

VOLUME 2 AIR OPERATOR AND AIR AGENCY CERTIFICATION AND APPLICATION PROCESS

CHAPTER 11 CERTIFICATION OF A PART 145 REPAIR STATION

Section 6 Safety Assurance System: Part 145 Repair Station Ratings and Classifications Under 14 CFR Part 145, §§ 145.59 and 145.61

2-1257 REPORTING SYSTEM(S). Use Safety Assurance System (SAS) automation and the associated Data Collection Tools (DCT) for certification.

2-1258 PURPOSE. The purpose of this section is to explain the ratings contained in Title 14 of the Code of Federal Regulations (14 CFR) part 145, §§ 145.59 and 145.61.

NOTE: Ratings specify the types of articles the repair station is rated to perform maintenance, preventive maintenance, or alterations. They specify what the repair station is allowed to do. Ratings exist as a means of authorizing repair stations to perform maintenance and alterations. A repair station may only perform the maintenance, preventive maintenance, or alterations for which it is rated. Repair stations should not receive ratings solely to maintain aircraft, engines, propellers, or component part (article) not approved under a Federal Aviation Administration (FAA) Type Certificate Data Sheet (TCDS), such as certain military aircraft, engines, or components. Specific ratings issued to a repair station are dependent on the equipment, personnel, technical data, and housing and facilities of the repair station. Depending on how a repair station intends to perform maintenance, it may require multiple and/or different ratings.

2-1259 GENERAL. Certificated repair stations are authorized to perform maintenance, preventive maintenance, and alterations on products that have an approved FAA TCDS, or used on aircraft with an approved TCDS. Section 145.201(a)(1) requires a repair station to perform maintenance in accordance with 14 CFR part 43. Part 43, § 43.1(a) states, in part, that “this part prescribes rules governing the maintenance, preventative maintenance, rebuilding, and alteration of any—(1) aircraft having a U.S. airworthiness certificate...” Repair stations should not receive ratings to maintain noncertificated products or those products not approved under 14 CFR part 21, such as certain military aircraft, engines, or components.

A. Adding or Removing an Article to an Existing Limited Rating.

1) Adding or removing an article to an existing limited rating is an amendment to the rating, not an added rating. This requires the repair station to make application to the FAA, listing by type, make, or model, as appropriate, each article under an existing rating.

2) The Air Agency Certificate (FAA Form 8000-4) will not change. An amendment to the rating will require submission of FAA Form 8310-3, Application for Repair Station Certificate and/or Rating. Once acceptable to the aviation safety inspector (ASI), the application is finalized and operations specifications (OpSpecs) are revised to authorize the addition or removal of an article. For example:

- a) A repair station currently holds a limited airframe rating, limited to Cessna 150 series aircraft, and would like to add Piper PA-28 series aircraft.
- b) The repair station submits FAA Form 8310-3 to the CHDO with the request to add the Piper aircraft (block 2 checked “Other” explaining the reason).
- c) The ASI verifies that the repair station meets all of the applicable requirements for the new make/model/series (M/M/S) aircraft. The Piper PA-28 aircraft is added to the OpSpecs under the limited airframe rating. The Air Agency Certificate would not change. The limitation section in OpSpecs should carefully be reviewed to depict any limitations the repair station is not capable of performing to avoid any unintended authorizations.

B. Adding or Removing a Rating to the Air Agency Certificate.

1) Adding or removing a rating to an Air Agency Certificate requires changing the ratings on the Air Agency Certificate and OpSpecs. This requires the repair station to make application to the FAA, listing by type, make, or model, as appropriate, each article under the new rating(s).

2) The Air Agency Certificate (FAA Form 8000-4) is required to be reissued. The repair station will require submission of FAA Form 8310-3. Once acceptable to the ASI, the application is finalized and the Air Agency Certificate and OpSpecs are issued with the new rating(s) to authorize the addition/removal of article(s). For example:

- a) A repair station currently holds a limited airframe rating and would like to add a limited engine rating.
- b) The repair station submits FAA Form 8310-3 to the CHDO with the request to add the limited engine rating (block 2 checked “Change in Rating,” block 3 checked for the limited engine rating).
- c) The ASI verifies that the repair station meets all of the applicable requirements for adding the engine rating for the new M/M/S engine(s). The Air Agency Certificate will be issued to include the limited engine rating. The date of the issuance in parentheses will follow the added rating. The OpSpecs will be amended to add the limited engine rating with the M/M/S and appropriate limitations. The limitation section in OpSpecs should carefully be reviewed to depict any limitations the repair station is not capable of performing to avoid any unintended authorizations.

