person to receive training and a logbook endorsement to perform a certain kind of launch operation. For example, if a person seeks ground launch privileges, that person will be required to receive training from an authorized instructor and receive a logbook endorsement authorizing ground launch privileges. When that person seeks aero tow launch privileges, again that person will be required to receive training from an authorized instructor and receive a logbook endorsement authorizing aero tow launch privileges. The same procedure applies for the self-launching privileges. However, persons currently holding those limitations shall continue to hold those limitations until that person upgrades their launch privileges and then the person may surrender his/her certificate and receive a new certificate without the limitations.

5-267 NIGHT VISION GOGGLES (NVG) TRAINING, ENDORSEMENT, AND QUALIFICATION FOR PILOTS AND FLIGHT INSTRUCTORS. On August 21, 2009, the FAA issued the "Pilot, Flight Instructor, and Pilot School Certification" final rule (74 FR 42500 42571, August 21, 2009).

A. Pilots Policy for NVG Operations. Per § 61.31(k), this rule requires ground and flight training and a one-time instructor endorsement for a pilot to act as PIC during NVG operations. This rule “grandfathers” PICs previously qualified as a PIC for NVG operations under § 61.31(k). Under § 61.31 (k)(3), a pilot will not need the “one-time” NVG training and endorsement, provided the pilot can document satisfactorily accomplishing any of the following pilot checks for using NVG in an aircraft:

- 1) A U.S. Armed Forces-conducted pilot proficiency check on NVG operations.
- 2) An examiner- or check airman-conducted pilot proficiency check on NVG operations under part 135.
- 3) An NVG manufacturer- or authorized instructor-conducted pilot proficiency check on NVG operations, when the pilot:
 - a) Is employed by a Federal, State, county, or municipal law enforcement agency; and
 - b) Has logged at least 20 hours as PIC in NVG operations.

B. Pilots’ Recency of Experience Requirements for NVG Operations. The new § 61.57(f) establishes, as a recent flight experience requirement, that pilots remain PIC-qualified for NVG operations. For a pilot to act as PIC using NVG with passengers onboard, the pilot, within the preceding 2 calendar-months, will have to perform and document the tasks under new § 61.57(f), as the sole manipulator of the controls during the time period beginning 1 hour after sunset and ending 1 hour before sunrise. If the pilot did not perform and log the tasks under § 61.57(f), then the FAA will allow the pilot an additional 2 calendar-months to perform and log the tasks under § 61.57(f). However, the FAA will not allow the pilot to carry passengers during this second 2-month period. If the pilot still did not perform and log the NVG tasks in the revised § 61.57(f), during those additional 3 calendar-months, then the FAA will require the pilot to pass an NVG proficiency check to act as PIC using NVG. Section 61.57(f) lists the recent flight experience requirements for maintaining PIC qualifications for NVG operation. Those recent flight experience requirements are:

- 1) **NVG Operating Experience.** An individual may act as PIC in an NVG operation with passengers onboard only if, within 2 calendar-months preceding the month of the flight, that individual performs and logs the following tasks as the sole manipulator of the controls on a flight during an NVG operation:
 - a) Three takeoffs and three landings, with each takeoff and landing including a climb-out, cruise, descent, and approach phase of flight (only required if the pilot wants to use NVG during the takeoff and landing phases of the flight).
 - b) Three hovering tasks (only required if the pilot wants to use NVG when operating helicopters or powered-lifts during the hovering phase of flight).
 - c) Three area departure and area arrival tasks.

d) Three tasks of transitioning from aided night flight (i.e., the pilot uses NVG to maintain visual surface reference) to unaided night flight (i.e., the pilot does not use NVG) and back to aided night flight.

e) Three NVG operations, or when operating helicopters or powered-lifts, six NVG operations.

f) An individual may act as PIC using NVG only if, within the 4 calendar-months preceding the month of the flight, that pilot performs and logs the tasks listed in § 61.57(f)(1)(i) through (v) as the sole manipulator of the controls during an NVG operation.

2) NVG Proficiency Check. A pilot must either meet the NVG experience requirements of § 61.57(f)(1) or (2) or pass an NVG proficiency check to act as PIC using NVG. The pilot must perform the proficiency check in the category of aircraft that is appropriate to the NVG operation for which the individual is seeking the NVG privilege or in a flight simulator (SIM) or FTD that is representative of that category of aircraft. The check must consist of the tasks listed in § 61.31(k), and one of the following people must perform the check:

a) An examiner qualified to perform NVG operations in that same aircraft category and class;

b) An individual authorized by the U.S. Armed Forces to perform NVG proficiency checks, provided the person being administered the check is also a member of the U.S. Armed Forces;

c) A company check pilot authorized to perform NVG proficiency checks under 14 CFR part 121, 125, or 135, provided that both the check pilot and the pilot being tested are employees of that operator;

d) An authorized flight instructor qualified to perform NVG operations in that same aircraft category and class;

e) An individual qualified as PIC for NVG operations in accordance with subparagraph (f); or

f) An individual who is FAA-approved to perform NVG proficiency checks.

C. Policy for Flight Instructor Requirements for NVG Qualifications. Per the new § 61.195(k), a flight instructor authorized to conduct NVG training and endorsements must:

1) Hold the appropriate pilot and flight instructor certificate with the applicable category and class rating;

2) If appropriate, hold a type rating on his or her pilot certificate for the aircraft that the NVG training is given in;

3) Be PIC-qualified for NVG operations, in accordance with § 61.31(k);

- 4) Have logged 100 NVG operations as the sole manipulator of the controls;
- 5) Have logged 20 NVG operations as the sole manipulator of the controls in the category and class, and type of aircraft, if aircraft class and type is appropriate, that the training will be given in;
- 6) Be qualified to act as PIC in NVG operations under § 61.57(f) or (g); and
- 7) Have a logbook endorsement from an FAA aviation safety inspector (ASI), or an FAA-authorized individual to provide that logbook endorsement, that states the FAA authorizes the flight instructor to perform the NVG PIC qualification and recent flight experience requirements under § 61.31(k) and § 61.57(f) and (g).
 - a) Per § 61.195(k)(7), an FAA ASI or an FAA-authorized individual is permitted to sign the logbook of a flight instructor to authorize a flight instructor to conduct NVG PIC qualification and recent flight experience training. It is expected that the FAA ASI and FAA-authorized individual have met the requirements of § 61.31(k)(3) and are NVG-current in accordance with § 61.57(f) or (g).
 - b) FSDOs and Regional Offices (RO) should select focal points for aided vision. Aided vision includes Night Vision Imaging Systems (NVIS) and Enhanced Flight Vision Systems (EFVS). Depending on the qualifications and experience levels of our ASIs in the FSDOs and ROs, FSDO and Regional Managers must consider “best qualified” criteria in selecting ASIs to perform this endorsement job assignment. “Best qualified” at a minimum should include the completion of the FAA Safety Team (FAAST) NVG course at <http://faasafety.gov>. The Airman Certification and Training Branch, AFS-810, is available for consultations with FSDOs and ROs on this subject.

Figure 5-21. FAA Form 8410-1, Airman Proficiency/Qualification Check

AIRMAN PROFICIENCY/QUALIFICATION CHECK		DATE OF CHECK 09-19-04	
		LOCATION Cleveland, Ohio	
NAME OF AIRMAN (Last, first, middle initial) Goode, Janet B.		TYPE OF CHECK 14 CFR 125 - PIC	
EMPLOYED BY Saturn Corp	BASED AT (City and State) Youngstown, Ohio	TYPE AIRCRAFT/SIMULATOR USED Douglas DC-3	
NAME OF CHECK AIRMAN		BLOCK TIME 1.8 hr	
FLIGHT MANEUVERS GRADE (S - SATISFACTORY U - UNSATISFACTORY)			
PILOT		FLIGHT ENGINEER	
S - SATISFACTORY W - WAIVER (See Appendix F to 121)	U - UNSATISFACTORY	AIR-CRAFT	SIMU-LATOR
			ITEM
PREFLIGHT			
1. EQUIPMENT EXAMINATION (Oral or written)	S		1. EQUIPMENT EXAM (Oral) (Written)
2. * PREFLIGHT INSPECTION	S		2. PREFLIGHT CHECK OF AIRCRAFT
3. TAXIING	S		3. COMPUTATION OF FUEL LOAD & FUEL LOADING
4. POWERPLANT CHECKS	S		4. COMPLETION OF COMPANY APPROVED FORMS
TAKEOFFS			
5. NORMAL	S		5. STARTING, TAXI, AND RUNUP
6. INSTRUMENT	S		6. POWERPLANT AND PROPELLER CONTROL
7. CROSSWINDS	S		7. CRUISE CONTROL AND COMPUTATIONS
8. WITH SIMULATED POWERPLANT FAILURE	S		8. AIRCRAFT/POWERPLANT OPERATION ANALYSIS
9. * REJECTED TAKEOFF	S		9. FUEL SYSTEM MANAGEMENT
INSTRUMENT PROCEDURES			
10. * AREA DEPARTURE	S		10. AIR CONDITION & PRESSURIZATION CONTROL
11. * HOLDING	S		11. ELECTRICAL SYSTEM OPERATION
12. * AREA ARRIVAL	S		12. POWERPLANT FIRE CONTROL
13. ILS APPROACHES	S		13. EMERGENCY GEAR AND FLAP EXTENSION
14. OTHER INSTRUMENT APPROACHES	S		14. HEATER FIRE AND CARGO COMPARTMENT FIRE
15. CIRCLING APPROACHES	S		15. SMOKE EVACUATION
16. MISSED APPROACHES	S		16. EMERGENCY DEPRESSURIZATION
INFLIGHT MANEUVERS			
17. * STEEP TURNS	S		17. FUEL DUMPING PROCEDURE
18. * APPROACHES TO STALLS	S		18. POWERPLANT SHUTDOWN AND RESTART
19. * SPECIFIC FLIGHT CHARACTERISTICS	W		19. DEICING AND ANTI-ICING
20. POWERPLANT FAILURE	S		20. LOCATION AND USE OF EMERGENCY EQUIPMENT
LANDINGS			
21. NORMAL	S		21. EMERGENCIES-HYDRAULIC, PRESSURIZATION, ETC.
22. FROM AN ILS	S		22. CREW COORDINATION AND MONITORING
23. CROSSWIND	S		
24. WITH SIMULATED POWERPLANT(S) FAILURE	S		
25. REJECTED LANDING	S		
26. FROM CIRCLING APPROACH	S		
			REMARKS
27. NORMAL AND ABNORMAL PROCEDURES	S		
28. EMERGENCY PROCEDURES	S		
29. JUDGMENT	S		
30. HOVERING MANEUVERS	NA		
31. RAPID DECLARATIONS (Quick stops)	NA		
32. AUTOROTATIONS (Single engine helo, only)	NA		
Items that may be waived are indicated by the asterisk (*). See Appendix F to FAR 121. All applicable items must be graded S, U or W.			
RESULT OF CHECK	<input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED	CHECK AIRMAN'S PERFORMANCE	SATISFACTORY UNSATISFACTORY
REGION GL	DISTRICT OFFICE FSDO07	INSPECTOR'S SIGNATURE [Inspector's Signature]	

FAA Form 8410-1 (4-87)

SUPERSEDES FAA FORM 3111 WHICH IS OBSOLETE

RESERVED. Paragraphs 5-268 through 5-285.

VOLUME 5 AIRMAN CERTIFICATION**CHAPTER 2 TITLE 14 CFR PART 61 CERTIFICATION OF PILOTS AND FLIGHT INSTRUCTORS****Section 5 Miscellaneous Part 61 Certification Information**

5-311 GENERAL. The information in this section is supplemental and does not always apply directly to the actual certification of airmen. Some of the information is safety-related. Aviation safety inspectors (ASI) should be aware of this information and relate it to examiners or flight instructors. Other information notes items to consider during surveillance of airmen, instructors, or examiners.

