ORAL ARGUMENT NOT YET SCHEDULED

No. 18-1160

IN THE UNITED STATES COURT OF APPEALS

FOR THE DISTRICT OF COLUMBIA CIRCUIT

KORNITZKY GROUP, LLC
d/b/a AeroBearings, LLC

Petitioner,

v.

DANIEL K. ELWELL,
ACTING ADMINISTRATOR
Federal Aviation Administration,

Respondent

ON PETITION FOR REVIEW OF AN ORDER OF
THE NATIONAL TRANSPORTATION SAFETY BOARD

BRIEF OF AMICUS CURIAE

AERONAUTICAL REPAIR STATION ASSOCIATION IN SUPPORT OF PETITIONER AND REVERSAL

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Date: October 22, 2018

CERTIFICATE AS TO PARTIES, RULINGS UNDER REVIEW, RELATED CASES AND CORPORATE DISCLOSURE

A. Parties. The parties involved in the proceeding below, before the National Transportation Safety Board, included Kornitzky Group, LLC d/b/a Aerobearings, LLC (Aerobearings) and the Federal Aviation Administration (FAA). Before this Court, Aerobearings is the Petitioner and the FAA is the Respondent.

B. Rulings Under Review. This case is based on a petition filed by Aerobearings for review of an order of the National Transportation Safety Board. The order that is to be reviewed is Administrator v. Kornitzky Group, LLC, NTSB Order No. EA-5840, served May 11, 2018.

C. Related Cases. Amicus Curiae adopts the reference to related cases in Petitioner's brief.

D. Corporate Disclosure. Pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure, the Aeronautical Repair Station Association certifies that it is a non-profit corporation with no parent corporation or publicly traded stock.

/s/ Christian A. Klein
Christian A. Klein

Date: October 22, 2018

STATEMENT REGARDING CONSENT TO FILE, AUTHORSHIP AND MONETARY CONTRIBUTIONS

A. Consent to File. Pursuant to Federal Rule of Appellate Procedure 29(a)(2) and Circuit Rule 29(a)(2), amicus curiae certifies that all parties in this case have consented to the filing of this brief.

B. Authorship and Monetary Contributions. Pursuant to Federal Rule of Appellate Procedure 29(a)(4)(E), amicus curiae certifies that no party or party's counsel authored this brief in whole or in part, that no party or party's counsel provided any money that was intended to fund the preparation or submission of this brief, and that no party or person—other than the amicus curiae, its members, or its counsel—contributed money that was intended to fund the preparation or submission of this brief.

/s/ Christian A. Klein
Christian A. Klein

Date: October 22, 2018

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GLOSSARY

ARSA	Aeronautical Repair Station Association
FAA	Federal Aviation Administration
NTSB	National Transportation Safety Board
RCCB	FAA's Regulatory Consistency Communication Board

IDENTITY, INTEREST OF AMICUS CURIAE AND SUMMARY OF ARGUMENT

The Aeronautical Repair Station Association (ARSA or the Association) is a non-profit trade association representing the interests of more than 400 companies from every sector of the global civil aviation industry. ARSA's membership includes independent repair stations, maintenance organizations authorized by type and production certificate holders, aircraft owners and operators, manufacturers, and other companies related to, or having an interest in, the design, production, maintenance, preventive maintenance, or alteration of civil aviation products. Since the Association's founding in 1984, ARSA has promoted aviation safety by emphasizing the importance of the aviation safety regulations and the responsibility of certificate holders to ensure aviation safety before international regulatory authorities, legislative bodies, and the courts.

The instant case is of particular interest to ARSA because it has the potential to change the standards set forth in the plain language of 14 C.F.R. parts 43 and 145 as well as longstanding guidance issued by the Federal Aviation Administration (FAA) that apply to maintenance records developed and retained by repair stations and other maintenance providers. Additionally, the decision confuses the meaning and application of the "technical data" that must be available when maintenance, preventive maintenance and alteration actions are being performed.

The reasoning of the National Transportation Safety Board (NTSB) threatens to upend the carefully crafted regulatory scheme implemented by the FAA and international civil aviation safety authorities around the world. ARSA submits this brief to explain the regulatory complexities involved so the Court may make an informed determination of how the law should apply in this case.

All cites are contained in footnotes to ensure the narrative remains uninterrupted.

(I) SUMMARY OF ARGUMENT

The crux of the falsification finding, and thus the emergency revocation of the Petitioner's air agency certificate, is that information was omitted from maintenance release documents. We submit that conclusion is incorrect as a matter of fact and law. A maintenance release is a certification that the work performed was accomplished correctly; it is not a complete maintenance record.

With respect to the need for an air agency to have technical data available for work performed, the NTSB's Order uses the term incorrectly by associating it with the information showing that equipment and tooling was appropriate. Thus, an incorrect conclusion was reached as to the procedural requirements of 14 C.F.R. part 145.

(II) THE FAA'S REGULATORY FRAMEWORK

(A) Persons Authorized to Perform Maintenance, Preventive Maintenance and Alterations and the Standards for Performing Work

The FAA controls the design, production, operation and maintenance of aircraft and installed products and articles. It does so by issuing aviation safety regulations contained, for the most part, in Title 14 of the Code of Federal Regulations; it makes reasonable interpretations of its requirements by issuing orders to its workforce, advisory circulars to the public and legal interpretations on particular questions (collectively referred to as "guidance"). Advisory circulars

contain one way, but not the only way, to establish compliance with the applicable safety rules.

In order to perform maintenance,[1] preventive maintenance[2] or alterations on aircraft with certificates of airworthiness issued by the FAA, all persons[3] must follow the rules and standards contained in 14 C.F.R. part 43.[4] Only persons holding certain certificates may supervise maintenance, preventive maintenance and alterations and issue approvals for return to service for the work performed.[5]

(B) Repair Stations are Authorized to Perform Maintenance, Preventive Maintenance and Alterations

Under 14 C.F.R. § 43.3(e), a repair station is authorized to perform maintenance, preventive maintenance and alteration in accordance with 14 C.F.R. part 145. Air agency certificates and operations specifications are issued in accordance with 14 C.F.R. part 145 and associated guidance.

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[1] 14 C.F.R. § 1.1 defines maintenance to mean "inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance."

[2] 14 C.F.R. § 1.1 defines preventive maintenance to mean "simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations."

[3] 14 C.F.R. § 1.1 defines person to mean "an individual, firm, partnership, corporation, company, association, joint-stock association, or governmental entity. It includes a trustee, receiver, assignee, or similar representative of any of them."

[4] 14 C.F.R. § 43.1.

[5] 14 C.F.R. § 43.3, 43.5 and 43.7.

An applicant for, and holder of, an air agency certificate must show that it has adequate housing, facilities, equipment, tools, materials, trained personnel, and maintenance data pertinent to the rating it holds or for which it has applied.[6] In addition, the applicant for a 14 C.F.R. part 145 air agency certificate must submit and thereafter maintain a repair station manual,[7] a quality control manual[8] and a training program manual[9] explaining the system and procedures it will follow. The repair station and quality control manual must be acceptable to the FAA and the training program manual must be approved by the agency.

The extent and nature of work performed by repair stations is so highly regulated that each facility may only perform certain maintenance functions on specific kinds of articles. The FAA recognizes the specialty of a particular repair station by issuing its "rating."[10] The FAA further limits, or defines, a repair station's

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[6] 14 C.F.R. §§ 145.103(a) and 145.109.
[7] 14 C.F.R. §§ 145.207 and 145.209.
[8] 14 C.F.R. § 145.211.
[9] 14 C.F.R. § 145.163(a).
[10] Ratings are issued for classes of articles; limited ratings are issued for specific articles or to perform specialized services. Specialized service ratings are not limited to processes; all ratings relate to articles. 14 C.F.R. §§ 145.3(b), 145.59, 145.61.

privileges by issuing operations specifications.[11] These specifications describe the manner in which the certificate holder will exercise the privileges of its certificate.[12]

After the air agency certificate is issued, the holder must ensure it follows the systems and procedures in its acceptable or approved manuals and that it maintains the required housing, facilities, equipment, tools, material, and trained personnel adequate for the issuance of the certificate, ratings and any limitations included in its operations specifications.