NOTE: Air agency Certificates and OpSpecs are legal documents. Language should clearly specify the authorizations, ratings, and/or limitations being approved. When filling out the Air Agency Certificate, there must not be any erasures, strikeovers, or typographical errors. The Air Agency Certificate must be signed by the office manager or a delegated manager.

C. Adding or Removing Articles from a Capability List (CL). A repair station with a limited rating may use a CL as authorized by § 145.215 to identify articles within the scope of ratings of the repair station’s certificate with an established capability for maintenance,

preventive maintenance, or alterations. An application (FAA Form 8310-3) is not required to make revisions to a CL. A CL should identify the level of capability of each article listed (e.g., overhaul, repair, inspect, test, etc.). Once the article or subassembly is identified on the CL, there is no need to list “individual series” contained under the make and model, provided the classification is defined.

1) The ASI will receive a copy of the CL, or any revisions to the list, and will verify the repair station met all applicable regulatory requirements for the self-evaluation. The OpSpecs will indicate the certificate holder is authorized and the articles are covered under the existing ratings and limitations.

2) If the repair station is not appropriately rated, or does not maintain or have the necessary tools, equipment, housing, facilities, and trained personnel to perform the required maintenance on the article(s) listed on the CL, reject the CL list.

a) Initiate a transmittal document indicating the date, document, and revision number of the rejected CL.

b) Return all copies to the applicant with an explanation of discrepancies requiring correction and instructions for resubmitting the documents.

D. Geographic Authorization. A repair station outside the United States may be issued geographic authorization to maintain U.S.-registered aircraft operated under 14 CFR part 121 or 135, where an appropriately rated repair station is not available in that country. Geographic authorization is not a rating; it is authorization in OpSpec B050 which allows line maintenance to be performed outside of the repair station’s domiciled country. CHDO management must concur with the issuance of geographic authorization, and must consider the surveillance responsibilities and resource requirements. Coordination efforts with an International Field Office (IFO) and air carrier CMO with oversight responsibilities in that country should be considered to mitigate resources and travel expenses.

2-1260 CLASS RATINGS UNDER § 145.59. Class ratings are issued to repair stations that can demonstrate capability to maintain a representative number of makes and models of products under this rating. A class rating does not have restrictions for a specific product. If any restrictions or limitations apply, then a limited rating would be issued in lieu of the class rating. Normally, the FAA will not issue a class rating on an initial repair station certification. New applicants should be issued a limited rating until such time the repair station can demonstrate the capability to perform enough work to establish a representative number of makes and models for a class rating.

NOTE: The ASI should exercise discretion when using the term “representative number,” as this will vary with the type of application and the depth and complexity of the work performed. For example, an airframe Class 4 rating would normally be issued when the applicant demonstrates the ability to maintain one of each make in that class (i.e., Boeing 747, Airbus A320, MD-11, and large all-metal construction helicopters).

A. Airframe. Airframe is defined in 14 CFR part 1, § 1.1 as the fuselages, booms, nacelles, cowlings, fairings, airfoil surfaces (including rotors but excluding propellers and rotating airfoils of engines), and landing gear of an aircraft and their accessories and controls. The following class ratings are listed under “Airframe:”

1) Class 1. A composite construction of small aircraft. Gross takeoff weight (GTOW) is 12,500 lbs. or less, of which a major portion of the airframe structure is constructed of composite material, made of at least two types of substances, regardless of kind of covering utilized (e.g., Cirrus, HondaJet, Stemme Glider).

2) Class 2. A composite construction of large aircraft. GTOW is more than 12,500 lbs., of which a major portion of the airframe structure is constructed of composite material, made of at least two types of substances, regardless of kind of covering utilized (e.g., Boeing 787, Airbus A350, Airbus A380, Airbus Helicopters H160).

3) Class 3. An all-metal construction of small aircraft. GTOW is 12,500 lbs. or less, of which a major portion of the airframe structure, regardless of kind of covering utilized, is all-metal construction (e.g., Cessna 172, Piper PA-31, Pilatus PC-12, Cessna 425, Bell 206).

4) Class 4. An all-metal construction of large aircraft. GTOW is more than 12,500 lbs., of which a major portion of the airframe is all metal construction (e.g., Boeing 747, McDonnell Douglas MD-11, Airbus A320, Sikorsky S-70).