5-312 USE OF FLIGHT SIMULATORS OR FLIGHT TRAINING DEVICES (FTD) APPROVED TO CONDUCT § 61.58 PILOT-IN-COMMAND (PIC) PROFICIENCY CHECKS. Title 14 of the Code of Federal Regulations (14 CFR) part 61, § 61.58 requires that to serve as PIC of an aircraft certificated for more than one pilot, the PIC must have completed a proficiency check in the particular type aircraft since the beginning of the 24th calendar-month before the month in which the pilot acts as PIC. However, the PIC proficiency checks of § 61.58 may be performed in a flight simulator or FTD in accordance with the applicable provisions set forth in § 61.58(e).

A. Recent FTD Technology. Recent breakthroughs in computer technology have permitted development of highly-sophisticated computerized electronics and computer-generated visual imagery in aircraft FTDs. Authority for the increased use of simulators and training devices has been incorporated in the various regulations relating to the certification of pilots. However, all devices must be approved specifically by the Federal Aviation Administration (FAA) for use under the existing regulations.

B. Expanded Use of Simulators. The FAA has indicated its commitment to permit the expanded use of simulators and training devices, in connection with the training and practical testing of pilots, as state-of-the-art technology develops and as public interest dictates. The simulator approval criteria contained in Advisory Circular (AC) 120-40, Airplane Simulator Qualification, are periodically updated along with simulator technology to ensure maximum transfer in flightcrew training and to ensure that the simulator or training device factually represents the aircraft and flight environment.

C. ASI Familiarity with Exemptions. Each Flight Standards District Office (FSDO) will take necessary action to ensure that the simulator approval criteria outlined in AC 120-40 is followed closely. ASIs should be familiar with exemptions issued to ensure that trainees receive the required training from the exemption holder and the conditions and limitations of the exemptions are strictly observed.

5-313 USE OF AN AIRPLANE SIMULATOR OR FTD IN ACCORDANCE WITH § 61.157. Section 61.157 permits applicants for an airline transport pilot (ATP) certificate or an additional type rating to use an approved flight simulator or FTD during the practical test.

Review § 61.157 and the ATP practical test guide to determine the permitted usage of the flight simulator and FTD.

5-314 COMPLIANCE WITH ENGLISH LANGUAGE REQUIREMENTS OF PART 61 FOR PILOT CERTIFICATION. Sections 61.65, 61.75, 61.83, 61.96, 61.103, 61.123, 61.153, and 61.183 have requirements governing competency in the English language as an eligibility requirement for all grades of pilot certificates issued under part 61. All applicants must be able to read, speak, write, and understand the English language. Only an applicant who is unable to meet one of these requirements due to medical reasons (e.g., hearing impaired) is permitted to be issued a pilot or flight instructor certificate. In this case, the administrator may place such operating limitations on the applicant's certificate that are necessary for the safe operation of the aircraft. For example, the limitation "NOT VALID FOR FLIGHTS REQUIRING THE USE OF RADIOS" may be placed on the applicant's certificate. Only an FAA ASI is authorized to remove the limitation from a certificate. Examiners may not do so unless specifically authorized by the supervising FSDO.

NOTE: A limitation is given only if the inability to meet the requirements is due to a medical condition/disability. It does not apply to applicants unable to meet the requirements due to lack of fluency, inadequate articulation and/or comprehension of the English language, or accent to the degree that speech is not clearly understood; those applicants may not be issued a U.S. pilot certificate.

A. Standards and Testing. Several questions have been raised concerning the standards and the testing to determine whether an applicant can read, speak, write, and understand the English language (see AC 60-28, English Language Skill Standards Required by 14 CFR Parts 61, 63, and 65). While there are no practical test standards (PTS) established to ascertain the applicant's English language ability, the following examples may be used as guidelines in this evaluation:

1) An ASI may ask the applicant to listen to a tape recording of an air traffic control (ATC) clearance or instructions, then ask the applicant to speak and explain the clearance or instructions back to the examiner in the English language.

2) An applicant may be asked to write down in English the meaning of an ATC clearance, instructions, or a weather report, then asked to speak and explain the clearance, instructions, or weather report back to the ASI in the English language.

NOTE: The intent is not to require the applicant to read, speak, write, and understand the English language at college level standards. A common sense approach should be used in evaluating an applicant for this requirement.

B. Aviation Standard. The English language has been accepted as the international standard by the International Civil Aviation Organization (ICAO). However, the effectiveness of part 61 regarding the English competency of pilots of all nationalities depends on compliance with, and enforcement of, the English language competency requirements.

C. Information to Disseminate. ASIs should ensure that the following information is disseminated during contacts with flight and ground instructors, approved schools, the aviation community, and Designated Pilot Examiners (DPE).

1) ASIs should require positive personal identification from each applicant for a pilot certificate under the regulations.

2) All applicants must be able to read, speak, write, and understand the English language. Only an applicant who is unable to meet these requirements due to medical reasons (e.g., hearing impairment, speech impairment due to medical reasons) is permitted to be issued a pilot or flight instructor certificate with the limitation “NOT VALID FOR FLIGHTS REQUIRING THE USE OF ENGLISH.”

3) Under § 61.75, applications for a pilot certificate may not be accepted by an ASI through the mail. An application presented in person at the FSDO may be processed and an appropriate certificate issued. The certificate will not bear an English language limitation only when the FAA has verified that the applicant is able to read, speak, write, and understand the English language sufficiently. An English language limitation may be removed when the person demonstrates competency in the English language (see Volume 5, Chapter 1, Section 5).

4) If the holder of a pilot certificate without an English language operating limitation cannot demonstrate compliance with the English language competency requirements for the grade of pilot certificate held, ASIs should initiate action in accordance with Volume 7, Chapter 6 and the current edition of FAA Order 2150.3, FAA Compliance and Enforcement Program. Under Title 49 of the United States Code (49 U.S.C.), this could result in suspension, revocation, or reissuance of the pilot certificate with an appropriate operating limitation.

5-315 PILOT CERTIFICATE REQUIREMENTS AND THE LOGGING OF FLIGHT TIME IN HANG GLIDERS, ULTRALIGHTS, POWERED (MOTORIZED) GLIDERS, AND OTHER VEHICLES. The following guidance is designed to clarify issues concerning the logging of flight time and minimum pilot certificate requirements for hang gliders, ultralights, and similar vehicles.

A. Noncertificated Vehicles. Title 14 CFR part 103, § 103.7(b), does not require airman certification of operators of certain ultralight vehicles.

B. Logging Time. Unless the vehicle is type certificated (TC) as an aircraft in a category listed in § 61.5(b)(1) or as an experimental aircraft, or otherwise holds an airworthiness certificate, flight time acquired in such a vehicle may not be used to meet requirements of part 61 for a certificate or rating or to meet recency of experience requirements.

C. Minimum Certificate Requirements. To operate a small aircraft with an experimental airworthiness certificate, at least a student pilot certificate is required. The certificate must be properly endorsed in accordance with § 61.87, except in the case of an aircraft operating limitation that requires the PIC to hold an appropriate category/class rating. In that case, the pilot must hold at least a private pilot certificate.

D. Logging Time in Powered Gliders. Flight time in a powered glider cannot be logged as required airplane pilot flight time unless the aircraft is TC as an airplane. Flight time used to meet recency of experience requirements or the requirements for a certificate or rating may only be logged according to the category in which the aircraft is TC (airplane, glider, etc.). Powered gliders may be TC either as gliders or airplanes.

5-316 PILOT TYPE RATING REQUIREMENTS IN AIRCRAFT CERTIFICATED UNDER SPECIAL FEDERAL AVIATION REGULATION (SFAR) 41. SFAR 41 was adopted to allow certain small propeller-driven, multiengine airplanes originally TC in accordance with 14 CFR part 23 before October 17, 1979, to be operated at a maximum TC takeoff weight exceeding 12,500 pounds. These airplanes may also be configured with more than 10 passenger seats.

A. Air Taxi and Commercial Operators. Requirements for air taxi and commercial operators under part 135 were amended to allow the operation of airplanes certificated under SFAR 41. Since the adoption of SFAR 41, operation of these airplanes is routinely conducted under 14 CFR parts 91 and 135. Among the first aircraft to be certificated under SFAR 41 were certain models of Swearingen turboprop airplanes, the first of which was certificated on September 25, 1980.

B. Type Ratings. Under § 61.31(a), a pilot may not act as PIC of a large airplane (more than 12,500 pounds maximum certificated takeoff weight) unless the pilot holds a type rating for that airplane. Section 61.63(d) provides the requirements for issuance of type ratings. The FAA, through its aircraft TC process, concluded that a type rating could be issued for the operation of Swearingen-Fairchild SA-226/SA-277 aircraft. Thus, a single pilot type rating (SA-227) was established and listed in the current edition of AC 61-89, Pilot Certificates: Aircraft Type Ratings, for pilot type rating reference.

1) Because of the similarity of the SFAR 41 aircraft to the predecessor model aircraft, the unavailability of the SFAR 41 aircraft, the economic burden connected with placing these aircraft into service, and the sophistication of FAA-approved simulator equipment, which permits training and checking to be conducted simulating the more than 12,500-pound maximum takeoff gross weight version, the regulations permitted the type rating check for the Swearingen-Fairchild SFAR 41 aircraft to be given in the non-SFAR 41 aircraft, which required no type rating.

2) It is considered appropriate to allow pilots of part 135 operations who were fully qualified in the non-SFAR 41 version of this aircraft, and who had satisfactorily completed the FAA-approved differences ground training course and a knowledge or oral test for the SFAR 41 aircraft, to operate that aircraft in part 135 operations without a type rating until the pilot's next regularly scheduled instrument proficiency check. This action was accomplished by exemption. A continuation of the above procedure was also deemed appropriate in the case of the Embraer Bandeiranti Model 110P1 and P2 aircraft subsequently approved for retrofit under SFAR 41.

C. Second in Command (SIC). Part 91, § 91.531(a)(1) provides that no person may operate a large airplane without a pilot who is designated as a SIC. However, under an amendment to part 91, this section was revised to allow SFAR 41 airplanes to be operated

without a pilot who is designated as an SIC if that airplane is TC for operations with only one pilot crewmember.

D. ASI Information. Office managers should ensure that all FSDO certification personnel are informed of the above information and are guided by the following instructions concerning the operation of SFAR 41 aircraft.

1) The training, testing, and certification of pilots in a series of aircraft TC under SFAR 41 should be accomplished in accordance with the procedures described herein and with appropriate provisions of the operating rules under which the aircraft is to be placed in service. However, the Flight Standardization Board (FSB) responsible for a particular SFAR 41 aircraft may, through its evaluation, determine that a separate type rating is appropriate.

2) Because of increased availability of SFAR 41 aircraft, grants of exemption are no longer considered to be in the public interest for the identified aircraft and, when terminated, will not be reissued.

5-317 EXCHANGE OF VALID PILOT CERTIFICATES.

A. Field Reissuance. Valid pilot certificates and ratings may be reissued or exchanged by ASIs in the field. A certificate issued or last reissued on or after July 1, 1945, may be reissued by applying on FAA Form 8710-1, Airman Certificate and/or Rating Application. The dates of valid pilot certificates are found in § 61.11.

B. Pre-1945 Certificates. Private or commercial certificates issued before July 1, 1945, have expired and cannot be reissued. Certificates issued between January 1, 1942, and July 1, 1945, could have been exchanged without further showing of competence until August 23, 1956. A person who did not use the exchange privilege is considered to be the same as a person who has never held a certificate. That person must meet the requirements of part 61, including the need for knowledge and practical tests. Flight time accumulated with the previously-held certificate can be credited toward the present requirements for a certificate or rating.