The FAA's regulatory framework requires the repair station to define its operations in the referenced manuals because the performance rules in 14 C.F.R. part 43 require certificate holders to complete functions in accordance with methods, techniques and practices acceptable to the FAA (collectively referred to as "maintenance data").[13] Repair stations must have maintenance data necessary to perform maintenance, preventive maintenance and alteration on the articles for which they are rated.[14]

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[11] 14 C.F.R. §145.53(a).

[12] 14 C.F.R. §§ 145.5(a), 145.53(a); *see also* FAA Order 8900.1, Flight Standards Information System, vol. 3, ch. 18, § 1 (explaining the issuance of operations specifications).

[13] 14 C.F.R. § 43.13(a).

[14] Examples of technical data repair stations must have on hand include airworthiness directives, instructions for continued airworthiness, standard practice manuals, and service bulletins. 14 C.F.R. §§ 145.109(d) and 145.201(b)-(c).

The performance standard further mandates that certificate holders use the tools, materials and equipment necessary to return the article to at least its original or properly altered (i.e., airworthy) condition with respect to the work performed. If special equipment or test apparatus are recommended by the manufacturer of an article, the person must use that equipment or apparatus or its equivalent acceptable to the Administrator.[15] For repair stations, "[t]he equipment, tools, and material must be those recommended by the manufacturer of the article or must be at least equivalent to those recommended by the manufacturer and acceptable to the FAA.[16]

The regulations are silent as to what makes equipment "special" or "acceptable to" the agency; however, the equipment or tooling must operate in the same fashion and achieve the same results as that recommended by the manufacturer.

If the manufacturer does not recommend equipment or test apparatus, the general requirements of 14 C.F.R. § 43.13(a) would apply in that the use of such equipment or apparatus must return the article to at least its original (or properly altered) condition. Once the showing is made that the equipment or apparatus achieves the appropriate result, there are no regulations that require retention of the data or recording of the demonstration used to make the showing.

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[15] 14 C.F.R. § 43.13(b).
[16] 14 C.F.R. § 145.109(c).

(C) 14 C.F.R. § 43.9 Maintenance Record Requirements

After maintenance, preventive maintenance and/or alteration has been accomplished, persons must make a maintenance record before issuing an approval for return to service of the work performed.[17] The maintenance record includes four elements.

The first is a description (or reference to data acceptable to the Administrator) of the work performed.[18] It has been acceptable to the FAA for this description to be short and simple since almost every maintenance process involves numerous steps. A decision of the agency's Regulatory Consistency Communication Board (RCCB)[19] issued on the subject of maintenance records determined that the description of work performed did not even have to include the revision date of the maintenance manual used by the repair station. In other words, a mere reference to the maintenance data used was sufficient to comply with 14 C.F.R. § 43.9(a).[20]

The second element is the date the work was completed.[21] For a repair station, it means the date upon which it performed a final inspection and an authorized

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[17] 14 C.F.R. §§ 43.5 and 43.7.

[18] 14 C.F.R. § 43.9(a)(1).

[19] The RCCB was created to "provide resolutions to complex issues involving inconsistencies brought forward by internal and external stakeholders." It consists of representatives from three divisions of the agency, including its legal department. *See* FAA Order 8000.70.

[20] *See* RCCB Decision: Revision Dates on Maintenance Manuals.

[21] 14 C.F.R. § 43.9(a)(2).

person signed off on that inspection and issued the approval for return to service (i.e., the "maintenance release").[22]

The third element is the name of all persons performing any maintenance action, if other than the person approving the work for return to service.[23] This element can result in voluminous entries and is the reason the agency has created the logical distinction between a complete maintenance record and a maintenance release (i.e., the approval for return to service).

14 C.F.R. part 43 applies to "each person" performing any maintenance, preventive maintenance or alteration on an aircraft having a certificate of airworthiness.[24] Since person includes individuals as well as corporate entities, the "name" of each must be contained in the complete maintenance record.

In the case of repair stations, the persons would include every employee who performed any step in the work scope, any contractor used by a repair station and the individuals working for that contractor, and subcontractors at any tier or level. Using the example of the disassembly, cleaning, inspection, repair, reassembly and

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[22] 14 C.F.R. § 145.213(b) requires that the repair station conduct a final inspection before "certify[ing] on an article's maintenance release that the article is airworthy with respect to the maintenance, preventive maintenance, or alterations performed".

[23] 14 C.F.R. § 43.9(a)(3).

[24] 14 C.F.R. § 43.1.

testing (overhaul)[25] of an aircraft engine, the complete maintenance record must include the name of each person performing any step in the process and it may also include the inspector or supervisor that verified the step or process—resulting in multiple boxes or three-ring binders of information. Similarly, when an aircraft is undergoing heavy (i.e., extensive) maintenance and alteration in a hangar (where it may be worked on for weeks or months) the records will be even more voluminous, since the process can involve literally hundreds of persons working in multiple shifts throughout the day, as well as contractors and subcontractors and their employees.

The fourth element of a maintenance record is the certification of the person approving the work for return to service that it was performed satisfactorily and is airworthy with respect to the maintenance, preventive maintenance or alteration accomplished.[26] This is the "approval for return to service."

The agency recognizes maintenance releases that contain a simple statement of the work accomplished (e.g., overhaul), the date the work was completed along with the signature of the person authorized by 14 C.F.R. § 43.7 to approve the work for return to service and a reference to the complete maintenance record. The maintenance release can be on a "yellow or serviceable tag", which was the standard

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[25] 14 C.F.R. § 43.2(a).
[26] 14 C.F.R. § 43.9(a)(4).

for years and is still used by the industry.[27] The yellow tag only has room for a few words describing the work performed.

The agency understands and accepts that a maintenance release is not the complete record required by 14 C.F.R. § 43.9. In a Notice of Proposed Rulemaking for 14 C.F.R. part 145, the agency discussed the difference between the detailed records a repair station must create and maintain and a maintenance release.[28] It proposed to define maintenance release as "a repair station document signed by an authorized repair station representative that states that the article worked on is approved for return to service for the maintenance, preventive maintenance, or alteration performed."[29] In its final rule, the FAA "generally agree[d] that terms not unique to part 145, such as 'approve for return to service,' 'approved data', 'certificated', 'maintenance release' and 'overhauled,' should not be defined in part 145."[30]

The FAA's guidance to its workforce is replete with notes that caution aviation safety inspectors to ensure that operators, having different recordkeeping

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[27] Numerous examples of these documents can be found online by searching "FAA yellow tag".

[28] FAA; Part 145 Review: Repair Stations, 64 Fed. Reg. 33,142 (June 21, 1999) at 33,150 - 33,151, 33,158.

[29] *Id.* at 33,164.

[30] FAA; Repair Stations, 66 Fed. Reg. 41,088 (Aug. 6, 2001) (codified at 14 C.F.R. Pts. 11, 91, 121, 135 and 145) at 41,093.

requirements than maintainers, do not misinterpret the "return to service tag" as the "overhaul record".[31] The warnings are given because both the agency and the industry know that the "return to service tag" includes a reference to a work order containing all the documents making up the complete "overhaul record," which can be requested by the owner.

Similarly, the FAA's Advisory Circular describing acceptable methods for developing repair station and quality control manuals references the use of work orders which consist of the maintenance release and other maintenance and inspection forms used to record the accomplishment of the complete work scope.[32]

With the advent of bilateral agreements, many repair stations use the FAA Form 8130-3 as the maintenance release, which approves the described work for return to service, because it is recognized by international civil aviation authorities.[33] The form's title, "Authorized *Release* Certificate," makes clear that its purpose is to satisfy the maintenance release requirements.[34] (Emphasis added.)