Table 2-10. Airframe Ratings and Classifications Under § 145.59

Rating	Class	Definitions and Notes
Airframe	Class 1: Composite construction of small aircraft Class 2: Composite construction of large aircraft Class 3: All-metal construction of small aircraft Class 4: All-metal construction of large aircraft	Airframe ratings are issued to repair stations for the performance of maintenance and alterations on airframes, airframe structure, landing gear, and aircraft systems for which it is rated. An airframe rating is necessary to perform aircraft line or hangar maintenance, and major repairs and alterations on the aircraft. However, it may not maintain or alter a type certificated engine or propeller, radios, or instruments without additional rating(s). Authorized maintenance under an airframe rating: <ol style="list-style-type: none"> 1. The removal, installation, and functional test on installed powerplants, propellers, accessories, radios, and instruments are authorized under an airframe rating. 2. Maintenance (excluding major repair and alterations) expressly permitted by the Aircraft Maintenance Manual (AMM) containing the technical instructions for conducting maintenance on installed powerplants, accessories, propellers, radios, and instruments. 3. Title 14 CFR part 91, § 91.409 inspections of installed engines and propellers expressly permitted by the AMM.

		<ol style="list-style-type: none"> 4. Airframe major repair or alteration in 14 CFR part 43 appendix A. 5. Structural repairs and alterations permitted by the AMM, Structural Repair Manual (SRM), or other FAA-approved data. 6. Maintenance of aircraft components, such as: seats, seatbelts, berths, galley and galley appliances (coffee pots, refrigerators, carts), lavatories, cabinetry, cabin/flight deck interior foam and fabric upholstered parts, passenger convenience equipment, inflight entertainment systems, dividers, bulkheads, curtains, windows, any other interior structure, aircraft composite components, aircraft painting, electrical wiring harnesses and distribution systems, cargo ball mats, cargo floor roller tracks and motorized rollers, floor or side locks and rails, and cargo unit load devices (ULD). <p>NOTE: Additional ratings should be considered if the work performed under an airframe rating is questionable or is not clearly defined in the regulations. AMMs contain limited data for on-wing maintenance to powerplants, propellers, radios, instruments, and accessories, but may not have the required data for maintaining these articles. The Component Maintenance Manual (CMM) or Overhaul Manual may contain the repair data requiring special tooling or special skills normally not associated with an airframe rating. An airframe rating may not be appropriate for the following type of maintenance:</p> <ol style="list-style-type: none"> 1. An accessory, appliance, or component part is removed from the aircraft for maintenance or alteration and internal sections are repaired or replaced using data not associated with the airframe rating. 2. Major repairs or alterations to a powerplant, propeller, appliance, radios, instruments, or accessories under part 43 appendix A require additional ratings. 3. Additional ratings are required for altimeter system and air traffic control (ATC) tests and inspections, as required in §§ 91.411 and 91.413. 4. The aircraft maintenance records are not receiving a maintenance release for that equipment, as required by § 43.9(a), due to the component was removed and was not reinstalled onto the aircraft. 5. Maintaining powerplants, propellers, radios, instruments, or accessories. Maintaining these articles involves data not associated with the AMMs.
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B. Powerplant. Aircraft engine is used or intended to be used for propelling aircraft. It includes turbo-superchargers, magnetos, carburetors, appurtenances, and other accessories necessary for proper operation of the powerplant, but does not include propellers. The following class ratings are listed under “Powerplant:”

- 1) **Class 1.** Reciprocating engines of 400 horsepower or less.
- 2) **Class 2.** Reciprocating engines of more than 400 horsepower.
- 3) **Class 3.** Turbine engines.

NOTE: Although the regulations do not define “powerplant,” they do define “aircraft engine.” The term powerplant and engine are synonymous for this guidance.

Table 2-11. Powerplant Rating and Classifications Under § 145.59

Rating	Class	Definitions and Notes
Powerplant	Class 1: Reciprocating engines of 400 horsepower or less Class 2: Reciprocating engines of more than 400 horsepower Class 3: Turbine engines	A powerplant rating provides the privilege of maintaining and performing maintenance and alterations on powerplants installed or removed from an aircraft, and components needed for its operation within the limitations in its OpSpecs, but not to adjoining airframe or propeller components. Authorized maintenance under a powerplant rating: <ol style="list-style-type: none"> 1. Removal and installation of propellers from an engine, and the removal and installation of accessories from an engine. 2. Opening and closing of access panels, doors, cowling, and nacelles, as needed, to gain access to the powerplant, controls, or accessories. 3. Powerplant major repair or alterations in 14 CFR part 43 appendix A. 4. Maintenance (excluding major repair and alterations) expressly permitted by the Engine Maintenance Manual (EMM) containing the technical instructions for conducting maintenance on accessories and components. 5. Maintenance on removed engine components or parts of an engine where a function or step of a process is performed (such as nondestructive inspection (NDI), plating, heat treatment, welding, plasma spraying, laser shot peening) using FAA-accepted or approved data.