C. Changes to Personal Data. A person applying for any change to the personal data on their pilot certificate must present, to an FAA ASI, appropriate documentation acceptable to the Administrator, which substantiates the validity of the requested change. The purpose of this documentation is to preclude reissuance of an invalid pilot certificate.

1) The following items typify the kind of changes that require such documentation:

- Change of name.
- Change of nationality (requires a passport, copy of the naturalization document). (This includes dual citizenship.)
- Change of gender.
- Change in date of birth.

NOTE: For a change of nationality, if the applicant does not wish to have the Naturalization document copied and included in the FAA file, then the applicant must sign a separate piece of paper that lists the petition number of the U.S. nationality document, name of the court and location where the hearing occurred, and the date of the nationality hearing.

2) The applicant should fill out an FAA Form 8710-1 for reissuance.

3) After examining and verifying the documentation, the ASI issues FAA Form 8060-4, Temporary Airman Certificate, reflecting the appropriate change. The ASI fills out the Inspector's Report section on the application (FAA Form 8710-1) and forwards the application, the superseded certificate, and a copy of the temporary certificate to the Airmen Certification Branch (AFS-760). The date of issuance on the temporary airman certificate will match the date the inspector/aviation safety technician (AST) signed the report.

D. Change of Gender. For a change of gender on an airman certificate, the original copies of two documents must be provided to the certifying ASI. After examining and verifying these documents, the ASI photocopies the documents and attaches the photocopies to FAA Form 8710-1. In block I, under "Other," the ASI notes gender change reissue. The file is then forwarded to AFS-760 for processing. The required documents are:

1) A court order, issued by a court of the United States or its territories, stating that the individual has changed his/her gender to ____, or a court order stating that the individual's gender is ____; or

2) A physician's statement clearly indicating that the individual is physically the gender noted on the court order.

E. Lighter-Than-Air Category Ratings. On November 1, 1973, pilot certificates with a lighter-than-air category rating, which had no class rating, became obsolete (not expired). The same is true of pilot certificates showing a free balloon class rating but not the lighter-than-air category rating. Holders of these certificates were originally qualified in the airship class. There was a time when anyone could walk into a FSDO and, by merely filling out an appropriate form, receive a private pilot certificate with "HOT-AIR BALLOON ONLY" shown in Section XII of the Temporary Airman Certificate.

1) Until April 3, 1965, it was possible to obtain private pilot certificates with balloon class ratings and no category rating depicted on the certificate. Holders of these certificates had to qualify in gas balloons to be authorized to serve as PIC of any sort of free balloon. Individuals who qualified in hot-air balloons with airborne heaters received ratings which read, "FREE BALLOON, LIMITED TO HOT-AIR BALLOONS (WITH OR WITHOUT AIRBORNE HEATER)," and could fly any hot-air balloon but not a gas balloon. Qualification in the carnival-type balloon without an airborne heater limited the certificate holder to these hot-air balloons only.

2) Before November 1, 1973, no provisions existed for issuing private pilot certificates for free balloons; consequently, until October 31, 1975, (when the "grandfather

privileges” of part 61 expired), obsolete balloon pilot certificates were reissued as commercial pilot certificates with appropriate category and class rating.

3) Two conditions may be encountered in exchanging lighter-than-air pilot certificates.

a) If the certificate does not contain a class rating and was submitted for exchange before November 1, 1975, a new private or commercial pilot certificate, as appropriate, will be issued as “LIGHTER-THAN-AIR-AIRSHIP AND FREE BALLOON.”

b) If the certificate shows a lighter-than-air category and contains an airship-class rating issued before October 31, 1973, and application was made for a free-balloon rating after November 1, 1975, the holder must pass the appropriate free-balloon flight test. To obtain an unlimited free-balloon class rating, the applicant would have to pass the gas balloon flight test.

4) Several variations of balloon certificates may be presented for exchange.

a) If the obsolete certificate reads “FREE BALLOON,” it will be reissued as “LIGHTER-THAN-AIR-FREE BALLOON.”

b) If the certificate reads “HOT-AIR BALLOONS ONLY” or “FREE BALLOON, LIMITED TO HOT-AIR BALLOONS (WITH OR WITHOUT AIRBORNE HEATER)” it will be reissued as “LIGHTER-THAN-AIR-FREE BALLOON, LIMITED TO HOT-AIR BALLOONS WITH AIRBORNE HEATER.” The hot-air balloon limitation may be removed when the holder obtains the pilot experience required for a rating on a gas balloon. No flight test is required.

c) If the certificate reads “HOT-AIR BALLOON WITHOUT AIRBORNE HEATER” or “FREE BALLOON, LIMITED TO HOT-AIR BALLOONS (WITHOUT AIRBORNE HEATER)” it will be reissued as “LIGHTER-THAN-AIR-FREE BALLOON, LIMITED TO HOT-AIR BALLOONS WITHOUT AIRBORNE HEATER.” To have the airborne heater limitation removed, the holder must obtain the pilot experience and pass the flight test required for a hot-air balloon with an airborne heater rating. To have the hot-air balloon limitation removed completely, the pilot must obtain the experience and pass the flight test for free [gas] balloons.

5) If, after November 1, 1974, the applicant obtained the pilot experience (private or commercial) and successfully completed a flight test in a hot-air free balloon without an airborne heater, the limitation in Section XII should be, “LIGHTER-THAN-AIR-FREE BALLOON, LIMITED TO HOT-AIR BALLOONS WITHOUT AIRBORNE HEATER.” This limitation (without airborne heater) can be removed by obtaining the required experience and passing the flight test required in a free balloon with airborne heater. The limitation in Section XII would then read, “LIGHTER-THAN-AIR-FREE BALLOON, LIMITED TO HOT-AIR BALLOONS WITH AIRBORNE HEATER.”

6) If the applicant obtains the pilot experience (private or commercial) and successfully completes a flight test in a hot-air free balloon equipped with an airborne heater, the limitation in Section XII would read, “LIGHTER-THAN-AIR-FREE BALLOON, LIMITED TO HOT-AIR BALLOONS WITH AIRBORNE HEATER.” This limitation (with airborne heater) can be removed when the holder obtains the experience required for a rating in a gas balloon. This required experience must be obtained in a gas balloon and no flight test is required. Section XII would read “LIGHTER-THAN-AIR-FREE BALLOON.”

7) When an applicant obtains the pilot experience (private or commercial) and successfully completes a flight test in a free gas balloon, the limitation in Section XII would read, “LIGHTER-THAN-AIR-FREE BALLOON.”

8) Unlike “old” part 61, the new rule does not automatically give the holder of a lighter-than-air category with an airship class rating the privilege to serve as PIC of a free balloon. Before the free balloon class rating can be added to the certificate, the experience and skill requirements for this rating must be met.

9) Before adoption of part 61 (revised), there were several cases where a pilot held two certificates, one for heavier-than-air and one for a lighter-than-air class rating.

a) Holders of these certificates may exchange them for a single pilot certificate bearing all appropriate ratings. Either certificate number may be used.

b) Holders of these pilot certificates should be encouraged to combine them into the one certificate at any time either is amended or reissued.

5-318 VOLUNTARY SURRENDER OF CERTIFICATE OR RATING. Application for voluntary surrender, or “downgrading,” of a pilot certificate or rating may be accepted by an ASI only in accordance with § 61.27. No certificate or rating shall be accepted for surrender or downgrading unless the applicant submits a request in writing and fully understands that he or she has no reinstatement rights.

A. Conditions for Surrender. There are four basic conditions for the surrender of an airman certificate or rating:

- 1) Voluntary surrender unrelated to an enforcement case;
- 2) Voluntary surrender in anticipation of FAA certificate action;
- 3) Voluntary, temporary deposit of an airman’s certificate to the custody of the FSDO when an airman’s competency has been questioned by the FAA and the enforcement action or reexamination is justifiably delayed; and
- 4) Surrender at Regional Counsel’s request.

B. Reason for Surrender. No airman certificate may be accepted by an FAA ASI unless the reason for surrender is identified. Surrender of that certificate must be in accordance with procedures described in this handbook. Under no circumstance shall a pilot certificate be

accepted for voluntary surrender unless the ASI immediately contacts the Regional Counsel and explains the facts and circumstances concerning the surrender. The airman's certificate may be accepted only with the concurrence of, and in accordance with, directions of the Regional Counsel. Legal enforcement cases involving the surrender of an airman certificate shall be forwarded to the regional office for processing no later than five days after the date of certificate surrender.

1) If no enforcement action is pending or being contemplated under § 61.27, an airman may, for personal reasons, voluntarily surrender the certificate to the FAA for the purpose of cancellation of the certificate, reissuance of the certificate at a lower grade, or reissuance of the certificate with specific ratings deleted.

a) An airman may have many reasons for voluntarily surrendering or exchanging a certificate. One reason could be that the FAA has questioned the pilot's competency, and the airman is to be reexamined under 49 U.S.C. In this instance, the airman may elect to surrender the certificate or rating, in writing, in lieu of submitting to reexamination (Figure 5-22, Letter of Surrender (In Lieu of a Reexamination)).

b) When an airman elects to surrender the certificate as described above, the ASI may accept the certificate, along with a letter of surrender signed by the airman. The certificate, a copy of the temporary airman certificate, the application for the issuance of a modified certificate (FAA Form 8710-1), and the letter of surrender should be forwarded to AFS-760.

c) The surrender letter must clearly spell out the incident or event and the airman's involvement. The letter should state that the airman has been apprised of his/her legal rights and clearly state the voluntary nature of the surrender in view of these rights. The letter shall not be conditional and must be patterned after Figure 5-23, Letter of Surrender (Pending Enforcement Action).

2) An airman may surrender a pilot certificate to the FAA at any stage of an investigation (see the current edition of FAA Order 2150.3). Great care must be exercised when accepting an airman certificate for surrender when enforcement action is pending.

a) The eventual action of the FAA could possibly be other than certificate action. In addition, the Regional Counsel's office may be unable to provide priority handling of such cases (the failure to issue promptly an Order of Suspension or Order of Revocation may impose an undue sanction on the airman).

b) Not only must the surrender be voluntary, it must also be documented as such. It must be absolutely clear that no FAA coercion was used. For example, if an FAA ASI, during an investigation, told an airman that the airman had violated a regulation, then accepted the certificate for surrender, the action would not appear voluntary. In a legal enforcement case, no FAA ASI has either the authority or responsibility to make such a statement; this is a function of the Regional Counsel.

c) The airman shall be told that any statement the airman makes can and may be used against the airman in legal proceedings and that the airman need not make any statement without being represented by legal counsel.

d) The airman shall be apprised of FAA legal enforcement procedures as described in 14 CFR part 13, §§ 13.15 and 13.19.

3) An airman may temporarily deposit an airman certificate voluntarily in the custody of a FSDO (for a maximum of 30 days at a time) while the airman is preparing for a reexamination of competence. The airman must be informed, in the presence of a third person, that the airman is not required to deposit the airman certificate with the FSDO or to sign any statement. This procedure can also be used for an airman convalescing from an accident or an illness, or for a person having the aircraft repaired that is intended to be used for the reexamination flight check.

a) Temporary deposit shall never be used to resolve a violation of the regulations (i.e., reexamination is not used as a punishment or as a substitute for enforcement action). A temporary airman certificate with the original certificate number affixed may be issued to the airman to allow solo practice to prepare for reexamination or to continue flying with limitations. In this case “passenger carrying prohibited” or other appropriate limitations should be included (see Figure 5-24, FAA Form 8060-4, Showing Passenger Carry Limitation (Maintained at FSDO Level Only)). For example, if instrument competency is questioned, the temporary airman certificate should omit the instrument rating. The same procedure could be used with any rating questioned. In no case should a student pilot certificate be issued to the holder of another student (or other) pilot certificate. The temporary airman certificate issued and the letter of temporary deposit to the FSDO (Figures 5-25, FAA Form 8060-4, Emergency Field Issuance (Maintained at FSDO Level Only) and 5-26, Letter of Temporary Deposit) must have the same expiration date. The ASI may issue a new temporary airman certificate for an additional period of 30 days, provided the airman agrees to such action and submits a new letter of temporary deposit to the FSDO with the appropriate expiration date as described above.

b) If at the end of the expiration date, the airman has not passed the reexamination test, fails to appear, or has not made other acceptable arrangements, immediate legal enforcement action (emergency suspension) shall be taken to suspend the permanent airman certificate or rating in question until the airman demonstrates competency to hold that certificate.