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[31] For examples, see Order 8900.1, Volume 6, Chapter 1, Section 3, ¶ 6-66; Volume 6, Chapter 2, Section 36, ¶ 6-990, Volume 6, Chapter 6, Section 5, ¶ 6-6-5-5.

[32] Advisory Circular 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals, ¶¶ B.7.2 and 5.11.6. (for work orders and work packages) and ¶ 5.11.7 (for maintenance releases).

[33] FAA Order 8130-21 describes the completion and use of FAA Form 8130-3 as an "[a]pproval for return to service of products and articles" (see page 1-1, ¶ 1-1b and Chapter 3).

[34] 14 C.F.R. §§ 43.9(a)(4) and 145.219(b).

Persons installing components on higher assemblies and in aircraft, aircraft engines and propellers are aware of the fact that the FAA Form 8130-3 may not contain enough information by the language in the "User/Installer Responsibilities" block, which states:

> It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.
>
> Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1.
>
> Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

(D) Repair Stations Must Prepare and Follow Manual(s) with Required Content

The regulations are clear that repair stations are not only required to prepare repair station and quality control manuals, but must also follow them.[35]

(1) Maintenance and Inspection Records

The repair station manual's systems and procedures must include "[a] description of the required records and the recordkeeping system used to obtain,

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[35] 14 C.F.R. §§ 145.207(a) and 145.211(a)-(b).

store, and retrieve the required records."[36] Among other things, the repair station must "retain records in English that demonstrate compliance with the requirements of part 43."[37] The maintenance record requirements of 14 C.F.R. part 43 are described in detail above.[38]

To comply with 14 C.F.R. part 43 record requirements, the repair station's quality control manual must contain "[a] sample of the inspection and maintenance forms and instructions for completing such forms or a reference to a separate forms manual."[39] When completed, the required forms will include the details that ensure compliance with all elements of 14 C.F.R. § 43.9. If the repair station uses an FAA Form 8130-3 as the maintenance release mandated by 14 C.F.R. § 145.219(b), the inspection and maintenance forms in the work order referenced in Block 5 is provided to the owner of the article when requested or required.

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[36] 14 C.F.R. § 145.209(i).

[37] 14 C.F.R. § 145.219(a).

[38] The only other records required by 14 C.F.R. part 43 are mandated under 14 C.F.R. § 43.11 for inspections "performed in accordance with part 91, 125, § 135.411(a)(1), or § 135.419", which are not relevant to this matter.

[39] 14 C.F.R. § 145.211(c)(3).

(2) Repair Station Technical Data

A repair station's quality control manual must describe the system and procedures for "[e]stablishing and maintaining current technical data for maintaining articles."[40]

The word "data" and the term "technical data" are used numerous times in the regulations; it is important to understand the use in each context.

"Technical data" required to perform maintenance, preventive maintenance or alteration are the methods, techniques and practices, i.e., the how-to instructions provided to the individual performing the work—a better term is maintenance data.[41]

"Data" used to establish that an airworthiness standard is met is "engineering data." It includes "technical data" such as drawings and specifications, information on dimensions, materials, processes, testing and plans, test reports, computations and analysis.[42]

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[40] 14 C.F.R. 145.211(c)(1)(v).

[41] 14 C.F.R. §§ 43.13(a), 145.109(d) and 145.201(b).

[42] 14 CFR §§ 21.31 and 21.41 are the showing that the type design meets the applicable airworthiness standards for issuance of design approvals.

(3) Equipment

A repair station's quality control manual must include the system and procedures for "[c]alibrating measuring and test equipment used in maintaining articles, including the intervals at which the equipment will be calibrated."[43]

In addition, a repair station must use the equipment and tools recommended by the manufacturer of the article being worked on or their equivalent.[44] Although the regulations do not require a repair station's manual to explain the system and procedures for making an equivalency determination, the FAA has made clear that it is the certificate holder's responsibility. The regulations are silent on the *data* that must be used to show the FAA that the tooling or equipment is equivalent.

The agency's advice to repair stations states that "the manual *should* explain the procedure it will use for determining equivalency" and that "the equipment or test apparatus must be capable of performing all necessary tests and checking all required parameters of the articles."[45] (Emphasis added.)

The agency's guidance to its workforce references a "technical data file", but it also states that "[t]he repair station must provide a means to the FAA that will *demonstrate* that the tool meets the manufacturer's standards and specifications with

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[43] 14 C.F.R. § 145.211(c)(1)(viii).
[44] 14 C.F.R. § 145.109(c).
[45] Advisory Circular 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals, ¶ 5.2.5.1, page 5-4.

all respects regarding tolerances and accuracy." (Emphasis added.) It goes onto state that the "equivalency *can* be made based upon an evaluation of a technical data file."[46] (Emphasis added.) In other words, the guidance indicates that the repair station could show an agency representative how the tool or equipment is used, what it does and does not do and the result of the usage rather than establish a technical data file.

The regulations and guidance are silent on development and use of tools or equipment independent of recommendations from the manufacturer. However, aviation safety rules provide the standard for acceptance, i.e., "tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices."[47] Industry practices require that maintenance, preventive maintenance or alteration action return the article to at least its original or properly altered condition.[48] The required records confirm that result by mandating the authorized person to certify on the maintenance release that all steps were performed satisfactorily and the article is airworthy with respect to the work performed.[49]

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[46] Order 8900.1, Volume 6, Chapter 9, Section 9, ¶ C.
[47] 14 C.F.R. § 43.13(a).
[48] 14 C.F.R. $ 43.13(b).
[49] 14 C.F.R. §§ 43.9(a)(4) and 145.213(b).

(E) Approved Data vs. Data Acceptable to the Administrator

Technical data needs to be approved under the aviation safety regulations governing maintenance, preventive maintenance and alteration when an action will result in a major repair[50] or major alteration.[51] The agency has issued myriad guidance to its workforce, its designees[52] and the public on how methods, techniques and practices can be created independently and if the action results in a major repair or major alteration, how the *engineering information* supporting the maintenance or alteration action can be approved.[53]

Technical data can also be used to show that equipment or tooling is equivalent to a tool or test apparatus recommended by the manufacturer or that the tool or equipment performs a function if no equipment is recommended by the

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[50] 14 C.F.R. § 1.1 defines both "major repair" and "minor repair."

[51] 14 C.F.R. § 1.1 defines both "major alteration" and "minor alteration."

[52] 14 C.F.R. part 183, Representatives of the Administration, Subpart C provides that Designated Engineering Representatives may "approve…engineering information" within the disciplines (e.g., structures, powerplant, engine) and limits prescribed by and under the supervision of the Administrator.