		<p>NOTE: Additional ratings should be considered if the work performed under a powerplant rating is questionable or is not clearly defined in the regulations. A powerplant rating may not be appropriate for the following type of maintenance:</p> <ol style="list-style-type: none"> 1. A repair station will need an airframe rating to remove or install powerplants from an aircraft. 2. An engine accessory or appliance is removed from the engine for maintenance or alteration and internal sections are repaired or replaced using data not associated with the engine rating. The EMM may not have the required data for such repairs. The Component Maintenance Manual (CMM) or Overhaul Manual may contain the repair data requiring special tooling or special skills normally not associated with a powerplant rating. 3. Major repairs and alterations performed on articles that do not fall under powerplant in part 43 appendix A. 4. The powerplant maintenance records are not receiving a maintenance entry for that equipment as required by § 43.9(a) due to the component was removed and was not reinstalled onto the engine. 5. Maintaining or altering airframes, propellers, radios, instruments, or accessories. Maintaining these articles involves data not associated with the EMMs.
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NOTE: When determining the appropriate rating for auxiliary power units (APU), an APU is an accessory by virtue of its function of providing power to the aircraft when the aircraft is not in flight. However, some of the newer models of aircraft also use APUs as powerplants, which further blurs the lines between general aviation (GA) and corporate or commuter aircraft. ASIs should consider those articles used as the primary means of propulsion for these newer aircraft as powerplants, not APUs, and should rate repair stations appropriately. However, repair stations performing maintenance or alterations on APUs used strictly to produce auxiliary power for transport-category aircraft should obtain a limited accessory rating.

C. Propeller. A propeller is a device for propelling an aircraft that has blades on an engine-driven shaft and that, when rotated, produces by its action on the air a thrust approximately perpendicular to its plane of rotation. It includes control components normally supplied by its manufacturer, but does not include main and auxiliary rotors or rotating airfoils of engines. The following class ratings are listed under “Propeller:”

1) **Class 1.** All fixed pitch and ground adjustable propellers of wood, metal, or composite construction.

2) **Class 2.** All other propellers, by make.

NOTE: For a Class 2 propeller rating, there must be a list of propellers by make contained in the OpSpecs.

Table 2-12. Propeller Ratings and Classifications Under § 145.59

Rating	Class	Definitions and Notes
Propeller	Class 1: All fixed pitch and ground adjustable propellers of wood, metal, or composite construction Class 2: All other propellers, by make	A propeller rating provides the privilege of maintaining and performing maintenance and alterations on propellers and propeller components installed or removed from the aircraft, for which it is rated and within the limitations in its OpSpecs, but not to adjoining airframe or powerplant components. A repair station certificated as a propeller, powerplant, or airframe-rated repair station may remove and install propellers and the attaching hardware on an aircraft. Authorized maintenance under a propeller rating: <ol style="list-style-type: none"> 1. Removal and installation of propellers, propeller accessories, and propeller spinner dome from an engine. 2. Opening and closing of access panels, doors, cowling, and nacelles, as needed, to gain access to the propeller controls, or accessories. 3. Propeller major repair or alterations in 14 CFR part 43 appendix A. 4. Balance and testing for proper tracking and pitch-changing mechanisms on aircraft. 5. Repair or replace components applicable for the propeller operation.

D. Radio.

1) **Radio Ratings.** Radio class ratings are categorized under communication, navigation, and radar classes. Modern avionics equipment typically integrates communications and navigation functions into a single appliance. Also, radar equipment or a radio that operates using pulse technology also serves communication and/or navigation functions. The combination of functionality and operations of these articles may require the repair station to attain a rating for all three classes, depending on the complexity of the articles being maintained, and upon determining the repair station can maintain a representative amount of articles within each class.

2) **Radio Class Ratings.** The following class ratings are listed under “Radio:”

- a) Class 1: Communication equipment.
- b) Class 2: Navigational equipment.
- c) Class 3: Radar equipment.