4) Surrender at the request of Regional Counsel is an action taken as the result of an Order of Suspension or Order of Revocation issued by Regional Counsel. From time to time, the Regional Counsel requests the FSDO to pick up a certificate when an airman fails to surrender the certificate as a result of a Regional Counsel Order. The following actions should be taken by the ASIs:

a) The specific Regional Counsel instructions should be followed. In most cases, it is requested that an ASI contact the airman to be sure the airman understands that the order demands the surrender of the certificate.

b) The ASI shall review the Order of Suspension or Order of Revocation so that the ASI is familiar with the allegations. The ASI should then arrange a meeting with the airman. The ASI should take to the meeting a copy of the Order of Suspension or Order of Revocation, a Loss of Certificate Affidavit (Figure 5-27, Loss of Certificate Affidavit), and a franked envelope addressed to Regional Counsel.

c) When meeting the airman, the ASI should present official identification and inquire if the airman has received the Order of Suspension or Order of Revocation. If the airman has not received a copy, present the airman with a copy. The ASI should point out the action taken in the order and offer to accept the certificate for surrender to the FAA. The ASI shall not enter into a discussion as to the authenticity of the facts, evidence, or the propriety of the sanction. The ASI should advise the airman that failure to surrender the certificate within the period of time specified in the order would make the airman subject to additional action.

d) If the airman states that the certificate is lost, the ASI should give the airman the affidavit form and the franked envelope addressed to the Regional Counsel. The ASI should instruct the airman to complete the affidavit and forward it in lieu of the lost certificate.

e) If the airman does not wish to surrender the certificate to the ASI, the ASI should give the airman the franked envelope addressed to the Regional Counsel so the airman can forward the certificate to the proper office.

f) If at any time the ASI has any reason to believe that a hostile or dangerous confrontation is likely, the matter shall be discussed with the Regional Counsel before taking the action. When a potentially hazardous confrontation is expected, the ASI can be accompanied to the meeting with the airman by a U.S. Marshal.

C. Issuing a Certificate or Rating to an Airman Who is Under an Order of Revocation.

1) An ASI planning to issue a certificate or rating to an airman who is under an Order of Revocation should arrange a meeting with the airman and review FAA Order 2150.3, paragraph 1307, and §§ 61.13 and 61.19(e). At this meeting, the ASI will examine the Order of Revocation and become familiar with its contents to ensure that an application from the airman is not accepted prior to the expiration of the periods specified in the previously-mentioned sections or as authorized in the Order of Revocation. If found ineligible, the ASI will advise the airman of the reasons.

2) An ASI who receives an application for an airman certificate from an airman whose certificate has been revoked and who is found ineligible, will disapprove the application and issue an FAA Form 8060-5, Notice of Disapproval of Application, indicating the reasons for disapproval and using verbiage such as “Applicant disapproved because...”

D. Voluntary Certificate Downgrade.

1) When a person elects to voluntarily downgrade his or her pilot certificate to a lower certification level, to avoid submitting to a § 44709 re-examination practical test, the ASI

should consider if the person's desire involves competency and proficiency in the common piloting tasks. For example, if the pilot is required to submit to a § 44709 re-examination practical test because of landing competency and proficiency, then he or she must accomplish that task at all levels of pilot certification. It is a requirement for the pilot to submit to a § 44709 re-examination practical test and the ASI must advise him or her of this. However, the testing standard is at the downgraded level of pilot certification that the person has agreed to.

2) When a pilot elects to voluntary downgrade his or her pilot certificate, the pilot must fill out FAA Form 8710-1. Ensure that the box for reissuance of the certificate has been checked. The ASI may accept the certificate, along with a letter of voluntary downgrade signed by the airman. The ASI will forward the pilot certificate, a copy of the temporary airman certificate, the application (FAA Form 8710-1) for issuance of the downgraded pilot certificate, and the letter of voluntary downgrade to AFS-760. The ASI should forward a copy of the complete file to the regional operations branch for review.

3) After examining and verifying the documentation, the ASI issues FAA Form 8060-4, reflecting the appropriate change. The ASI fills out the Inspector's Report section on FAA Form 8710-1 and forwards the application, the superseded certificate, and a copy of the temporary certificate to AFS-760.

5-319 EMERGENCY ISSUANCE OF REPLACEMENT CERTIFICATE. In an emergency, an ASI may issue a temporary pilot certificate to replace a lost or destroyed certificate.

A. Condition of Emergency Issuance.

1) The pilot must show that an immediate replacement of the lost certificate is necessary for either the return flight to base, to continue an extended flight, or to continue employment as a pilot.

2) The pilot must show that he or she is unable, or that it is not feasible, to obtain a facsimile in accordance with § 61.29(c).

3) The pilot must either be personally known to the ASI or must present, in person, acceptable evidence of identity.

4) The ASI must confirm the validity, grade, and ratings of the lost certificate by telephoning AFS-760.

B. Temporary Certificate. The temporary certificate issued should be clearly marked "EMERGENCY FIELD ISSUANCE" (see Figure 5-25) and be limited to reasonable duration necessary for the pilot to obtain a duplicate certificate from AFS-760 by the most expeditious means. In no case shall the temporary certificate be issued for more than 60 days. This temporary airman certificate will be maintained at the FSDO level. No "Emergency Field Issue" temporaries need to be mailed to AFS-760.

C. Reconstruction of a Lost Certification File.

1) Copy of FAA Application Form and FAA Form 8060-4. A copy of the original FAA application form and FAA Form 8060-4, with signatures on both forms, is required. If no copy exists, the information that appeared on the original application must be provided on a new FAA application form and FAA Form 8060-4, complete with signatures (applicant, examiner, and inspector).

2) Duplicate Reports. AFS-760 will furnish the duplicate test report(s) provided they are furnished with the approximate date(s) and location(s) of the computer knowledge test(s).

3) Reconstructed File. In the upper right hand block of FAA application form, "RECONSTRUCTED FILE" must appear in RED ink.

4) Forward Certification File. All information regarding the certification file must be forwarded through the FSDO or International Field Office (IFO) to: FAA, Attn: Airmen Certification Branch (AFS-760), P.O. Box 25082, Oklahoma City, OK 73125-4940.

5-320 "BLUE SEAL" PILOT CERTIFICATES. Since 1961, pilot certificates bearing blue seals have been issued to applicants who have demonstrated their ability to control an airplane by reference to instruments.

A. Blue Seal Incentive. This seal conveys no additional privileges but was intended as an incentive to holders of other pilot certificates to obtain instrument instruction.

B. Blue Seal Eligibility. The following pilots may obtain Blue Seal certificates from ASIs:

- Private pilots who originally demonstrated their instrument competence on their private pilot practical tests,
- The holder of a private pilot certificate who has not previously demonstrated instrument ability by passing a practical test on the instruction required by § 61.107(b)(6),
- Commercial pilots with airplane category ratings whose certificates do not bear ICAO instrument limitations,
- The holder of a commercial pilot certificate that bears a ICAO limitation may obtain a Blue Seal certificate by obtaining the flight experience required by § 61.129(b)(2)(ii) and passing a practical test on the control and maneuvering of an airplane solely by reference to instruments,
- Holders of instrument ratings, and
- ATPs.

C. Applying for a Blue Seal Certificate. A pilot who meets the requirements for a Blue Seal certificate may apply on FAA Form 8710-1. The applicant must clearly mark the application "APPLICATION FOR BLUE SEAL CERTIFICATE" (see Figure 5-28, FAA Form 8710-1, Application for a Blue Seal Certificate).

1) The applicant should present the application, the pilot certificate, logbooks, and any other pertinent documentary evidence to an ASI for issuance of the certificate.

2) When the ASI has determined the applicant's eligibility, the ASI should prepare FAA Form 8060-4 and complete the certification file in the usual manner, noting on the application the basis for issuance.

3) An applicant who is tested for a Blue Seal certificate and found unsatisfactory shall be issued FAA Form 8060-5 in the usual manner and have the original pilot certificate returned. Any corrective action taken should be completely informal and advisory, unless immediate action is necessary for safety.

5-321 LOST LOGBOOKS OR FLIGHT RECORDS. Aeronautical experience requirements must be shown for a person to be eligible for the issuance or to exercise the privileges of a pilot certificate. A pilot who has lost logbooks or flight time records should be reminded that any fraudulent or intentional false statements concerning aeronautical experience are a basis for suspension or revocation of any certificate or rating held. The pilot who has this problem may, at the discretion of the ASI accepting the application for a pilot certificate or rating, use a signed and notarized statement of previous flight time as the basis for starting a new flight time record. Such a statement should be substantiated by all available evidence, such as aircraft logbooks, receipts for aircraft rentals, and statements of flight operators.

5-322 AUTHENTICATION OF OLD AND NEW AIRMAN CERTIFICATES TO IDENTIFY FORGERIES OR COUNTERFEITS. ASIs are occasionally required to determine the authenticity of an airman certificate. ASIs should be able to recognize legitimate certificates during surveillance or certification activities. Additionally, law enforcement officers or drug enforcement agents may ask for assistance in identifying counterfeit or forged certificates.

A. New Security-Enhanced Airman Certificates. On July 31, 2003, AFS-760 began issuing new, security-enhanced airman certificates.

1) The new, durable, credit card-sized certificates are made from high-quality composite polyvinyl chloride media card stock. They incorporate new security features, such as a hologram of the FAA seal, microprinting, and ultraviolet ink printing.

2) The certificate will be issued to all new and existing airmen as they achieve higher certificate levels or additional ratings and will replace certificates that have been lost or damaged. It is expected that all active airmen will be able to replace their certificates over a 3- to 4-year period.

3) The new certificates feature graphics of the Wright Brothers, 1902 Wright Glider, 1903 Wright Flyer, a Boeing Jet aircraft, Department of Transportation seal, and a hologram of the FAA seal.

4) The "old style" certificate is still valid. The "new style" certificate will be issued to all airmen and will be issued with the appropriate seal color. A \$2 fee is still required to receive a replacement certificate.

B. Suspected Counterfeiting. Any contact with suspected counterfeit or forged airman certificates should be reported immediately to the Regional Office Civil Aviation Security Division, Investigations and Internal Security Branch. Under no circumstances should an ASI attempt to confiscate a suspected forged or counterfeit certificate.

5-323 CLASS B AIRSPACE ENDORSEMENTS FOR STUDENT PILOTS. Section 61.95 specifies certain requirements for student pilots operating in Class B airspace.

A. Solo Flight in Class B Airspace. Section 61.95(a) prohibits student pilots from operating on a solo flight in Class B airspace unless the requirements of § 61.95(a)(1) through (3) have been met.

B. Solo Flight to, from, or at an Airport in Class B Airspace. Section 61.95(b) prohibits student pilots from operating on a solo flight to, from, or at an airport within Class B airspace unless the requirements of § 61.95(b)(1) through (3) have been met.

NOTE: Sample endorsements specifying that student pilots have received ground and flight instruction and have been found competent to operate in Class B airspace are found in Figure 5-29, Samples of Student Pilot Class B Airspace Endorsements.

5-324 CONDUCT OF TRAINING AND TESTING, SFAR 41 AIRPLANES, BY PILOTS WITH A “SECOND-IN-COMMAND REQUIRED” LIMITATION ON THEIR TYPE RATING.