[53] Advisory Circulars 21-25, Approval of Modified Seating Systems Initially Approved Under a Technical Standard Order; 33-6, Weld Repair of Aluminum Crankcases and Cylinders of Piston Engines; 33-9, Developing Data for Major Repairs of Turbine Engine Parts; 43-210, Standardized Procedures for Obtaining Approval of Data Used in the Performance of Major Repairs and Major Alterations; 43-214A, Repairs and Alterations to Composite and Bonded Aircraft Structure Document Information; Order 8300.16, Major Repair and Alteration Data Approval; Order 8100.17B, Field Approval Delegation Handbook are just a few of the documents devoted to the subject of major repairs and alterations.

manufacturer. However, there is no regulation or other requirement that technical data be approved unless the work will result in a major repair or alteration. In fact, the agency's guidance to its workforce on equivalent tooling and equipment warns that "[n]either the FAA nor a DER may approve equipment or test apparatus."[54]

Due to inconsistent application of the terms "acceptable to" and "accepted by", the FAA issued guidance on their meaning. The agency has applied the following meaning to the term "acceptable to":

> Acceptable To. The terms "acceptable to the Administrator" and "acceptable to the FAA" appear numerous times in the FAA's regulations. If an item is required to be acceptable to the FAA, the FAA's active review and acceptance prior to use is not normally required. However, in exercising its oversight responsibilities, the FAA may make case-specific determinations as to a particular item's acceptability. A person or certificate holder should be able to reference some standard or publication as the basis for the acceptability of the intended application, procedure, method, etc. The standard or publication used should be an accepted industry practice previously found acceptable by the FAA, or, at a minimum, the person using it should be able to articulate a clear and reasonable basis for the action taken being an acceptable practice or procedure. This could include, but is not limited to, a practice or procedure contained in an FAA-issued advisory circular (AC) or other published guidance, information contained in the Original Equipment Manufacturer's (OEM) published procedures for performing a maintenance task, or relevant information from an ASTM International standard. However, if a regulation requires that a submission to the FAA must be acceptable to the FAA as a precondition for the FAA to act, the FAA may exercise discretion as to whether the determination must be made before or after the FAA acts. For example, operations specifications (OpSpecs), which contain

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[54] Order 8900.1, Volume 6, Chapter 9, Section 9, ¶ 6-1800 C.5.b.

authorizations, typically necessitate an item be acceptable to the FAA before the FAA issues the authorization.

> **Note:** A person should be able to demonstrate, if called upon to do so, that the method, technique, practice, etc., would in fact be acceptable to the FAA. For example, it would not be an acceptable practice for a maintenance provider to torque bolts by "feel" when Title 14 of the Code of Federal Regulations (14 CFR) part 43, § 43.13(a) states that each person performing aircraft maintenance must use "methods, techniques, and practices acceptable to the Administrator." Instead, an acceptable industry practice is to use a properly calibrated torque wrench to ensure the required torque values are achieved. The practice of failing to use a torque wrench and hoping for the best would be a practice the FAA would not find acceptable.[55]

(III) CONCLUSION

It is imperative that applicants and certificate holders can rely upon the plain language of the minimum standards in the aviation safety regulations and the intent of those rules set forth in preambles to notices of proposed rulemaking and final rules. To allow agencies to pick and choose sentences out of the regulations to support particular "legal actions" creates confusion in the industry and in the executive and judicial branches of government.

The regulations and agency guidance clearly distinguish between complete maintenance records and maintenance releases. The latter document does not, indeed, cannot, contain a complete description of work performed and thus it is

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[55] Notice 8900.444, Meaning of the Terms "Acceptable to" and Accepted by" for Use by Aviation Safety Inspectors.

impossible to sustain a record falsification accusation based solely on omissions in a maintenance release. Therefore, the NTSB's decision must be reversed based upon a plain reading of the applicable regulations.

To allow legal decisions to be based upon "opinions" of individual government agency representatives without firm, reasoned and articulated support from both the regulations and guidance material based upon the plain language and meaning of those documents flies in the face of the United States being a nation of laws, not men.

The findings related to the Petitioner not having the technical data required by the regulations is based upon a flawed understanding of the what information needs to be available. The methods, techniques and practices used by a repair station's technicians to perform maintenance preventive, maintenance, and alteration actions need to be available, i.e., the how-to instructions.

Contrary to the NTSB's conclusion that the repair station must "have access to its technical data and demonstrate that it is operating its facility in accordance with the technical data and procedures acceptable to the Acting Administrator",[56] the regulations cited do not require a repair station to maintain the technical data used

[56] NTSB Order No. EA-5840 at page 22.

to develop equipment or operate its facilities. Thus, the Order can be reversed in its entirety based upon the plain language of the relevant regulations.

The Aeronautical Repair Station Association respectfully submits its Amicus Curiae based upon its direct involvement in the rulemaking process and development of guidance material submitted to the public for comment. It is hopeful that the court will base its decision on the plain language of the regulations in 14 C.F.R. parts 43 and 145 that directly govern the case at bar.

Respectfully submitted,

ON BEHALF OF
THE AERONAUTICAL REPAIR STATION ASSOCIATION

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CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rule of Appellate Procedure 32(g) and Circuit Rule 32(e), I hereby certify that this Brief has been prepared in proportionally-spaced Times New Roman 14-point typeface and, according to Microsoft Word, contains fewer than 6000 words, exluding the parts of the Brief exempted by Federal Rule of Appellate Procedure 32(f) and Circuit Rule 32(e)(1).

/s/ Christian A. Klein
Christian A. Klein

Date: October 22, 2018

CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the District of Columbia Circuit by using the appellate CM/ECF system on October 22, 2018. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

/s/ Christian A. Klein
Christian A. Klein

Date: October 22, 2018

ADDENDUM A

Index to Addendum A

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* All regulations copied from https://www.ecfr.gov/cgi-bin/ECFR?page=browse (data current as of Oct. 18, 2018)

14 C.F.R. § 1.1 General Definitions. (Relevant definitions referenced in brief)

…

Major alteration means an alteration not listed in the aircraft, aircraft engine, or propeller specifications—

(1) That might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or

(2) That is not done according to accepted practices or cannot be done by elementary operations.

Major repair means a repair:

(1) That, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or

(2) That is not done according to accepted practices or cannot be done by elementary operations.

…

Minor alteration means an alteration other than a major alteration.

Minor repair means a repair other than a major repair.

14 C.F.R. § 21.31 Type design.

The type design consists of—

(a) The drawings and specifications, and a listing of those drawings and specifications, necessary to define the configuration and the design features of the product shown to comply with the requirements of that part of this subchapter applicable to the product;

(b) Information on dimensions, materials, and processes necessary to define the structural strength of the product;

(c) The Airworthiness Limitations section of the Instructions for Continued Airworthiness as required by parts 23, 25, 26, 27, 29, 31, 33 and 35 of this subchapter, or as otherwise required by the FAA; and as specified in the applicable airworthiness criteria for special classes of aircraft defined in § 21.17(b); and

(d) For primary category aircraft, if desired, a special inspection and preventive maintenance program designed to be accomplished by an appropriately rated and trained pilot-owner.

(e) Any other data necessary to allow, by comparison, the determination of the airworthiness, noise characteristics, fuel venting, and exhaust emissions (where applicable) of later products of the same type.

14 C.F.R.§ 21.41 Type certificate.

Each type certificate is considered to include the type design, the operating limitations, the certificate data sheet, the applicable regulations of this subchapter with which the FAA records compliance, and any other conditions or limitations prescribed for the product in this subchapter.

14 C.F.R. § 43.1 Applicability.

§43.1 Applicability.

(a) Except as provided in paragraphs (b) and (d) of this section, this part prescribes rules governing the maintenance, preventive maintenance, rebuilding, and alteration of any—

(1) Aircraft having a U.S. airworthiness certificate;

(2) Foreign-registered civil aircraft used in common carriage or carriage of mail under the provisions of Part 121 or 135 of this chapter; and

(3) Airframe, aircraft engines, propellers, appliances, and component parts of such aircraft.

(b) This part does not apply to—

(1) Any aircraft for which the FAA has issued an experimental certificate, unless the FAA has previously issued a different kind of airworthiness certificate for that aircraft;

(2) Any aircraft for which the FAA has issued an experimental certificate under the provisions of § 21.191(i)(3) of this chapter, and the aircraft was previously issued a special airworthiness certificate in the light-sport category under the provisions of § 21.190 of this chapter; or

(3) Any aircraft subject to the provisions of part 107 of this chapter.

(c) This part applies to all life-limited parts that are removed from a type certificated product, segregated, or controlled as provided in § 43.10.

(d) This part applies to any aircraft issued a special airworthiness certificate in the light-sport category except:

(1) The repair or alteration form specified in §§ 43.5(b) and 43.9(d) is not required to be completed for products not produced under an FAA approval;

(2) Major repairs and major alterations for products not produced under an FAA approval are not required to be recorded in accordance with appendix B of this part; and

(3) The listing of major alterations and major repairs specified in paragraphs (a) and (b) of appendix A of this part is not applicable to products not produced under an FAA approval.