Table 2-13. Radio Ratings and Classifications Under § 145.59

Rating	Class	Definitions and Notes
Radio	Class 1: Communication equipment	Radio transmitting and/or receiving equipment used in an aircraft to send or receive communications in flight, regardless of carrier frequency or type modulation used. This equipment includes auxiliary and related aircraft inter-phone systems, amplifier systems, electrical or electronic inter-crew signaling devices, and similar equipment. Does not include equipment for navigating or aiding navigation of aircraft, equipment used for measuring or terrain clearance, other measuring equipment operated on radio or radar principles, or mechanical, electrical, gyroscopic, or electronic instruments that are a part of communications radio equipment.
	Class 2: Navigational equipment	A radio system used in an aircraft for en route or approach navigation. This does not include equipment operated on pulsed radio frequency principals, or equipment used for measuring altitude or terrain clearance.
	Class 3: Radar equipment	An aircraft electronic system operated on radar or pulsed radio frequency principles.
<p>NOTE: A radio-rated repair station may remove or install complete communication and navigation systems and equipment onto an airframe. This includes tests, inspections, repairs, and alterations associated with aircraft wiring, antennas, connectors, relays, radio instruments, painting and refinishing equipment, and marking calibration or other information on panels and components. Major alteration and repairs of radios are authorized. Installation requiring alterations to the aircraft structure must be performed, supervised, and inspected by qualified personnel with airframe structure experience that can provide approval for return to service of the aircraft after the repairs or alterations. The fabrication of tuning shafts, brackets, cable assemblies, and other similar components used in radios or aircraft radio installations and prepare Weight and Balance (W&B) reports may also be authorized under the radio rating.</p>		

E. Instrument.

1) **Instrument Ratings.** The instrument rating is divided into four classes (mechanical, electrical, gyroscopic, and electronic) based on the article’s general principles of operation. Multiple class ratings may be necessary to perform repairs on these articles.

NOTE: ASIs must verify that a repair station obtains the appropriate supporting requirements for the capabilities it is requesting.

2) **Instrument Class Ratings.** The following class ratings are listed under “Instrument:”

- a) Class 1: Mechanical.
- b) Class 2: Electrical.
- c) Class 3: Gyroscopic.
- d) Class 4: Electronic.

Table 2-14. Instrument Ratings and Classifications Under § 145.59

Rating	Class	Definitions and Notes
Instrument	Class 1: Mechanical	A diaphragm, bourdon tube, aneroid, optical, or mechanically-driven centrifugal instrument used on aircraft to operate aircraft, including tachometers, airspeed indicators, pressure gauges’ drift sights, magnetic compasses, altimeters, or similar mechanical instruments.
	Class 2: Electrical	Self-synchronous and electrical indicating instruments and systems, including remote indicating instruments, cylinder head temperature gauges, or similar electrical instruments.
	Class 3: Gyroscopic	An instrument or system using gyroscopic principles and motivated by air pressure or electrical energy, including automatic pilot control units, turn and bank indicators, directional gyros, and their parts and flux gate and gyrosyn compasses.
	Class 4: Electronic	An instrument whose operation depends on electron tubes, transistors, or similar devices, including capacitance type quantity gauges, system amplifiers, and engine analyzers.
NOTE: An instrument-rated repair station may maintain, inspect, test, calibrate, and alter instruments, including removal and installation of instruments onto an airframe. Major alteration and repairs of instruments are authorized. The function of installation may include fabrication of instrument panels and other installation structural components. Installation requiring alterations to the aircraft structure must be performed, supervised, and inspected by qualified personnel with airframe structural experience that can provide approval for return to service of the aircraft after the structural repairs or alterations.		

Table 2-15. Authorized Repair Station Ratings for §§ 91.411 and 91.413 Testing

To perform air traffic control (ATC) transponder testing and inspections as described in 14 CFR part 43 appendix F or altimeter system tests and inspections as described in part 43 appendix E, authorized repair station ratings for 14 CFR part 91, §§ 91.411 and 91.413 testing would require different ratings for the following conditions:	
Condition	Rating
Part 91, § 91.411	
Component removal or installation.	Instrument rating Class 1, or Limited instrument rating of a particular make and model (unless limited from this function), or Airframe rating appropriate to airplane or helicopter.
Integrated system tested on aircraft without removal or installation, normal operation of system without disassembly of aircraft.	Instrument rating Class 1, or Limited instrument rating appropriate to the make and model of appliance to be tested, or Limited rating appropriate to the test to be performed, or Airframe rating appropriate to airplane or helicopter to be tested.
Specific components tested on the bench (may not satisfy all requirements).	Instrument rating Class 1, or Limited instrument rating appropriate to the make and model of appliance to be tested, or Airframe rating appropriate to airplane or helicopter tested.
Part 91, § 91.413	
Component removal or installation.	Radio rating Class 3, or Limited Radio rating appropriate to the appliance (unless limited from this function), or Airframe rating appropriate to airplane or helicopter tested.
Integrated system tested on aircraft without removal or installation, normal operation of system without disassembly of aircraft.	Radio rating Class 3, or Limited radio rating appropriate to the make and model of transponder to be tested, or Limited rating appropriate to the test to be performed.
Specific components tested on the bench (may not satisfy all requirements).	Radio rating Class 3, or Limited radio rating of a particular make and model.