A. An SIC Required. The SA-227, EMB-110, BE-300/1900, and certain other SFAR 41 airplanes are TC for single pilot operations. However, depending on the type of operation conducted (e.g., part 135 passenger service), an SIC may be required.

B. Limitation. Applicants for a type rating practical test in certain SFAR 41 airplanes may opt to complete the practical test as a single pilot or by using an SIC. If the single-pilot option is elected, the applicant will receive a type rating without limitation upon satisfactory completion of the practical test. When an applicant satisfactorily completes a practical test using an SIC, the applicant will be issued a type rating with the limitation “SECOND-IN-COMMAND REQUIRED.” To enhance crew complement flexibility, there is a need to establish guidelines for the training and flight testing of applicants for type ratings in SFAR 41 aircraft. These guidelines are intended to apply to the following:

- Certificated flight instructors (CFI),
- ATPs conducting instruction in air transportation service,
- Certificated ground instructors associated with a training center that holds exemption authority,
- ASIs,
- DPEs, aircraft and simulator only,
- Pilot proficiency examiners, and
- Part 135 air carrier check airmen and instructors.

C. Ground Instruction. The ground instruction required by §§ 61.63(d)(6) and 61.157(f) may be given by an appropriately rated flight instructor who holds a type rating (with or without a “SECOND-IN-COMMAND REQUIRED” limitation) on his/her pilot certificate for the associated airplane. The ground instruction required by §§ 61.63(d)(6)(ii) and 61.157(f)(2) for employees of a part 135 certificate holder may be given by an instructor authorized by a part 135 approved training program.

D. Simulator Instruction. Instructors who conduct training in an FAA-approved flight simulator or an FAA-approved FTD toward the issuance of a type rating must be qualified in accordance with one of the following categories.

1) Hold a valid flight instructor certificate with airplane multiengine and instrument airplane ratings and have a type rating for the airplane on his/her pilot certificate. A pilot who has the limitation “SECOND-IN-COMMAND REQUIRED” on the type rating may only instruct an applicant seeking the same privileges and limitation. A pilot with an unrestricted type rating may conduct simulator instruction for both limited and unrestricted ratings.

2) A ground instructor with a training center.

3) An ATP with the appropriate type rating on his/her pilot certificate, instructing in air transportation. The ATP can only instruct within the limitations of his/her pilot certificate as defined in subparagraph B above.

E. Flight Instruction. Flight instruction may only be conducted within the limitations and authorizations of the flight instructor certificate, pilot certificate, and type ratings.

1) Instructors who hold an unrestricted type rating on their pilot certificates may conduct flight training required by §§ 61.89(b) and 61.157(f) and part 135, §§ 135.339(c), 135.347, and 135.351(c) for an applicant seeking an unrestricted type rating or single-pilot operating privileges, or for an applicant seeking a type rating with the limitation “SECOND-IN-COMMAND REQUIRED.”

2) Instructors who hold a type rating with a “SECOND-IN-COMMAND REQUIRED” limitation may only give flight instruction to applicants seeking operating privileges for a crew of two or a type rating with a “SECOND-IN-COMMAND REQUIRED” limitation. Section 61.55(d)(3) provides for an instructor to act as PIC with an SIC who is not qualified in accordance with § 61.55(a) and (b).

F. Qualification to Conduct Flight Tests. ASIs, examiners, and check airmen who hold unrestricted type ratings in SFAR 41 airplanes may conduct practical tests in these aircraft leading to the issuance of type ratings with or without a “SECOND-IN-COMMAND REQUIRED” limitation, or operating privileges for single- or two-pilot operations, as appropriate. ASIs, examiners, and check airmen who hold a type rating with a “SECOND-IN-COMMAND REQUIRED” limitation may only conduct practical tests leading to the issuance of type ratings with a “SECOND-IN-COMMAND REQUIRED” limitation, or operating privileges for two-pilot operations, as appropriate. Oral testing may be conducted by

an ASI, examiner, or check airman who is rated in the aircraft, regardless of a “SECOND-IN-COMMAND REQUIRED” limitation.

G. Removal of the “Second-In-Command Required” Limitation from a Type Rating. To remove the limitation, it is not necessary to complete an entire practical test (oral and flight) as a single-pilot operation. All maneuvers approved for a flight simulator may be accomplished in that flight simulator for the purpose of removing this limitation. This does not change any flight simulator requirements for the original issuance of the type rating. A pilot who holds a type rating with a “SECOND-IN-COMMAND REQUIRED” limitation, or who wishes to upgrade a pilot certificate to authorize single-pilot privileges (CE-525 to CE-525S) and wishes to remove the limitation and have an unrestricted type rating or single-pilot privileges, must complete a practical test in accordance with FAA-S-8081-5 that satisfactorily demonstrates single-pilot competency, and must include testing on areas of operation and additional areas.

1) Topics for areas of operation include:

- Preflight preparation tasks: None,
- Preflight procedures tasks: All,
- Takeoff and departure phase tasks: All,
- In-flight maneuvers tasks: C, E, F,
- Instrument procedures tasks: All,
- Landings and approaches to landing tasks: All,
- Normal and abnormal procedures,
- Emergency procedures, and
- Postflight procedures tasks: All.

2) Topics for additional areas include:

- Collision avoidance,
- Communication management, and
- Instrument flight rules (IFR) cross-country flight plan avionics loading.

5-325 OPERATING LIMITATIONS FOR HEARING AND/OR SPEECH IMPAIRED.

A. Operating Limitations on Pilot Certificate. This paragraph specifies the required operating limitations to be placed on the pilot certificate of persons who are hearing and/or speech impaired due to medical reasons. Persons who are unable to read, speak, write, and understand English because of inadequate fluency or comprehension for nonmedical reasons are not addressed in this paragraph and will not be issued a pilot or instructor certificate until the English fluency requirements are met.

B. Part 61 Specifications. Part 61 specifies that an applicant for pilot certification must be able to read, speak, write, and understand the English language.

1) Persons who are unable to meet the requirement to speak or understand the English language because of hearing and/or speech impairment due to medical reasons must

have the medical reason confirmed and documented on the person's application for airman medical certification by the designated Aviation Medical Examiner (AME).

2) The designated AME will inform a person who is hearing and/or speech impaired, that he or she must submit to a special medical flight test (see Volume 5, Chapter 8, Section 1). The special medical flight test will determine if an applicant is eligible for a medical certificate and Statement of Demonstrated Ability (SODA).

3) The following limitation will be placed by the Federal Air Surgeon, an authorized FAA medical representative, or a designated AME on a person's medical certificate where the person is hearing and/or speech impaired and on the SODA: "NOT VALID FOR FLYING WHERE RADIO USE IS REQUIRED."

C. Operating Limitations on Persons. Operating limitations for persons who are unable to meet the part 61 requirement to speak or understand the English language because of a hearing and/or speech impairment due to medical reasons.

1) A person who is hearing and/or speech impaired may not serve as a PIC or as a required pilot crewmember for any flights requiring the use of a radio. For flights requiring radio use, an appropriately qualified pilot must act as the 14 CFR § 1.1 PIC for the flight. That PIC must meet all the part 61 pilot certification, medical certification, and recency of experience requirements. The PIC and any other required pilot crewmember must not be hearing or speech impaired.

- a) Has final authority and responsibility for the operation and safety of the flight;
- b) Has been designated as PIC before or during the flight; and
- c) Holds the appropriate category, class, and type rating, if appropriate, for the conduct of the flight.

2) A person who is hearing and/or speech impaired may not serve as a required pilot crewmember aboard an aircraft that requires more than one pilot crewmember by the aircraft's type design or by the regulation, and may not serve as a safety pilot for the purpose of § 91.109(b).

D. Ratings and Limitations Section. Persons who are hearing and/or speech impaired must have the following operating limitations placed on their pilot certificate in the Ratings and Limitations section (i.e., XIII):

XIII.

MAY NOT SERVE AS A PILOT IN COMMAND OR A REQUIRED PILOT CREWMEMBER FOR FLIGHTS REQUIRING THE USE OF RADIO COMMUNICATIONS.

MAY NOT SERVE AS A REQUIRED PILOT CREWMEMBER IN AN AIRCRAFT THAT REQUIRES MORE THAN ONE PILOT CREWMEMBER BY THE AIRCRAFT

TYPE CERTIFICATE OR BY REGULATION, NOR SERVE AS A SAFETY PILOT FOR THE PURPOSE OF § 91.109(b).

NOT VALID FOR FLIGHTS OUTSIDE THE UNITED STATES.

E. Flight Instructor Certificate. Per § 61.183(b), the rule requires that an applicant for a flight instructor certificate must be able to read, speak, write, and understand the English language.

1) Persons who are unable to meet these requirements of § 61.183(b) because of a hearing and/or speech impairment due to medical reasons must have the operating limitation listed below placed on their flight instructor certificate. As previously stated in subparagraph 5-325B above, the Federal Air Surgeon, authorized FAA medical representative, or a designated AME will confirm and document the medical condition on the person's application for medical certification.

2) The following limitation must be placed on a flight instructor certificate when the FAA has determined by the FAA that the person is hearing and/or speech impaired: "MAY NOT SERVE AS A FLIGHT INSTRUCTOR IN FLIGHT." However, a person who is hearing and/or speech impaired may be able to serve as a flight instructor in a flight simulator, FTD, advanced aviation training device (AATD), or may serve as a ground instructor in a classroom setting.

F. Practical Test. As a special emphasis item during the practical test of persons who are hearing or speech impaired, the ASI must evaluate the person's ability to receive ATC instructions from the assigned PIC on the flight and comply with instructions in a timely manner and within the approved standards.

G. Hearing Enhancement Device. If a hearing-impaired person is able to demonstrate to the FAA that he or she can understand the English language through the use of some hearing enhancement device (e.g., such as a Cochlear implant) and vocally respond in English sufficient to meet part 61 specifications, without the use of American Sign Language or other aid, then the person may be eligible for removal of the:

1) "NOT VALID FOR FLYING WHERE RADIO USE IS REQUIRED" limitation on the person's medical certificate.

2) Operating limitations on the person's pilot certificate.

3) "MAY NOT SERVE AS A FLIGHT INSTRUCTOR IN FLIGHT" limitation on the person's flight instructor certificate.

H. Impairment After Medical Certificate Issuance. Per § 61.53, if a person becomes hearing and/or speech impaired after issuance of a medical certificate, and the impairment is verified, that person is considered to have a medical deficiency. Therefore, the person is prohibited from acting as a PIC or as a required pilot flight crewmember (in any capacity). That person must be instructed to inform the jurisdictional FAA Regional Flight Surgeon (RFS) or the Aerospace Medical Certification Division (AMCD) in Oklahoma City about his or her

impairment. The RFS or AMCD will determine if the person is eligible to receive a medical certificate and SODA with the limitation “NOT VALID FOR FLYING WHERE RADIO USE IS REQUIRED.” In addition, a designated AME who finds that an airman is speech and/or hearing impaired should inform the person to contact his or her local jurisdictional FSDO to receive the appropriate operating limitations on the person’s airman certificates.

Figure 5-22. Letter of Surrender (In Lieu of a Reexamination)

[date]

I hereby voluntarily surrender my [type] pilot certificate [number] to the FAA for [reason, e.g., cancellation]. I understand that this constitutes unequivocal abandonment of the certificate and that an FAA airman certificate or rating may not be reissued to me unless I again pass all the tests prescribed for its issue.

[Signature]

Figure 5-23. Letter of Surrender (Pending Enforcement Action)

[date]

As the result of the occurrence at _____ on _____, [the airman must explain in full, in his or her own language, the occurrence and his or her involvement].

I hereby voluntarily surrender my pilot certificate [number] for whatever action the FAA may deem necessary. My rights to be heard as to why my certificate should not be amended, suspended, or revoked have been fully explained to me and are hereby waived.

