#### **Presentation Syllabus**

 Form:
 TC-001

 Page:
 1 of 1

 Revision:
 IR

 Date:
 11232022

Title: What Good is this Certificate, Anyway? Subtitle: The Relationships of 14 CFR part 65 Identifier: BRCC-REG-14-0065-1-0120-184

Duration: 120 Minutes Credit time: 2 Hours

Presenter: Sarah MacLeod

Presenter biography: <u>Sarah MacLeod</u> is managing member of <u>Obadal, Filler, MacLeod &</u>

Klein, P.L.C. and a founder and executive director of the <u>Aeronautical Repair Station Association</u>. She has advocated for individuals and companies on international aviation safety law, policy and compliance issues for decades. Ms. MacLeod obtained a bachelor's degree from Evergreen State College, Olympia, Washington and a law degree from

Catholic University of America.

Prerequisite: None

Description: This session explores the applications of mechanic and repairman

certificates held under 14 CFR part <u>65</u>. It examines the eligibility for and privileges/limitations of each certificate. It puts those certificates in context of the requirements of part 43 and describes their employment

within the quality systems of other certificate holders.

Learning objectives: Upon completion of this session, participants will have the tools to

understand:

• The structure of part 65.

The eligibility for and privileges/limitations of mechanic and repairmen partificates.

repairman certificates.

• The relationship between individual certificates and other elements

of 14 CFR.

 How to differentiate between when an individual is exercising the privileges of their certificate vs. when the certificate is used as a qualification for employment by another certificate holder.

Reference material: Regulatory Research Guide

14 CFR parts 43, 65, 145, 121 and 135 FAA Dynamic Regulatory System

Required reading: None.

Target audience: Any person involved in civil aviation design, production, operations and

maintenance, including but not limited to: management, engineers, pilots, certificated mechanics and non-certificated technicians, inspection personnel and quality control and assurance personnel.

Revision history:

Date Created Level Revision description

11232022 IR Session release for use with BRCC IA renewal training.

# Obadal, Filler, MacLeod & Klein, P.L.C.

117 North Henry Street, Alexandria, VA 22314–2903

# What good is this certificate, anyway?

The Relationships of 14 CFR part 65
March 10, 2023
BRCC-REG-14-0065-1-0120-184
Sarah MacLeod, Managing Member

## **Session Identification Information**

Title: What good is this certificate, anyway?

The Relationships of 14 CFR part 65

Identifier: BRCC-REG-14-0065-1-0120-184

Presenter: Sarah MacLeod

Level: 1 - Introductory

Prerequisite: None

Length: 120 Minutes



# **About the Aeronautical Repair Station Association**

<u>ARSA</u> is devoted to the worldwide civil aviation maintenance industry—from its global corporations to the small, independent businesses. <u>ARSA</u> members are located on five continents and in nearly 20 countries.

The association's experts create tools for members to navigate the maze of government mandates while enhancing safety, efficiency and productivity.

ARSA is managed by the law firm of Obadal, Filler, MacLeod & Klein, P.L.C., which provides management, government affairs, and legal services to trade associations and transportation-centric companies.

# About Obadal, Filler, MacLeod & Klein, P.L.C.

OFM&K is a boutique law firm based in Alexandria, Virginia (across the river from Washington, D.C.).

It provides management, government affairs and legal services to trade associations and transportation-centric companies with particular emphasis on international aviation safety regulations.

It helps clients navigate the maze of government mandates while enhancing safety, efficiency and productivity.

#### About the Presenter – Sarah MacLeod

<u>Sarah MacLeod</u> is managing member of <u>OFM&K</u> and a founder and executive director of the <u>Aeronautical Repair Station Association</u>. She has advocated for individuals and companies on international aviation safety law, policy and compliance issues since the 1980s.

Ms. MacLeod obtained a bachelor's degree from Evergreen State College, Olympia, Washington and a law degree from Catholic University of America.

# Legal Disclaimer

This material is provided for educational and informational purposes only. It does not constitute any type of professional advice. Law, regulations, guidance and government policies change frequently. While this material is updated, its accuracy cannot be guaranteed.