F. Accessories.

1) Accessory Ratings. An accessory is an appliance, part, mechanism, equipment, or apparatus that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, aircraft engine, or propeller. The accessory rating is divided into mechanical, electrical, and electronic classes, based on an article's principle of operation. The combination of functionality and operations of these articles may require the repair station to attain a rating for all three classes, depending on the complexity of the article.

NOTE: Because night vision goggles (NVG) are no longer novel, unique, or unusual in application, and more repair stations perform and seek to perform this type of maintenance, it is no longer appropriate to issue a limited rating for specialized services for future NVG ratings. Since NVGs are certificated as appliances (and they meet the requirement of a Class 3 accessory), the FAA should issue a Class 3 accessory or limited accessory rating, as appropriate, to repair stations that apply for a rating and that meet the requirements of part 145.

2) Accessory Class Ratings. The following class ratings are listed under "Accessory:"

- a) Class 1: Mechanical.
- b) Class 2: Electrical.
- c) Class 3: Electronic.

Table 2-16. Accessory Ratings and Classifications Under § 145.59

Rating	Class	Definitions and Notes
Accessory	Class 1: Mechanical	A mechanical accessory that depends on friction, hydraulics, mechanical linkage, or pneumatic pressure for operation, including aircraft wheel brakes, mechanically-driven pumps, carburetors, aircraft wheel assemblies, shock absorber struts, and hydraulic servo units.
	Class 2: Electrical	An electrical accessory that depends on electrical energy for its operation, and a generator, including starters, voltage regulators, electric motors, electrically-driven fuel pumps, magnetos, or similar electrical accessories.
	Class 3: Electronic	An electronic accessory that depends on the use of an electron tube transistor, or similar device, including supercharger, temperature, air conditioning controls, or similar electronic controls.

NOTE: An accessory rated repair station may perform maintenance on accessories removed from an aircraft, engine, or propeller for which it is rated and within the limitations in its OpSpecs.

2-1261 LIMITED RATINGS UNDER § 145.61.

A. Limited Rating Issuance. Repair stations are issued limited ratings for the performance of maintenance and alterations on particular makes and models of airframes, powerplants, propellers, radios, instruments, accessories, and/or parts thereof; or if it performs only specific maintenance requiring equipment and skills not ordinarily performed under other repair station ratings. Such a rating may be limited to a specific model aircraft, engine, constituent part, or to any number of parts made by a particular manufacturer.

NOTE: Review the notes and authorized maintenance in paragraph 2-1260 for the general application of a rating and type of work authorized.

B. Limited Rating Applicability. Limited ratings listed in § 145.61 are limited to not only a particular article's make or model, but may also be limited to certain maintenance functions. In this case, the OpSpecs would identify the process or specification and any additional limitations, but the make/model column could contain "all models." The limitations column would identify any limitations to its maintenance capabilities, such as, "Limited to plasma spray operations on Pratt and Whitney series turbine blades." This rating allows the repair station to plasma spray all Pratt and Whitney turbine blades, regardless of the Pratt and Whitney model.

C. Limited Rating Types. The FAA may only issue the following limited ratings:

- Airframes of a particular make and model;
- Engines of a particular make and model;
- Propellers of a particular make and model;
- Instruments of a particular make and model;
- Radio equipment of a particular make and model;
- Accessories of a particular make and model;
- Landing gear components;
- Floats, by make;
- Nondestructive inspection (NDI), testing, and processing;
- Emergency equipment;
- Rotor blades, by make and model;
- Aircraft fabric work; and
- Any other purpose for which the FAA finds the applicant's request is appropriate.

NOTE: The limited rating, "any other purpose for which the FAA finds the applicant's request is appropriate," is intended to be issued for repair stations that wish to perform maintenance on items and other component parts that do not necessarily fit into one of the other 12 limited ratings. This action provides future and current certificate holders another option for ratings that will better define the types of articles the repair station may perform maintenance on. It will reduce the number of limited airframe ratings issued for component part work for which an airframe rating is not needed. Similarly, articles could be provided for by the limited "other" category. These could include items such as: aircraft interiors,

upholstering, serving carts, cabinets, unit load devices (ULD), cargo pallets or containers, coffee makers, and litters; and specifications such as testing in accordance with part 43 appendix F.