14 C.F.R. § 43.2 Records of overhaul and rebuilding.

(a) No person may describe in any required maintenance entry or form an aircraft, airframe, aircraft engine, propeller, appliance, or component part as being overhauled unless—

(1) Using methods, techniques, and practices acceptable to the Administrator, it has been disassembled, cleaned, inspected, repaired as necessary, and reassembled; and

(2) It has been tested in accordance with approved standards and technical data, or in accordance with current standards and technical data acceptable to the Administrator, which have been developed and documented by the holder of the type certificate, supplemental type certificate, or a material, part, process, or appliance approval under part 21 of this chapter.

(b) No person may describe in any required maintenance entry or form an aircraft, airframe, aircraft engine, propeller, appliance, or component part as being rebuilt unless it has been disassembled, cleaned, inspected, repaired as necessary, reassembled, and tested to the same tolerances and limits as a new item, using either new parts or used parts that either conform to new part tolerances and limits or to approved oversized or undersized dimensions.

14 C.F.R. § 43.3 Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations.

§ 43.3 Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations.

(a) Except as provided in this section and §43.17, no person may maintain, rebuild, alter, or perform preventive maintenance on an aircraft, airframe, aircraft engine, propeller, appliance, or component part to which this part applies. Those items, the performance of which is a major alteration, a major repair, or preventive maintenance, are listed in appendix A.

(b) The holder of a mechanic certificate may perform maintenance, preventive maintenance, and alterations as provided in Part 65 of this chapter.

(c) The holder of a repairman certificate may perform maintenance, preventive maintenance, and alterations as provided in part 65 of this chapter.

(d) A person working under the supervision of a holder of a mechanic or repairman certificate may perform the maintenance, preventive maintenance, and alterations that his supervisor is authorized to perform, if the supervisor personally observes the work being done to the extent necessary to ensure that it is being done properly and if the supervisor is readily available, in person, for consultation. However, this paragraph does not authorize the performance of any inspection

required by Part 91 or Part 125 of this chapter or any inspection performed after a major repair or alteration.

(e) The holder of a repair station certificate may perform maintenance, preventive maintenance, and alterations as provided in Part 145 of this chapter.

(f) The holder of an air carrier operating certificate or an operating certificate issued under Part 121 or 135, may perform maintenance, preventive maintenance, and alterations as provided in Part 121 or 135.

(g) Except for holders of a sport pilot certificate, the holder of a pilot certificate issued under part 61 may perform preventive maintenance on any aircraft owned or operated by that pilot which is not used under part 121, 129, or 135 of this chapter. The holder of a sport pilot certificate may perform preventive maintenance on an aircraft owned or operated by that pilot and issued a special airworthiness certificate in the light-sport category.

(h) Notwithstanding the provisions of paragraph (g) of this section, the Administrator may approve a certificate holder under Part 135 of this chapter, operating rotorcraft in a remote area, to allow a pilot to perform specific preventive maintenance items provided—

(1) The items of preventive maintenance are a result of a known or suspected mechanical difficulty or malfunction that occurred en route to or in a remote area;

(2) The pilot has satisfactorily completed an approved training program and is authorized in writing by the certificate holder for each item of preventive maintenance that the pilot is authorized to perform;

(3) There is no certificated mechanic available to perform preventive maintenance;

(4) The certificate holder has procedures to evaluate the accomplishment of a preventive maintenance item that requires a decision concerning the airworthiness of the rotorcraft; and

(5) The items of preventive maintenance authorized by this section are those listed in paragraph (c) of appendix A of this part.

(i) Notwithstanding the provisions of paragraph (g) of this section, in accordance with an approval issued to the holder of a certificate issued under part 135 of this chapter, a pilot of an aircraft type-certificated for 9 or fewer passenger seats, excluding any pilot seat, may perform the removal and reinstallation of approved aircraft cabin seats, approved cabin-mounted stretchers, and when no tools are required, approved cabin-mounted medical oxygen bottles, provided—

(1) The pilot has satisfactorily completed an approved training program and is authorized in writing by the certificate holder to perform each task; and

(2) The certificate holder has written procedures available to the pilot to evaluate the accomplishment of the task.

(j) A manufacturer may—

(1) Rebuild or alter any aircraft, aircraft engine, propeller, or appliance manufactured by him under a type or production certificate;

(2) Rebuild or alter any appliance or part of aircraft, aircraft engines, propellers, or appliances manufactured by him under a Technical Standard Order Authorization, an FAA-Parts Manufacturer Approval, or Product and Process Specification issued by the Administrator; and

(3) Perform any inspection required by part 91 or part 125 of this chapter on aircraft it manufactured under a type certificate, or currently manufactures under a production certificate.

(k) Updates of databases in installed avionics meeting the conditions of this paragraph are not considered maintenance and may be performed by pilots provided:

(1) The database upload is:

(i) Initiated from the flight deck;

(ii) Performed without disassembling the avionics unit; and

(iii) Performed without the use of tools and/or special equipment.

(2) The pilot must comply with the certificate holder's procedures or the manufacturer's instructions.

(3) The holder of operating certificates must make available written procedures consistent with manufacturer's instructions to the pilot that describe how to:

(i) Perform the database update; and

(ii) Determine the status of the data upload.

14 C.F.R. § 43.5 Approval for return to service after maintenance, preventive maintenance, rebuilding, or alteration.

No person may approve for return to service any aircraft, airframe, aircraft engine, propeller, or appliance, that has undergone maintenance, preventive maintenance, rebuilding, or alteration unless—

(a) The maintenance record entry required by §43.9 or §43.11, as appropriate, has been made;

(b) The repair or alteration form authorized by or furnished by the Administrator has been executed in a manner prescribed by the Administrator; and

(c) If a repair or an alteration results in any change in the aircraft operating limitations or flight data contained in the approved aircraft flight manual, those operating limitations or flight data are appropriately revised and set forth as prescribed in § 91.9 of this chapter.

14 C.F.R. § 43.7 Persons authorized to approve aircraft, airframes, aircraft engines, propellers, appliances, or component parts for return to service after maintenance, preventive maintenance, rebuilding, or alteration.

(a) Except as provided in this section and § 43.17, no person, other than the Administrator, may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service after it has undergone maintenance, preventive maintenance, rebuilding, or alteration.

(b) The holder of a mechanic certificate or an inspection authorization may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service as provided in Part 65 of this chapter.

(c) The holder of a repair station certificate may approve an aircraft, airframe, aircraft engine, propeller, appliance, or component part for return to service as provided in Part 145 of this chapter.

(d) A manufacturer may approve for return to service any aircraft, airframe, aircraft engine, propeller, appliance, or component part which that manufacturer has worked on under § 43.3(j). However, except for minor alterations, the work must have been done in accordance with technical data approved by the Administrator.

(e) The holder of an air carrier operating certificate or an operating certificate issued under Part 121 or 135, may approve an aircraft, airframe, aircraft engine,

propeller, appliance, or component part for return to service as provided in Part 121 or 135 of this chapter, as applicable.

(f) A person holding at least a private pilot certificate may approve an aircraft for return to service after performing preventive maintenance under the provisions of § 43.3(g).

(g) The holder of a repairman certificate (light-sport aircraft) with a maintenance rating may approve an aircraft issued a special airworthiness certificate in light-sport category for return to service, as provided in part 65 of this chapter.

(h) The holder of at least a sport pilot certificate may approve an aircraft owned or operated by that pilot and issued a special airworthiness certificate in the light-sport category for return to service after performing preventive maintenance under the provisions of § 43.3(g).

14 C.F.R. § 43.9 Content, form, and disposition of maintenance, preventive maintenance, rebuilding, and alteration records (except inspections performed in accordance with part 91, part 125, § 135.411(a)(1), and § 135.419 of this chapter).