[Signature]

Figure 5-24. FAA Form 8060-4, Showing Passenger Carry Limitation (Maintained at FSDO Level Only)

I. UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION							III. CERTIFICATE NO. 526032230
ii. TEMPORARY AIRMAN CERTIFICATE							
THIS CERTIFIES THAT		IV. JOHN (NMN) DOE 175 SOUTH MAIN STREET V. KEYWANA, NM 80010					
DATE OF BIRTH 04-14-50	HEIGHT 72 IN.	WEIGHT 180	HAIR BROWN	EYES GREEN	SEX M	NATIONALITY USA	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 PRIVATE PILOT							
RATING AND LIMITATIONS XII. AIRPLANE SINGLE-ENGINE LAND							
XIII. PASSENGER CARRYING PROHIBITED EXPIRES 11/25/03							
THIS IS <input type="checkbox"/> AN ORIGINAL ISSUANCE <input checked="" type="checkbox"/> A REISSUANCE OF THIS GRADE OF CERTIFICATE				DATE OF SUPERSEDED AIRMAN CERTIFICATE 07/15/02			
BY DIRECTION OF THE ADMINISTRATOR						EXAMINER'S DESIGNATION NO. OR INSPECTOR'S REG. NO. 001234567	
X. DATE OF ISSUANCE 10/25/03		X. SIGNATURE OF EXAMINER OR INSPECTOR <i>Wesley Crusher</i> WP 07 WESLEY CRUSHER				DATE DESIGNATION EXPIRES --	

FAA Form 8060-4 (8-79) USE PREVIOUS EDITION

Figure 5-25. FAA Form 8060-4, Emergency Field Issuance (Maintained at FSDO Level Only)

I. UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION							III. CERTIFICATE NO.
ii. TEMPORARY AIRMAN CERTIFICATE							155099880
John Doe	THIS CERTIFIES THAT		IV. JOHN (NMN) DOE 751 SOUTH MAIN STREET V. KEYWANA, NM 80010				
	DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY VI.
	01/08/49	73 IN.	180	BROWN	GREEN	M	USA
	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 COMMERCIAL PILOT						
RATING AND LIMITATIONS XII. AIRPLANE SINGLE & MULTIENGINE LAND INSTRUMENT AIRPLANE							
XIII. EMERGENCY FIELD ISSUANCE							EXPIRES 10/15/03
vii. AIRMAN'S SIGNATURE	THIS IS <input type="checkbox"/> AN ORIGINAL ISSUANCE <input checked="" type="checkbox"/> A REISSUANCE OF THIS GRADE OF CERTIFICATE				DATE OF SUPERSEDED AIRMAN CERTIFICATE		
					07/15/02		
	BY DIRECTION OF THE ADMINISTRATOR				EXAMINER'S DESIGNATION NO. OR INSPECTOR'S REG. NO.		
	X. DATE OF ISSUANCE		X. SIGNATURE OF EXAMINER OR INSPECTOR		001234567		
09/15/03		<i>Wesley Crusher</i> WP 07 WESLEY CRUSHER		DATE DESIGNATION EXPIRES --			

FAA Form 8060-4 (8-79) USE PREVIOUS EDITION

Figure 5-26. Letter of Temporary Deposit

[date]

As a result of the occurrence at _____ on _____, I hereby voluntarily surrender my [pilot, mechanic, flight engineer, etc.] certificate [number] for temporary deposit in the _____ District Office of the FAA until [date]. If, by that date, I have not demonstrated the airman competence to hold that/those rating(s) to the FAA or received an extension of time within which to take the reexamination, I understand that legal enforcement action will be taken to suspend the privileges of my airman certificate (or rating) until I demonstrate the competence prescribed in the Federal aviation regulations for its original issuance.

[Signature]

Figure 5-27. Loss of Certificate Affidavit

STATE OF _____

COUNTY OF _____

Mr. _____, being duly sworn, says:

1. On _____, the only airman certificate held by me was No. _____, with _____ privileges and _____ ratings.
2. By Order of Suspension (or revocation) dated _____, my airman certificate was suspended (or revoked) effective _____ for a period of _____ months (or days) (if revocation, leave period out).
3. I have made a thorough search of the places where my airman certificate could or might be found. Notwithstanding the search, I have not been able to find such certificate. I do not know where such certificate presently is nor where it may be found; I believe it to be lost.
4. For the above reason, I am unable to surrender my airman certificate number _____; however, if and when such certificate is found while suspended, I will surrender it to the FAA.

Airman's Signature

SUBSCRIBED AND SWORN TO before me this _____ day of _____, _____

[Seal]

Notary Public in and for

County

State of _____

My Commission expires on _____

Figure 5-28. FAA Form 8710-1, Application for a Blue Seal Certificate

I. Application Information		B. SSN (US Only)		C. Date of Birth		D. Place of Birth										
<input type="checkbox"/> Student <input type="checkbox"/> Recreational <input checked="" type="checkbox"/> Private <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Airline Transport <input type="checkbox"/> Instrument <input type="checkbox"/> Additional Rating <input type="checkbox"/> Airplane Single-Engine <input type="checkbox"/> Airplane Multiengine <input type="checkbox"/> Rotorcraft <input type="checkbox"/> Balloon <input type="checkbox"/> Airship <input type="checkbox"/> Glider <input type="checkbox"/> Powered-Lift <input type="checkbox"/> Flight Instructor <input type="checkbox"/> Renewal <input type="checkbox"/> Reinstatement <input type="checkbox"/> Additional Instructor Rating <input type="checkbox"/> Ground Instructor <input checked="" type="checkbox"/> Other Blue Seal Certificate <input type="checkbox"/> Medical Flight Test <input type="checkbox"/> Reexamination <input type="checkbox"/> Reissuance of _____ certificate		Do not use		06/27/1947		Scottsdale, AZ										
A. Name (Last, First, Middle) Flyswell, James Charles																
E. Address 781 Main Street		F. Citizenship <input checked="" type="checkbox"/> USA <input type="checkbox"/> Other		G. Do you read, speak, write, & understand the English language? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No												
City, State, Zip Code Tucson, AZ 80010		H. Height 72 in.	I. Weight 180 lbs	J. Hair Red	K. Eyes Green	L. Sex <input checked="" type="checkbox"/> Male <input type="checkbox"/> Female										
M. Do you now hold, or have you ever held an FAA Pilot Certificate? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		N. Grade Pilot Certificate Private		O. Certificate Number 052603030		P. Date issued 08/15/79										
Q. Do you hold a Medical Certificate? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		R. Class of Certificate 3rd		S. Date issued 06/20/2003		T. Name of Examiner Henry R. Cooke, MD										
U. Have you ever been convicted for violation of any Federal or State statutes relating to narcotic drugs, marijuana, or depressant or stimulant drugs or substances? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						V. Date of Final Conviction										
II. Certificate or Rating Applied For on Basis of:																
<input type="checkbox"/> A. Completion of Required Test	1. Aircraft to be used (if flight test required)		2a. Total time in this aircraft / SIM / FTD		2b. Pilot in command											
<input type="checkbox"/> B. Military Competence Obtained In	1. Service		2. Date Rated		3. Rank or Grade and Service Number											
<input type="checkbox"/> C. Graduate of Approved Course	1. Name and Location of Training Agency or Training Center		4a. Flown 10 hours PIC in last 12 months in the following Military Aircraft.		4b. US Military PIC & Instrument check in last 12 months (List Aircraft)											
<input type="checkbox"/> D. Holder of Foreign License Issued By	1. Country		2. Grade of License		3. Number											
<input type="checkbox"/> E. Completion of Air Carrier's Approved Training Program	1. Name of Air Carrier		2. Date		3. Which Curriculum <input type="checkbox"/> Initial <input type="checkbox"/> Upgrade <input type="checkbox"/> Transition											
III RECORD OF PILOT TIME (Do not write in the shaded areas.)																
	Total	Instruction Received	Solo	PIC in Command (PIC)	Cross Country Instruction Received	Cross Country Solo	Cross Country PIC	Instrument	Night Instruction Received	Night Take-off Landings	Night PIC	Night Take-off/Landing PIC	Number of Flights	Number of Airo-Tows	Number of Ground Launches	Number of Powered Launches
Alpines	350	80	270	PIC 250 SIC 20	10	45	PIC 35 SIC	25	17	25	PIC 55 SIC	PIC 48 SIC				
Rotorcraft				PIC SIC			PIC SIC				PIC SIC	PIC SIC				
Powered Lift				PIC SIC			PIC SIC				PIC SIC	PIC SIC				
Glider																
Lighter Than Air																
Simulator Training Device																
PCATD																
IV. Have you failed a test for this certificate or rating? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																
V. Applicant's Certification - I certify that all statements and answers provided by me on this application form are complete and true to the best of my knowledge and I agree that they are to be considered as part of the basis for issuance of any FAA certificate to me. I have also read and understand the Privacy Act statement that accompanies this form.																
Signature of Applicant James Charles Flyswell						Date 6/20/03										

FAA Form 8710-1 (4-00) Supersedes Previous Editions

Instructor's Recommendation				
I have personally instructed the applicant and consider this person ready to take the test.				
Date	Instructor's Signature (Print Name & Sign)	Certificate No.	Certificate Expires	
Air Agency's Recommendation				
The applicant has successfully completed our _____ course, and is recommended for certificate or rating without further _____ test.				
Date	Agency Name and Number	Officials Signature		
		Title		
Designated Examiner or Airman Certification Representative Report				
<input type="checkbox"/> Student Pilot Certificate Issued (Copy attached) <input type="checkbox"/> I have personally reviewed this applicant's pilot logbook and/or training record, and certify that the individual meets the pertinent requirements of 14 CFR Part 61 for the certificate or rating sought. <input type="checkbox"/> I have personally reviewed this applicant's graduation certificate, and found it to be appropriate and in order, and have returned the certificate. <input type="checkbox"/> I have personally tested and/or verified this applicant in accordance with pertinent procedures and standards with the result indicated below. <input type="checkbox"/> Approved -- Temporary Certificate Issued (Original Attached) <input type="checkbox"/> Disapproved -- Disapproval Notices Issued (Original Attached)				
Location of Test (Facility, City, State)			Duration of Test	
			Ground	Simulator/FTD
			Flight	
Certificate or Rating for Which Tested		Type(s) of Aircraft Used	Registration No.(s)	
Date	Examiner's Signature (Print Name & Sign)	Certificate No.	Designation No.	Designation Expires
Evaluator's Record (Use For ATP Certificate and/or Type Rating)				
Oral	Inspector	Examiner	Signature and Certificate Number	Date
Approved Simulator/Training Device Check	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Aircraft Flight Check	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Advanced Qualification Program	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Aviation Safety Inspector or Technician Report				
I have personally tested this applicant in accordance with or have otherwise verified that this applicant complies with pertinent procedures, standards, policies, and or necessary requirements with the result indicated below.				
<input checked="" type="checkbox"/> Approved -- Temporary Certificate Issued (Original Attached) <input type="checkbox"/> Disapproved -- Disapproval Notice Issued (Original Attached)				
Location of Test (Facility, City, State)			Duration of Test	
			Ground	Simulator/FTD
			Flight	
Certificate or Rating for Which Tested		Type(s) of Aircraft Used	Registration No.(s)	
<input type="checkbox"/> Student Pilot Certificate Issued	<input type="checkbox"/> Certificate or Rating Based on	<input type="checkbox"/> Flight Instructor	<input type="checkbox"/> Ground Instructor	
<input type="checkbox"/> Examiner's Recommendation	<input type="checkbox"/> Military Competence	<input type="checkbox"/> Renewal	<input type="checkbox"/> Reinstatement	
<input type="checkbox"/> Reissue or Exchange of Pilot Certificate	<input type="checkbox"/> Foreign License	Instructor Renewal Based on		
<input type="checkbox"/> Special Medical test conducted -- report forwarded to Aeromedical Certification Branch, AAM-330	<input type="checkbox"/> Approved Course Graduate	<input type="checkbox"/> Activity	<input type="checkbox"/> Training Course	<input type="checkbox"/> Duties and Responsibilities
	<input type="checkbox"/> Other Approved FAA Qualification Criteria	<input type="checkbox"/> Test		
Training Course (FIRC) Name		Graduation Certificate No.	Date	
Date	Inspector's Signature (Print Name & Sign)	Certificate No.	FAA District Office	
09/29/03	John D. Lynch <i>John D. Lynch</i>	987651	WP FSDO 7	
Attachments:				
<input checked="" type="checkbox"/> Airman's Identification (ID)				
<input type="checkbox"/> Student Pilot Certificate (Copy)	<u>AZ Driver's License</u>	ID:		
	Form of ID	Name:	<u>James Charles Flyswell</u>	
<input type="checkbox"/> Knowledge Test Report	<u>123456789</u>	Date of Birth:	<u>06/27/1947</u>	
	Number	Certificate Number	<u>12345</u>	
<input checked="" type="checkbox"/> Temporary Airman Certificate	<u>03/17/2003</u>	E-Mail Address	<u>JCFlyswell@yahoo.com</u>	
	Expiration Date			
<input type="checkbox"/> Notice of Disapproval	<u>(555) 555-1234</u>			
	Telephone Number			
<input checked="" type="checkbox"/> Superseded Airman Certificate				