1) Limited Specialized Service. Limited specialized service ratings are issued for a special maintenance function when the function is performed in accordance with a specification approved by the FAA. A specialized service rating is not appropriate if the technical data is explicitly listed in the article's manufacturer's maintenance manuals, instructions for continued airworthiness (ICA), or air carrier's Continuous Airworthiness Maintenance Program (CAMP). The approval for return to service can be accomplished under the article's overall rating (e.g., airframe, powerplant, accessory, etc.). The specialized service rating is required when the technical data needs to be FAA approved, instructions don't exist, or the rating is not appropriate for the maintenance performed on the article. The OpSpecs must include the specifications used by the repair station to perform that service in accordance with § 145.61(c). No function of a limited rating for specialized service may be contracted out. Per § 145.61(c), "The specification may be—

- (1) A civil or military specification currently used by industry and approved by the FAA, or
- (2) A specification developed by the applicant and approved by the FAA."

NOTE: The repair station may seek a limited specialized service rating using technical data such as civil or Military Specifications (MIL-SPEC) currently used by industry. Many civil and MIL-SPECs are generic and may not be sufficient to repair complex articles used in the aviation industry today. For example, they may lack critical min/max dimensional serviceable limitations to ensure airworthiness of the product being inspected or repaired. The specification used for a repair must be sufficient to return an article to its original or properly altered condition. To ensure the data is adequate for the rating sought, the ASI should seek concurrence from the Aircraft or Engine Certification Office (ACO/ECO) before authorizing the rating in OpSpecs. The ASI may contact the Aircraft Evaluation Group (AEG) who will coordinate assistance with the correct ACO/ECO branch.

2) Limited Specialized Service Requirements. The limited specialized service rating would require a repair station to have the housing, facilities, equipment, tools, trained personnel, and data to perform the process on an article. The specification on the OpSpecs would set forth the minimum standards for performing the generic process (specialized service). For example, the specification would include an explanation of the housing, facilities, equipment, tools, trained personnel, and data necessary for the overall process. The applicable manufacturer's maintenance manual, air carrier manual, or other FAA-accepted or FAA-approved data would define the specific parameters associated with performing the process on the particular aviation article.

3) Unusual and Unique Processes. At the onset of the performance of a new, unusual, and/or unique process, a limited specialized service rating may be appropriate if the repair station performs the process as described in subparagraph 2-1261C1). The process may eventually become common and more appropriately identified by a rating other than a limited

rating for specialized services. In these cases, future repair station ratings will be issued in the more appropriate class. Ratings for currently rated repair stations can only be changed by application from the repair station or as a result of enforcement action. A repair station with a limited rating for specialized services in this circumstance should be advised of the change in classification. The FAA may recommend to the repair station that they apply for a change of rating.

D. Limited Rating Identification. OpSpecs should identify the manufacturer and the make/model. In certain rare occasions, the term “all” may be appropriate when identifying the make/model. When using “all” to denote the make/model, the principal inspector (PI) must use good judgment and carefully consider potential unintended consequences. If the inspector is not careful, use of the word “all” could inadvertently authorize work beyond the desired intent. For example, use of the word “all” may seem appropriate to authorize structural repairs on all models of aircraft manufactured by Mooney International Corporation. However, unless the PI excludes several early production models, this authorization may inadvertently allow structural repairs on both wood and metal primary structures. The use of “all” provides that the rating will include any future products that may be developed that fall within the listed limitation as well as all past products.

NOTE: Limited ratings may incorporate a CL if the repair station has elected to employ one. For example, a repair station without a CL might receive a limited airframe rating for the performance of transponder testing on a specific make/model aircraft, in accordance with part 43 appendix F. A repair station that employs a CL may list the transponder make/model on the CL. For the performance of transponder testing on a specific make/model aircraft, the aircraft must be listed on OpSpecs.

E. Limited Engine Rating. Repair stations require an appropriate limited engine rating when performing maintenance or alterations on engines. Inspections of engines performed under 14 CFR part 91, § 91.409 and removal and replacement of engines and components installed on an aircraft may be performed under an appropriate airframe rating as described in the airframe maintenance manuals. An engine requiring repair or alteration as a result of the aircraft inspection would require a limited engine rating.

NOTE: Because maintenance procedures, tools, equipment, and technical data may differ between manufacturers, ASIs must verify a repair station obtains the appropriate supporting requirements for the capabilities it is requesting.

F. Limited Rating Limitations. The current OpSpecs allow the proper identification of the limitation of makes and models, as well as maintenance functions in the “Limitations” section. Limitations must not be vague and undefined. It is important that the repair station clearly understand its privileges and any associated limitations. When issuing a limited rating, the PI must adequately describe the scope of the rating and any associated limitations in a clearly understood manner. Vague or misunderstood OpSpecs could lead to operations outside the intended scope of the certificate.