(a) Maintenance record entries. Except as provided in paragraphs (b) and (c) of this section, each person who maintains, performs preventive maintenance, rebuilds, or alters an aircraft, airframe, aircraft engine, propeller, appliance, or

component part shall make an entry in the maintenance record of that equipment containing the following information:

(1) A description (or reference to data acceptable to the Administrator) of work performed.

(2) The date of completion of the work performed.

(3) The name of the person performing the work if other than the person specified in paragraph (a)(4) of this section.

(4) If the work performed on the aircraft, airframe, aircraft engine, propeller, appliance, or component part has been performed satisfactorily, the signature, certificate number, and kind of certificate held by the person approving the work. The signature constitutes the approval for return to service only for the work performed.

(b) Each holder of an air carrier operating certificate or an operating certificate issued under Part 121 or 135, that is required by its approved operations specifications to provide for a continuous airworthiness maintenance program, shall make a record of the maintenance, preventive maintenance, rebuilding, and alteration, on aircraft, airframes, aircraft engines, propellers, appliances, or component parts which it operates in accordance with the applicable provisions of Part 121 or 135 of this chapter, as appropriate.

(c) This section does not apply to persons performing inspections in accordance with Part 91, 125, § 135.411(a)(1), or § 135.419 of this chapter.

(d) In addition to the entry required by paragraph (a) of this section, major repairs and major alterations shall be entered on a form, and the form disposed of, in the manner prescribed in appendix B, by the person performing the work.

14 C.F.R. § 43.11 Content, form, and disposition of records for inspections conducted under parts 91 and 125 and §§ 135.411(a)(1) and 135.419 of this chapter.

(a) Maintenance record entries. The person approving or disapproving for return to service an aircraft, airframe, aircraft engine, propeller, appliance, or component part after any inspection performed in accordance with part 91, 125, § 135.411(a)(1), or §135.419 shall make an entry in the maintenance record of that equipment containing the following information:

(1) The type of inspection and a brief description of the extent of the inspection.

(2) The date of the inspection and aircraft total time in service.

(3) The signature, the certificate number, and kind of certificate held by the person approving or disapproving for return to service the aircraft, airframe, aircraft engine, propeller, appliance, component part, or portions thereof.

(4) Except for progressive inspections, if the aircraft is found to be airworthy and approved for return to service, the following or a similarly worded statement—"I certify that this aircraft has been inspected in accordance with (insert type) inspection and was determined to be in airworthy condition."

(5) Except for progressive inspections, if the aircraft is not approved for return to service because of needed maintenance, noncompliance with applicable specifications, airworthiness directives, or other approved data, the following or a similarly worded statement—"I certify that this aircraft has been inspected in accordance with (insert type) inspection and a list of discrepancies and unairworthy items dated (date) has been provided for the aircraft owner or operator."

(6) For progressive inspections, the following or a similarly worded statement—"I certify that in accordance with a progressive inspection program, a routine inspection of (identify whether aircraft or components) and a detailed inspection of (identify components) were performed and the (aircraft or components) are (approved or disapproved) for return to service." If disapproved, the entry will further state "and a list of discrepancies and unairworthy items dated (date) has been provided to the aircraft owner or operator."

(7) If an inspection is conducted under an inspection program provided for in part 91, 125, or § 135.411(a)(1), the entry must identify the inspection program, that part of the inspection program accomplished, and contain a statement that the

inspection was performed in accordance with the inspections and procedures for that particular program.

(b) Listing of discrepancies and placards. If the person performing any inspection required by part 91 or 125 or § 135.411(a)(1) of this chapter finds that the aircraft is unairworthy or does not meet the applicable type certificate data, airworthiness directives, or other approved data upon which its airworthiness depends, that persons must give the owner or lessee a signed and dated list of those discrepancies. For those items permitted to be inoperative under § 91.213(d)(2) of this chapter, that person shall place a placard, that meets the aircraft's airworthiness certification regulations, on each inoperative instrument and the cockpit control of each item of inoperative equipment, marking it “Inoperative,” and shall add the items to the signed and dated list of discrepancies given to the owner or lessee.

14 C.F.R. § 43.13 Performance rules (general).

(a) Each person performing maintenance, alteration, or preventive maintenance on an aircraft, engine, propeller, or appliance shall use the methods, techniques, and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator, except as noted in § 43.16. He shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices. If

special equipment or test apparatus is recommended by the manufacturer involved, he must use that equipment or apparatus or its equivalent acceptable to the Administrator.

(b) Each person maintaining or altering, or performing preventive maintenance, shall do that work in such a manner and use materials of such a quality, that the condition of the aircraft, airframe, aircraft engine, propeller, or appliance worked on will be at least equal to its original or properly altered condition (with regard to aerodynamic function, structural strength, resistance to vibration and deterioration, and other qualities affecting airworthiness).

(c) Special provisions for holders of air carrier operating certificates and operating certificates issued under the provisions of Part 121 or 135 and Part 129 operators holding operations specifications. Unless otherwise notified by the administrator, the methods, techniques, and practices contained in the maintenance manual or the maintenance part of the manual of the holder of an air carrier operating certificate or an operating certificate under Part 121 or 135 and Part 129 operators holding operations specifications (that is required by its operating specifications to provide a continuous airworthiness maintenance and inspection program) constitute acceptable means of compliance with this section.

14 C.F.R. § 135.411 Applicability.

(a) This subpart prescribes rules in addition to those in other parts of this chapter for the maintenance, preventive maintenance, and alterations for each certificate holder as follows:

(1) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of nine seats or less, shall be maintained under parts 91 and 43 of this chapter and §§ 135.415, 135.417, 135.421 and 135.422. An approved aircraft inspection program may be used under § 135.419.

(2) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of ten seats or more, shall be maintained under a maintenance program in §§ 135.415, 135.417, 135.423 through 135.443.

(b) A certificate holder who is not otherwise required, may elect to maintain its aircraft under paragraph (a)(2) of this section.

(c) Single engine aircraft used in passenger-carrying IFR operations shall also be maintained in accordance with § 135.421 (c), (d), and (e).

(d) A certificate holder who elects to operate in accordance with §135.364 must maintain its aircraft under paragraph (a)(2) of this section and the additional requirements of Appendix G of this part.

14 C.F.R. § 135.419 Approved aircraft inspection program.

(a) Whenever the Administrator finds that the aircraft inspections required or allowed under part 91 of this chapter are not adequate to meet this part, or upon application by a certificate holder, the Administrator may amend the certificate holder's operations specifications under § 119.51, to require or allow an approved aircraft inspection program for any make and model aircraft of which the certificate holder has the exclusive use of at least one aircraft (as defined in § 135.25(b)).

(b) A certificate holder who applies for an amendment of its operations specifications to allow an approved aircraft inspection program must submit that program with its application for approval by the Administrator.

(c) Each certificate holder who is required by its operations specifications to have an approved aircraft inspection program shall submit a program for approval by the Administrator within 30 days of the amendment of its operations specifications or within any other period that the Administrator may prescribe in the operations specifications.

(d) The aircraft inspection program submitted for approval by the Administrator must contain the following:

(1) Instructions and procedures for the conduct of aircraft inspections (which must include necessary tests and checks), setting forth in detail the parts and areas

of the airframe, engines, propellers, rotors, and appliances, including emergency equipment, that must be inspected.

(2) A schedule for the performance of the aircraft inspections under paragraph (d)(1) of this section expressed in terms of the time in service, calendar time, number of system operations, or any combination of these.

(3) Instructions and procedures for recording discrepancies found during inspections and correction or deferral of discrepancies including form and disposition of records.

(e) After approval, the certificate holder shall include the approved aircraft inspection program in the manual required by § 135.21.