FAA Form 8710-1 (4-00) Supersedes Previous Edition

Figure 5-29. Samples of Student Pilot Class B Airspace Endorsements

14 CFR § 61.95(a)

I certify that [*name of student pilot*] has received ground instruction on operations in [*name of specific Class B airspace*]. I have given flight instruction to [*name of student pilot*] on operation in [*name of specific Class B airspace*] and have found him/her competent to conduct solo flight in [*name of specific Class B airspace, e.g., Washington Class B airspace*] only.

[*Date of endorsement, flight instructor's name, certificate number, and expiration date.*]

14 CFR § 61.95(b)

I certify that [*name of student*] has received ground instruction on operations at [*name of airport in Class B airspace*]. I have given flight instruction on operations at [*name of airport in Class B airspace*] to [*name of student pilot*] and have found him/her competent to conduct solo flight at [*name of airport in Class B airspace, e.g., Washington Executive Airport*].

[*Date of endorsement, flight instructor's name, certificate number, expiration date.*]

RESERVED. Paragraphs 5-326 through 5-340.

VOLUME 6 SURVEILLANCE

CHAPTER 9 PART 145 INSPECTIONS

Section 16 Inspect Part 145 Repair Stations Within the United States

6-2001 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3650.

B. Avionics: 5650.

6-2002 OBJECTIVE. This section provides guidance on inspecting Title 14 of the Code of Federal Regulations (14 CFR) part 145 repair stations for Flight Standards personnel involved in certificate management.

6-2003 GENERAL.

A. Inspection Initiation. This comprehensive, in-depth inspection that encompasses all of the repair station areas of responsibility is the result of a work program requirement. While conducting the inspection, the principal inspector (PI) should verify that the facility and personnel are qualified to perform the maintenance functions as listed in the operations specifications (OpSpecs) and capability list (CL).

B. Work Away From a Fixed Location. The district office where the work is being performed may inspect repair stations working away from a fixed location. The PI from the geographical office performing the inspection should maintain good communications with the parent facility's certificate-holding district office (CHDO) regarding procedures, manuals, equipment, personnel, etc.

6-2004 COORDINATION REQUIREMENTS. If the repair station has an assigned principal maintenance inspector (PMI) and a principal avionics inspector (PAI), the inspectors should coordinate on the inspection.

NOTE: If an office should elect to complete an in-depth inspection, 3614/5614 in lieu of the 3650/5650, then they will use the "R" items that are generated from the Repair Station Assessment Tool (RSAT) to record their findings and not create new PTRS records. This will allow the 3650/5650 "R" item to be closed at the end of the inspection.

6-2005 REFERENCES, FORMS, AND JOB AIDS.

A. References (current editions):

- Title 14 CFR parts 43, 65, 121, 125, 129, 135, and 145.
- Special Federal Aviation Regulation (SFAR) 36, Development of Major Repair Data.

- Advisory Circular (AC) 43-15, Recommended Guidelines for Instrument Shops.
- AC 43-207, Correlation, Operation, Design, and Modification of Turbofan/Jet Engine Test Cells.
- AC 65-31, Training, Qualification, and Certification of Nondestructive Inspection (NDI) Personnel.
- AC 145-5, Repair Station Internal Evaluation Programs (IEP).
- AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals.
- AC 145-10, Repair Station Training Program.
- Order 8900.1, Volume 2, Chapter 11, Sections 1 through 5.
- 8900.1, Volume 3, Chapters 15 and 42.
- 8900.1, Volume 6, Chapter 11, Section 17, Inspect Avionics Test Equipment.

B. Forms. None.

C. Job Aids. Job Task Analysis (JTA): 2.4.18, Inspect 14 CFR Part 145 Foreign Repair Station.

6-2006 PROCEDURES.

A. Review Applicable Information. Before inspecting, the PI should carefully review:

- 1) Parts 43 and 145.
- 2) Repair Station Manual (RSM)/Quality Control Manual (QCM).
- 3) OpSpecs.
- 4) The Safety Performance Analysis System (SPAS) and repair station analytical model (RSAM).
 - a) The SPAS is the organization's primary source of comprehensive, integrated safety information that inspectors, analysts, and managers use in developing and adjusting field surveillance, investigation, and other oversight programs.
 - b) The SPAS interfaces with key fielded oversight programs (such as Air Transportation Oversight System (ATOS), Surveillance and Evaluation Program (SEP), and the National Program Guidelines (NPG)), as well as other government and industry sources. The SPAS:
 - Collects raw performance and operational data,
 - Analyzes and summarizes the data, and
 - Provides critical information in the form of graphs, tables, and reports.
 - c) These SPAS outputs are then used to:
 - Identify safety hazard and risk areas,

- Target inspections to repair stations and to areas of greatest risk, and
- Monitor the effectiveness of targeted oversight actions.

d) The SPAS repair station profile and RSAM are available for use. This data provides additional information on performance and risk associated with individual repair station facilities.

5) Enhanced Vital Information Database (eVID).

6) CHDO file.

B. Conduct the Inspection. Accomplish repair station oversight using an enhanced baseline surveillance, whereby the PTRS codes 3650 and 5650 are each divided into 16 individual subsystem sections with corresponding PTRS activity codes. This provides a comprehensive surveillance plan for repair stations and ensures that all aspects of part 145 repair station operations are considered. Initiate the baseline surveillance by opening the PTRS activity code 3650/5650 to generate the required activity codes:

- Section 1, (3604/5604) Certificate Requirements.
- Section 3, (3605/5605) Records Systems.
- Section 4, (3660/5660) Manuals.
- Section 5, (3657/5657) Housing and Facilities.
- Section 6, (3658/5658) Tools and Equipment.
- Section 7, (3656/5656) Technical Data.
- Section 8, (3608/5608) Quality Control (QC).
- Section 9, (3601/5601) Parts and Materials.
- Section 10, (3659/5659) Personnel Record.
- Section 11, (3661/5661) Training.
- Section 12, (3654/5654) Maintenance Process.
- Section 13, (3606/5606) Work Away from Station.
- Section 15, (3618/5618) Air Carrier and Air Operator Requirements.
- Section 16, (3669/5669) Domestic European Aviation Safety Agency (EASA) supplement requirements.
- Section 20, (3663/5663) Contract Maintenance Certificated.
- Section 20, (3607/5607) Contract Maintenance Noncertificated.

1) These 16 subsystems constitute a complete repair station inspection. Each subsystem may not require surveillance each year. The RSAT located in the planning module generates the annual surveillance requirements for a repair station.

2) You must complete and close all “R” item generated activity codes applicable to the repair station before you may close the 3650/5650 PTRS record.

3) Using a system safety-based approach, the PI can use the RSAT to plan additional focused inspections according to the risk level identified in each element.

4) The 3650/5650 may inadvertently generate one or more of the following activity codes if the eVID is not current and correct:

- Work Away from Station (PTRS 3606/5606),
- Contract Maintenance Certificated (PTRS 3663/5663),
- Contract Maintenance Noncertificated (PTRS 3607/5607),
- Air Carrier and Air Operator Requirements (PTRS 3618/5618), and/or
- Domestic EASA supplement requirements (PTRS 3669/5669).

NOTE: If the repair station is performing work for an air carrier, the repair station must be able to provide written documentation showing the air carrier's criteria for accepting all repair station programs, and standard operating procedures (SOP), including specific maintenance manuals, and their performance in accordance with the air carrier's continuous airworthiness maintenance procedures.

NOTE: When completing a focused inspection on one of the 16 subsystems, use the PTRS code for that subsystem, not a 3650/5650 code.

C. Analyze Findings. Evaluate deficiencies to determine if they require corrective action.

D. Conduct Debriefing. Brief the certificate holder on the inspection results. Discuss any deficiencies and possible corrective actions.

6-2007 TASK OUTCOMES.

A. Complete the PTRS Record.

1) PTRS Activity Code 3650/5650 (Overall Repair Station Evaluation). In Section I, the "Assessment" block, select the appropriate word picture (numbered 1–10) from the drop-down menu that best describes the overall condition of the repair station. You may add comments to support the overall evaluation in Section IV.

2) Close the PTRS record for activity code 3650/5650 using a result code of "I" (Information), unless the PTRS was terminated (T) or canceled (X). Close the PTRS record for each subsystem using the appropriate result code selected from the drop-down list.

3) Due to the complexity of this PTRS requirement, the PI can transfer one or more of the "R" item surveillance requirements to another Flight Standards District Office (FSDO)/certificate management office (CMO). However, if the PI transfers them, the transferring PI must contact the transferee's office to verify the closure of the transferred PTRS before closing the PTRS record for activity code 3650/5650.

B. Complete the Task. Completion of this task will result in one the following:

- Sending a letter to the operator documenting all deficiencies and initiating an Enforcement Investigation Report (EIR), if necessary; or
- A satisfactory inspection with no deficiencies.

C. Document the Task. File all supporting documentation in the certificate holder's file. Update the VIS as required.

6-2008 FUTURE ACTIVITIES. Schedule and conduct followup inspections as applicable.

RESERVED. Paragraphs 6-2009 through 6-2025.

VOLUME 12 INTERNATIONAL AVIATION**CHAPTER 6 SUPPORT AN EASA SAMPLING INSPECTION SYSTEM TEAM VISIT
IN THE UNITED STATES****Section 1 FAA Participation in an EASA Sampling Inspection System Team Visit in the
United States****12-472 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY
CODES.**

A. Maintenance: 3817.

B. Avionics: 5817.

12-473 OBJECTIVE. This section provides guidance to aviation safety inspectors (ASI) on how to assist a European Aviation Safety Agency (EASA) Sampling Inspection System (SIS) team visiting the United States. The purpose of an EASA SIS team visit is to inspect Title 14 of the Code of Federal Regulations (14 CFR) part 145 repair stations located in the United States that are approved under EASA Part 145.

NOTE: ASIs must use this section in conjunction with the Maintenance Annex Guidance (MAG), which is discussed below. However, the MAG supersedes this section if conflicts exist between the two documents.

12-474 BACKGROUND. The inspection requirement is contained in the U.S./European Union (EU) aviation safety agreement (the Agreement) and its maintenance annex (Annex 2). When an EASA SIS team inspects a repair station, with emphasis on the EASA special conditions, it verifies that the Federal Aviation Administration (FAA) and the repair station comply with the MAG. The combination of participating in FAA Flight Standards Quality Assurance Staff (FSQA) internal audits and EASA SIS team inspections is part of the checks and balances built into the Agreement.