1) When necessary, use of the limitations column may further limit the intended scope of the rating. The PI should use good judgment and carefully consider possible unintended consequences of not specifying limitations. If painting, for instance, is the only maintenance function a repair station intends to perform, the limitation should read, “Limited to painting airframe structure and components on Boeing 737 series aircraft,” or similar language. If the repair station’s limitation is performing maintenance on only a certain part of the airframe, that language should specify the manufacturer, make, and model of the component, and describe exactly what the repair station is limited to do.

NOTE: Painting of aircraft may also involve other maintenance functions such as balancing of flight controls. The repair station should have the ability or be authorized to contract out those functions.

2) Powerplant maintenance has also found numerous “niche” businesses that may include the performance of a specific maintenance function on a wide variety of powerplants. In this case, the OpSpecs would identify the manufacturer, but the make/model column could contain “all models” instead of identifying each model. The limitations column would identify any limitations to its maintenance capabilities, such as, “Limited to plasma spray operations on Pratt and Whitney series turbine blades.” This rating allows the repair station to plasma spray all Pratt and Whitney turbine blades, regardless of the powerplant model the blades were from. The OpSpecs would also need to list additional manufacturers if the repair station has the technical data, tools, and equipment to perform this maintenance function on those additional powerplants.

2-1262 EXPERIMENTAL AIRCRAFT. Occasionally repair stations request ratings or additions to their OpSpecs to perform work on certain experimental aircraft (e.g., amateur built, Unmanned Aircraft Systems (UAS), Optionally Piloted Aircraft (OPA), or experimental light-sport) or other products to which part 43 does not apply.

A. Part 43 Applicable Aircraft. Part 43 provides that it applies only to certain products. Those products are:

- Aircraft having a U.S. airworthiness certificate (with certain exceptions);
- Foreign-registered civil aircraft used in common carriage or carriage of mail under part 121 or 135; and
- Airframes, aircraft engines, propellers, appliances, and component parts of the above aircraft.

B. Part 43 Non-Applicable Aircraft. Part 43 does not apply to any aircraft for which the FAA has issued an experimental certificate:

- Unless a different kind of certificate was previously issued to that aircraft; or
- Under the provisions of part 21, § 21.191(i)(3) and the aircraft was previously issued a special light-sport certificate under § 21.190.

C. Part 145 Repair Station Rules. The applicability of the repair station rule (refer to § 145.1) is clear that part 145 contains the rules a repair station must follow related to its

performance of maintenance, preventive maintenance, or alterations of an aircraft, airframe, aircraft engine, propeller, appliance, or component part to which part 43 applies.

D. Part 43 Non-Applicable Product Requests. The FAA office receiving a request to add a product to which part 43 does not apply, to a certificate (rating, OpSpecs, CL, or FAA-approved maintenance function) will advise the repair station making this request that repair station ratings are not issued for products to which part 43 does not apply and those products will not be added. This includes any aircraft identified under § 43.1(b) as having been issued an experimental airworthiness certificate unless that aircraft was previously issued a different kind of airworthiness certificate. It would be inappropriate to issue ratings to a repair station for the performance of maintenance on a product to which part 43 (and therefore part 145) does not apply.

1) When a part 145 repair station performs maintenance on a component part (article) or aircraft that is not FAA type certificated, or does not have a U.S. airworthiness certificate (articles not under the FAA's jurisdiction), the repair station is not exercising the privileges of its FAA-issued repair station certificate. Those activities are not governed by maintenance or repair station regulations.

2) No current regulation in part 145 prohibits a repair station from completing maintenance on articles not under the FAA's jurisdiction and providing approval for return to service by issuing an FAA Form 8130-3, or any other document, to record activities that are not regulated by the FAA.

E. Experimental Aircraft Operating Limitation Provisions. Experimental aircraft operating limitations may contain a provision that certain maintenance or inspections may be performed by a certificated repair station. A repair station may perform such work in accordance with the provisions of the limitations issued for the aircraft. Any work performed by a repair station in accordance with the limitation issued to the aircraft may satisfy the requirements of the limitations, but the repair station is not exercising certificate privilege when it applies its certificate number to any work for which part 43 does not apply.

NOTE: The maintenance provider may release an aircraft that holds an experimental certificate for aircraft and/or a UAS, upon completion of maintenance based on the owner's written request and limitations specification provided, but are not exercising the privileges of their certificate when they return to service the experimental aircraft. Additionally, the holder of the mechanic certificate may perform maintenance per owner request and in accordance with the limitations issued for the aircraft.

2-1263 COORDINATION REQUIREMENTS. This task requires coordination among the ASIs (Airworthiness) and may require coordination with multiple offices.

RESERVED. Paragraphs 2-1264 through 2-1269.