(f) Whenever the Administrator finds that revisions to an approved aircraft inspection program are necessary for the continued adequacy of the program, the certificate holder shall, after notification by the Administrator, make any changes in the program found by the Administrator to be necessary. The certificate holder may petition the Administrator to reconsider the notice to make any changes in a program. The petition must be filed with the representatives of the Administrator assigned to it within 30 days after the certificate holder receives the notice. Except in the case of an emergency requiring immediate action in the interest of safety, the filing of the petition stays the notice pending a decision by the Administrator.

(g) Each certificate holder who has an approved aircraft inspection program shall have each aircraft that is subject to the program inspected in accordance with the program.

(h) The registration number of each aircraft that is subject to an approved aircraft inspection program must be included in the operations specifications of the certificate holder.

14 C.F.R. § 145.3 Definition of terms.

For the purposes of this part, the following definitions apply:

(a) Accountable manager means the person designated by the certificated repair station who is responsible for and has the authority over all repair station operations that are conducted under part 145, including ensuring that repair station personnel follow the regulations and serving as the primary contact with the FAA.

(b) Article means an aircraft, airframe, aircraft engine, propeller, appliance, or component part.

(c) Directly in charge means having the responsibility for the work of a certificated repair station that performs maintenance, preventive maintenance, alterations, or other functions affecting aircraft airworthiness. A person directly in charge does not need to physically observe and direct each worker constantly but must be available for consultation on matters requiring instruction or decision from higher authority.

(d) Line maintenance means—

(1) Any unscheduled maintenance resulting from unforeseen events; or

(2) Scheduled checks that contain servicing and/or inspections that do not require specialized training, equipment, or facilities.

14 C.F.R. § 145.5 Certificate and operations specifications requirements.

(a) No person may operate as a certificated repair station without, or in violation of, a repair station certificate, ratings, or operations specifications issued under this part.

(b) The certificate and operations specifications issued to a certificated repair station must be available on the premises for inspection by the public and the FAA.

14 C.F.R. § 145.53 Issue of certificate.

(a) Except as provided in §145.51(e) or paragraph (b), (c), or (d) of this section, a person who meets the requirements of subparts A through E of this part is entitled to a repair station certificate with appropriate ratings prescribing such operations specifications and limitations as are necessary in the interest of safety.

(b) If the person is located in a country with which the United States has a bilateral aviation safety agreement, the FAA may find that the person meets the requirements of this part based on a certification from the civil aviation authority of that country. This certification must be made in accordance with implementation procedures signed by the Administrator or the Administrator's designee.

(c) Before a repair station certificate can be issued for a repair station that is located within the United States, the applicant shall certify in writing that all "hazmat employees" (see 49 CFR 171.8) for the repair station, its contractors, or subcontractors are trained as required in 49 CFR part 172 subpart H.

(d) Before a repair station certificate can be issued for a repair station that is located outside the United States, the applicant shall certify in writing that all employees for the repair station, its contractors, or subcontractors performing a job function concerning the transport of dangerous goods (hazardous material) are trained as outlined in the most current edition of the International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air.

14 C.F.R. § 145.59 Ratings.

The following ratings are issued under this subpart:

(a) Airframe ratings. (1) Class 1: Composite construction of small aircraft.

(2) Class 2: Composite construction of large aircraft.

(3) Class 3: All-metal construction of small aircraft.

(4) Class 4: All-metal construction of large aircraft.

(b) Powerplant ratings. (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.

(c) Propeller ratings. (1) Class 1: Fixed-pitch and ground-adjustable propellers of wood, metal, or composite construction.

(2) Class 2: Other propellers, by make.

(d) Radio ratings. (1) 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 of modulation used. This equipment includes auxiliary and related aircraft interphone systems, amplifier systems, electrical or electronic intercrew signaling devices, and similar equipment. This equipment does not include equipment used for navigating or aiding navigation of aircraft, equipment used for measuring altitude 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.

(2) Class 2: Navigational equipment. A radio system used in an aircraft for en route or approach navigation. This does not include equipment operated on radar or pulsed radio frequency principles, or equipment used for measuring altitude or terrain clearance.

(3) Class 3: Radar equipment. An aircraft electronic system operated on radar or pulsed radio frequency principles.

(e) Instrument ratings. (1) Class 1: Mechanical. A diaphragm, bourdon tube, aneroid, optical, or mechanically driven centrifugal instrument used on aircraft or to operate aircraft, including tachometers, airspeed indicators, pressure gauges drift sights, magnetic compasses, altimeters, or similar mechanical instruments.

(2) Class 2: Electrical. Self-synchronous and electrical-indicating instruments and systems, including remote indicating instruments, cylinder head temperature gauges, or similar electrical instruments.

(3) 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.

(4) 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.

(f) Accessory ratings. (1) Class 1: 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.

(2) Class 2: 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.

(3) Class 3: 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.

14 C.F.R. § 145.61 Limited ratings.

(a) The FAA may issue a limited rating to a certificated repair station that maintains or alters only a particular type of airframe, powerplant, propeller, radio, instrument, or accessory, or part thereof, or performs only specialized 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, or constituent part, or to any number of parts made by a particular manufacturer.

(b) The FAA issues limited ratings for—

(1) Airframes of a particular make and model;

(2) Engines of a particular make and model;

(3) Propellers of a particular make and model;

(4) Instruments of a particular make and model;

(5) Radio equipment of a particular make and model;

(6) Accessories of a particular make and model;

(7) Landing gear components;

(8) Floats, by make;

(9) Nondestructive inspection, testing, and processing;

(10) Emergency equipment;

(11) Rotor blades, by make and model;

(12) Aircraft fabric work;

(13) Any other purpose for which the FAA finds the applicant's request is appropriate.

(c) For a limited rating for specialized services, the operations specifications of the repair station must contain the specification used to perform the specialized service. 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.

14 C.F.R. § 145.103 Housing and facilities requirements.

(a) Each certificated repair station must provide—

(1) Housing for the facilities, equipment, materials, and personnel consistent with its ratings and limitations.

(2) Facilities for properly performing the maintenance, preventive maintenance, or alterations of articles or the specialized service for which it is rated. Facilities must include the following:

(i) Sufficient work space and areas for the proper segregation and protection of articles during all maintenance, preventive maintenance, or alterations.

(ii) Segregated work areas enabling environmentally hazardous or sensitive operations such as painting, cleaning, welding, avionics work, electronic work, and machining to be done properly and in a manner that does not adversely affect other maintenance or alteration articles or activities;

(iii) Suitable racks, hoists, trays, stands, and other segregation means for the storage and protection of all articles undergoing maintenance, preventive maintenance, or alterations, and;

(iv) Space sufficient to segregate articles and materials stocked for installation from those articles undergoing maintenance, preventive maintenance, or alterations to the standards required by this part.

(v) Ventilation, lighting, and control of temperature, humidity, and other climatic conditions sufficient to ensure personnel perform maintenance, preventive maintenance, or alterations to the standards required by this part.

(b) A certificated repair station may perform maintenance, preventive maintenance, or alterations on articles outside of its housing if it provides suitable

facilities that are acceptable to the FAA and meet the requirements of §145.103(a) so that the work can be done in accordance with the requirements of part 43 of this chapter.

14 C.F.R. § 145.109 Equipment, materials, and data requirements.

(a) Except as otherwise prescribed by the FAA, a certificated repair station must have the equipment, tools, and materials necessary to perform the maintenance, preventive maintenance, or alterations under its repair station certificate and operations specifications in accordance with part 43. The equipment, tools, and material must be located on the premises and under the repair station's control when the work is being done.

(b) A certificated repair station must ensure all test and inspection equipment and tools used to make airworthiness determinations on articles are calibrated to a standard acceptable to the FAA.

(c) The equipment, tools, and material must be those recommended by the manufacturer of the article or must be at least equivalent to those recommended by the manufacturer and acceptable to the FAA.