A. U.S./EU Aviation Safety Agreement.

1) The Agreement, signed on June 30, 2008, is between the United States and the EU to cooperate in the regulation of civil aviation safety. The Agreement's official title is "Agreement Between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety." The Agreement contains two annexes. Annex 1 pertains to airworthiness and environmental certification while Annex 2 pertains to maintenance. This section focuses on Annex 2.

2) The Agreement allows the FAA and EASA to rely on each other's surveillance systems, minimize the duplication of efforts, increase efficiency, and conserve resources to the greatest extent possible. The Agreement calls for successful completion of regularly scheduled FAA inspections. The FAA and EASA must be satisfied that repair stations located in the United States and that EU-based Approved Maintenance Organizations (AMO) meet the conditions of Annex 2.

3) Annex 2 of the Agreement allows EASA and the FAA to accept each other's standards, systems, and approvals relating to repair stations located in the United States and EU-based AMOs that maintain civil aviation products. Annex 2 also explains how to establish points of communication and cooperation when urgent or unusual situations develop.

B. MAG. The MAG is the general term for the document's official title, which is "Maintenance Annex Guidance Between the FAA for the United States of America and the European Aviation Safety Agency for the European Union." The MAG, which is a separate document than the Agreement, explains how to implement the Agreement and its Annex 2.

NOTE: Both the MAG and the Agreement are located at the following Web site:
<http://www.faa.gov/aircraft/repair>.

12-475 GENERAL. As part of the Agreement, the FAA and EASA have established the following quality control (QC) system to verify compliance with Annex 2. To promote cooperation and gain confidence in each other's systems, the FAA and EASA have the right to participate as an observer in each other's QC system.

NOTE: For the purposes of surveillance and inspections, the FAA and EASA (and aviation authority (AA)) will help each other gain unimpeded access to repair stations subject to its jurisdiction. It is incumbent upon the repair station to provide unimpeded access to EASA and the FAA to all work areas having civil aviation application. The repair station should ensure that, where possible, there is clear delineation between work areas with civil and military applications within the repair station.

A. Purpose of the EASA SIS Team.

1) The EASA SIS team will visit 14 CFR part 145 certificated repair stations (CRS) located in the United States that also hold an EASA Part 145 approval to monitor the FAA's application of Annex 2 (see the MAG, Section A, part II, paragraph 2.4).

2) During EASA SIS team visits, FAA ASIs will serve as observers with EASA SIS teams. The FAA should make every effort to receive and cooperate with EASA SIS teams. Although EASA SIS team inspections are separate from the certification audits of repair stations, they may provide valuable information to ASIs.

B. Focus of the EASA SIS Team Inspection. The EASA SIS team inspections are designed to establish EASA's continued confidence in the FAA's ability to comply with the requirements of Annex 2 and to ensure they are applied in a consistent manner (see the MAG, Section A, part II, paragraph 2).

1) The EASA SIS team will spend a considerable amount of time at the FAA certificate-holding district office (CHDO) reviewing repair station records/files and closed enforcement actions taken by the FAA. The EASA SIS team may also interview ASIs and their assistants to confirm they have access to and knowledge of the MAG.

2) The FAA and EASA have established the differences between 14 CFR part 145 and EASA part 145. The MAG, Section A, part V lists these differences as special conditions. A 14 CFR part 145 CRS that is EASA-approved must develop an EASA supplement to its Repair Station Manual (RSM) to comply with the EASA special conditions. When an EASA SIS team inspects a repair station, it will inspect specifically those areas referenced in the EASA supplement.

NOTE: The EASA SIS team may also inspect for compliance with 14 CFR parts 43 and 145. However, EASA SIS teams normally limit inspections to the special conditions unless events lead them into additional areas.

3) EASA SIS teams will also review the repair station's methods and procedures used to maintain foreign aircraft and parts, and also the items listed on EASA Form 9, FAA Recommendation. EASA will use this information to evaluate the repair station's compliance with the Agreement.

C. EASA SIS Team Members. EASA SIS teams will consist of:

- Two EASA-experienced maintenance surveyors and, if needed, additional staff from AAs of EU Member States listed in Annex 2, Appendix 2.
- FAA regional EASA coordinator or FAA National EASA Coordinator (Aircraft Maintenance Division (AFS-300)) serving as a SIS coordinator.
- The appropriate ASI assigned to the repair station. The ASI may be the principal maintenance inspector (PMI) or principal avionics inspector (PAI).

NOTE: For more information, see the MAG, Section A, part II, paragraph 2.3.

D. Resolution of Issues. Joint cooperation and communication is an essential part of the Agreement's success. Resolution of issues among the FAA, AA, and EASA will be made in accordance with the MAG, Section A, part I, paragraph 5.

12-476 PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of EASA Part-145 approval of repair stations located in the United States.
- Previous experience with certification or surveillance of part 145 repair stations.
- Knowledge of the MAG, Section A, part II, paragraph 2.

B. Coordination. This task requires coordination with:

- The inspected repair station by the EASA SIS team.
- The repair station's ASI. This could be the PMI or PAI.
- The FAA National or Regional EASA coordinator (see the MAG, Section A, part II, paragraph 2.3.2).
- FAA Regional Offices (RO) and district offices, as appropriate.

12-477 REFERENCES, FORMS, AND JOB AIDS.**A. References (current editions):**

- Title 14 CFR parts 43 and 145.
- Volume 2, Chapter 11, Certification of a Title 14 CFR Part 145 Repair Station.
- Volume 12, Chapter 8, Evaluate an EASA Supplement to a Repair Station's Manual/Quality Control Manual.
- Agreement Between the United States of America and the European Community on Cooperation in the Regulation of Civil Aviation Safety (the Agreement).
- Maintenance Annex Guidance Between the Federal Aviation Administration for the United States of America and the European Aviation Safety Agency for the European Union (the MAG).

B. Forms:

- EASA Form 9, FAA Recommendation (see the MAG, Section B, Appendix 3).
- SIS Form 8, EASA Visit Report AMO (see the MAG, Section A, Appendix 2).
- SIS Form 10, EASA Visit Report FSDO (see the MAG, Section A, Appendix 3).

C. Job Aids. Job aids are included in the MAG as appendices.**12-478 FAA RESPONSIBILITIES.**

A. Responsibilities of the FAA Regional EASA Coordinator. Upon receiving a notice from EASA that an EASA SIS team plans to visit a specific FAA region, the FAA regional EASA coordinator should:

- 1) Assist the EASA SIS team and local Flight Standards District Office (FSDO) in developing an itinerary for team members (see the MAG, Section A, part II, paragraph 2.7);
- 2) Coordinate the schedule of planned inspections with all team members;
- 3) Provide hotel and ground transportation information to the EASA standardization coordinator at EASA headquarters (HQ), and copy the FAA National EASA Coordinator (EASA inspectors will confirm their own reservations);
- 4) Notify the ASI of the repair station that the EASA SIS team intends to inspect and ensure he or she will be present during the inspection;
- 5) Contact the FAA National EASA Coordinator (AFS-300), who may accompany the EASA SIS team on its inspections of the repair stations;
- 6) Attend the entrance briefings and debriefings at inspected repair stations;
- 7) Attend the EASA SIS team debriefing at the FSDO. The FSDO manager should be available for the debriefing; and

8) Address the SIS findings at the FSDOs (as recorded on SIS Form 10 per the MAG, Section A, part II, paragraph 2.7.2) and ensure they correct the findings in a timely manner.

B. Responsibilities of the FAA Participating ASI. ASIs should note that EASA conducts SIS inspections to determine compliance with the MAG and the EASA supplement to the repair station's RSM/Quality Control Manual (QCM). The FAA should offer coordination and assistance to the EASA SIS team members to help them accomplish their tasks efficiently. EASA SIS team members may ask the participating ASI to provide FAA policy or guidance information and repair station records/files if questions arise. Once an ASI receives notice from the FAA regional EASA coordinator that an EASA SIS team plans to visit a repair station for which he or she has oversight responsibility, the ASI should:

- a) Notify the identified repair station of the upcoming EASA SIS team visit;
- b) Ensure the EASA SIS team will have unimpeded access to the repair station;
- c) Obtain and forward hotel and ground transportation information to the FAA regional EASA coordinator;
- d) Accompany the EASA SIS team to the repair station;
- e) Attend the repair station entrance briefing and debriefing; and
- f) Assist the EASA SIS team members, if requested.

12-479 TASK OUTCOMES.

A. Complete the PTRS Record. The ASI will complete a PTRS entry for all tasks completed.

B. Complete the Task. Completion of this task will result in the following:

- 1) The FAA regional EASA coordinator should:
 - a) Ensure that the EASA SIS team debriefs the repair station and the FSDO.
 - b) If the EASA SIS team notes any FSDO or repair station deficiencies, ensure that the FSDO or repair station corrects those deficiencies as soon as possible (see the MAG, Section A, part II, paragraph 2.8).
 - c) Use the Quality Management System (QMS) process to initiate a Preventive Action Request (PAR)/Corrective Action Request (CAR)/Nonconformance Record (NCR), when appropriate. Determining whether to initiate a PAR, CAR, or NCR is based on the level of the SIS findings at the FSDO as recorded on SIS Form 10.

d) Forward their corrective action plan (CAP), which addresses the FSDO findings recorded on SIS Form 10, to AFS-300. The FAA regional EASA coordinator should do this within 60 days of the official notification for EASA. AFS-300 will coordinate the CAP with EASA for its acceptance.

e) Coordinate communication between the FSDO and EASA. This ensures that there is written notification from the FSDO that the repair station will correct any deficiencies noted on SIS Form 8 in a timely manner. The coordination also ensures there is correspondence from EASA showing its acceptance of the repair station's corrective actions.

f) Review the results of the EASA SIS team inspection as recorded on SIS Form 8 (see the MAG, Section A, Appendix 2).

g) Sign SIS Form 8 and SIS Form 10, and then retain a copy of each form in the RO files.

h) Provide a copy of the completed and signed SIS Form 8 and SIS Form 10 to the FSDO manager.

i) Forward a copy of any correspondence from EASA regarding a specific repair station to its applicable ASI.

2) The ASI should:

a) Review the results of the EASA SIS team inspection by obtaining a copy of SIS Form 8 from the FAA regional EASA coordinator.

b) File a copy of the EASA SIS team inspection results in the repair station's certification file.

c) If any deficiencies are noted:

1. Ensure that the FSDO briefs an appropriate representative of the repair station on the deficiencies at the end of the EASA SIS team inspection. Ensure that the repair station promptly corrects findings regarding EASA Part 145.

2. Confirm, in writing, any 14 CFR-related findings with the repair station.

3. Meet with an appropriate representative of the repair station to review all deficiencies in detail, if necessary.

4. Review the repair station's CAP, if required.

5. When the ASI has accepted the repair station's CAP, he or she should forward a copy to EASA through the FAA regional EASA coordinator.

NOTE: The repair station should correct deficiencies noted by the EASA SIS team in a timely manner, typically within 60 days or a time acceptable to EASA.

6. Receive written notification from the repair station that it has corrected all deficiencies.

7. Ensure that documentation recording each deficiency and corrective action is in the repair station's certification file.

8. Place in the repair station's certification file any correspondence from EASA showing acceptance of the repair station's corrective action.

9. If necessary, inspect the repair station to ensure it has corrected the deficiencies.

10. The ASI should complete EASA Form 9 and forward a copy to the EASA coordinator and the FAA regional EASA coordinator once the repair station corrects the findings (see the MAG, Section B, Appendix 3).

C. Document the Task. File all supporting paperwork in the CHDO's office file and update the enhanced Vital Information Database (eVID), if appropriate.

12-480 FUTURE ACTIVITIES. Schedule and conduct a reinspection, if appropriate.

RESERVED. Paragraphs 12-481 through 12-496.