(d) A certificated repair station must maintain, in a format acceptable to the FAA, the documents and data required for the performance of maintenance, preventive maintenance, or alterations under its repair station certificate and

operations specifications in accordance with part 43. The following documents and data must be current and accessible when the relevant work is being done:

(1) Airworthiness directives,

(2) Instructions for continued airworthiness,

(3) Maintenance manuals,

(4) Overhaul manuals,

(5) Standard practice manuals,

(6) Service bulletins, and

(7) Other applicable data acceptable to or approved by the FAA.

14 C.F.R. § 145.163 Training requirements.

(a) A certificated repair station must have and use an employee training program approved by the FAA that consists of initial and recurrent training. An applicant for a repair station certificate must submit a training program for approval by the FAA as required by § 145.51(a)(7).

(b) The training program must ensure each employee assigned to perform maintenance, preventive maintenance, or alterations, and inspection functions is capable of performing the assigned task.

(c) A certificated repair station must document, in a format acceptable to the FAA, the individual employee training required under paragraph (a) of this section. These training records must be retained for a minimum of 2 years.

(d) A certificated repair station must submit revisions to its training program to its responsible Flight Standards office in accordance with the procedures required by § 145.209(e).

14 C.F.R. § 145.201 Privileges and limitations of certificate.

(a) A certificated repair station may—

(1) Perform maintenance, preventive maintenance, or alterations in accordance with part 43 on any article for which it is rated and within the limitations in its operations specifications.

(2) Arrange for another person to perform the maintenance, preventive maintenance, or alterations of any article for which the certificated repair station is rated. If that person is not certificated under part 145, the certificated repair station must ensure that the noncertificated person follows a quality control system equivalent to the system followed by the certificated repair station.

(3) Approve for return to service any article for which it is rated after it has performed maintenance, preventive maintenance, or an alteration in accordance with part 43.

(b) A certificated repair station may not maintain or alter any article for which it is not rated, and may not maintain or alter any article for which it is rated if it requires special technical data, equipment, or facilities that are not available to it.

(c) A certificated repair station may not approve for return to service'

(1) Any article unless the maintenance, preventive maintenance, or alteration was performed in accordance with the applicable approved technical data or data acceptable to the FAA.

(2) Any article after a major repair or major alteration unless the major repair or major alteration was performed in accordance with applicable approved technical data; and

(3) Any experimental aircraft after a major repair or major alteration performed under § 43.1(b) unless the major repair or major alteration was performed in accordance with methods and applicable technical data acceptable to the FAA.

14 C.F.R. § 145.207 Repair station manual.

(a) A certificated repair station must prepare and follow a repair station manual acceptable to the FAA.

(b) A certificated repair station must maintain a current repair station manual.

(c) A certificated repair station's current repair station manual must be accessible for use by repair station personnel required by subpart D of this part.

(d) A certificated repair station must provide to its responsible Flight Standards office the current repair station manual in a format acceptable to the FAA.

(e) A certificated repair station must notify its responsible Flight Standards office of each revision of its repair station manual in accordance with the procedures required by § 145.209(j).

14 C.F.R. § 145.209 Repair station manual contents.

A certificated repair station's manual must include the following:

(a) An organizational chart identifying—

(1) Each management position with authority to act on behalf of the repair station,

(2) The area of responsibility assigned to each management position, and

(3) The duties, responsibilities, and authority of each management position;

(b) Procedures for maintaining and revising the rosters required by §145.161;

(c) A description of the certificated repair station's operations, including the housing, facilities, equipment, and materials as required by subpart C of this part;

(d) Procedures for—

(1) Revising the capability list provided for in § 145.215 and notifying the responsible Flight Standards office of revisions to the list, including how often the responsible Flight Standards office will be notified of revisions; and

(2) The self-evaluation required under § 145.215(c) for revising the capability list, including methods and frequency of such evaluations, and procedures for reporting the results to the appropriate manager for review and action;

(e) Procedures for revising the training program required by § 145.163 and submitting revisions to the responsible Flight Standards office for approval;

(f) Procedures to govern work performed at another location in accordance with § 145.203;

(g) Procedures for maintenance, preventive maintenance, or alterations performed under § 145.205;

(h) Procedures for—

(1) Maintaining and revising the contract maintenance information required by § 145.217(a)(2)(i), including submitting revisions to the responsible Flight Standards office for approval; and

(2) Maintaining and revising the contract maintenance information required by § 145.217(a)(2)(ii) and notifying the responsible Flight Standards office of revisions to this information, including how often the responsible Flight Standards office will be notified of revisions;

(i) A description of the required records and the recordkeeping system used to obtain, store, and retrieve the required records;

(j) Procedures for revising the repair station's manual and notifying its responsible Flight Standards office of revisions to the manual, including how often the responsible Flight Standards office will be notified of revisions; and

(k) A description of the system used to identify and control sections of the repair station manual.

14 C.F.R, § 145.211 Quality control system.

(a) A certificated repair station must establish and maintain a quality control system acceptable to the FAA that ensures the airworthiness of the articles on which the repair station or any of its contractors performs maintenance, preventive maintenance, or alterations.

(b) Repair station personnel must follow the quality control system when performing maintenance, preventive maintenance, or alterations under the repair station certificate and operations specifications.

(c) A certificated repair station must prepare and keep current a quality control manual in a format acceptable to the FAA that includes the following:

(1) A description of the system and procedures used for—

(i) Inspecting incoming raw materials to ensure acceptable quality;

(ii) Performing preliminary inspection of all articles that are maintained;

(iii) Inspecting all articles that have been involved in an accident for hidden damage before maintenance, preventive maintenance, or alteration is performed;

(iv) Establishing and maintaining proficiency of inspection personnel;

(v) Establishing and maintaining current technical data for maintaining articles;

(vi) Qualifying and surveilling noncertificated persons who perform maintenance, prevention maintenance, or alterations for the repair station;

(vii) Performing final inspection and return to service of maintained articles;

(viii) Calibrating measuring and test equipment used in maintaining articles, including the intervals at which the equipment will be calibrated; and

(ix) Taking corrective action on deficiencies;

(2) References, where applicable, to the manufacturer's inspection standards for a particular article, including reference to any data specified by that manufacturer;

(3) A sample of the inspection and maintenance forms and instructions for completing such forms or a reference to a separate forms manual; and

(4) Procedures for revising the quality control manual required under this section and notifying the responsible Flight Standards office of the revisions, including how often the responsible Flight Standards office will be notified of revisions.

(d) A certificated repair station must notify its responsible Flight Standards office of revisions to its quality control manual.

14 C.F.R. § 145.213 Inspection of maintenance, preventive maintenance, or alterations.

(a) A certificated repair station must inspect each article upon which it has performed maintenance, preventive maintenance, or alterations as described in

paragraphs (b) and (c) of this section before approving that article for return to service.

(b) A certificated repair station must certify on an article's maintenance release that the article is airworthy with respect to the maintenance, preventive maintenance, or alterations performed after—

(1) The repair station performs work on the article; and

(2) An inspector inspects the article on which the repair station has performed work and determines it to be airworthy with respect to the work performed.

(c) For the purposes of paragraphs (a) and (b) of this section, an inspector must meet the requirements of § 145.155.

(d) Except for individuals employed by a repair station located outside the United States, only an employee appropriately certificated as a mechanic or repairman under part 65 is authorized to sign off on final inspections and maintenance releases for the repair station.

14 C.F.R. § 145.219 Recordkeeping.

(a) A certificated repair station must retain records in English that demonstrate compliance with the requirements of part 43. The records must be retained in a format acceptable to the FAA.

(b) A certificated repair station must provide a copy of the maintenance release to the owner or operator of the article on which the maintenance, preventive maintenance, or alteration was performed.

(c) A certificated repair station must retain the records required by this section for at least 2 years from the date the article was approved for return to service.

(d) A certificated repair station must make all required records available for inspection by the FAA and the National Transportation Safety Board.