In addition, the application of this material is always dependent on the particular facts and circumstances involved. The use of this material is therefore at your own risk.

#### **Reference Material**

References are available throughout the presentation as hyperlinks and in handouts or additional information provided.

The material is made available electronically in Adobe read-only format to registered participants.

To download a copy of the session materials associated with this presentation, visit potomac-law.com/training-184.

# Required Reading

- None.
- While there is no required reading for the course, reading is required for survival!
- It is extremely important to keep current on legislative, regulatory and policy changes.
- Use the resources and take the time to do your own research!

#### It All Starts with the Law

49 United States Code - Transportation

Subtitle I – Department of Transportation

Chapter <u>1</u> – Organization

§ <u>106</u> – Federal Aviation Administration

Subtitle VII – Aviation Programs

Part A – Air Commerce and Safety

Part B – Airport Development and Noise

Part <u>C</u> – Financing

Part D – Public Airports

Part E – Miscellaneous

#### It All Starts with Laws Passed by the Legislative Branch

49 United States Code – Transportation

```
Subtitle VII – Aviation Programs

Part A – Air Commerce and Safety

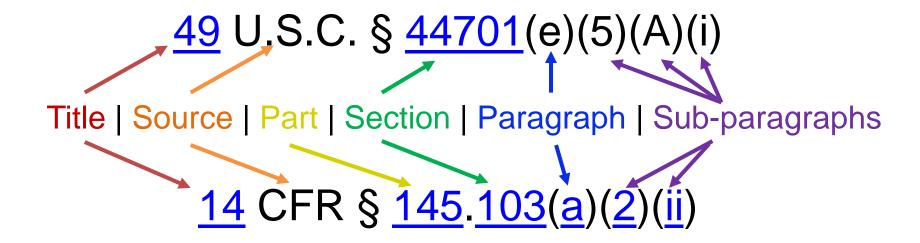
Subpart iii – Safety

§ 44701 – General requirements
```

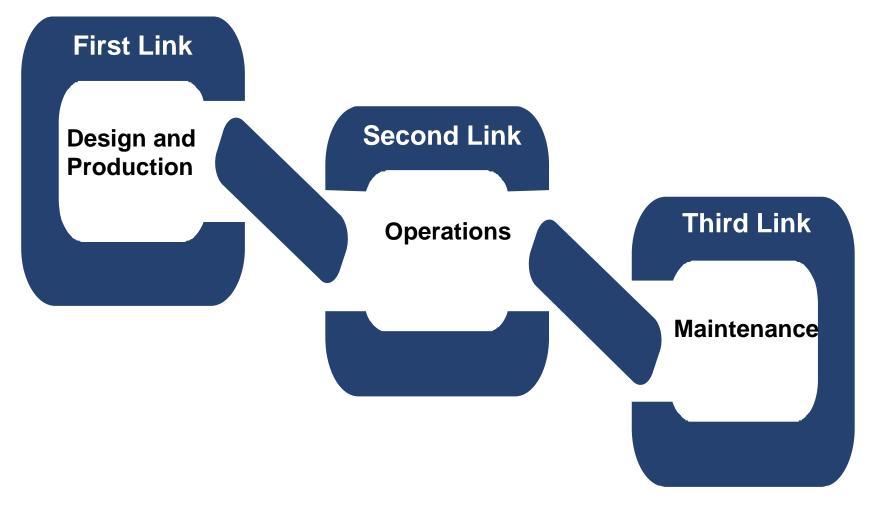
§ 44701(a)(1): "The Administrator of the Federal Aviation Administration shall promote safe flight of civil aircraft in air commerce by prescribing minimum standards required in the interest of safety for appliances and for the design, material, construction, quality of work, and performance of aircraft, aircraft engines, and propellers."

#### Finding & Citing U.S. Laws and Regulations

- Statute The United States Code (U.S.C.): uscode.house.gov.
- Rules The Code of Federal Regulations (CFR): <u>www.ecfr.gov</u>.



# **Lifecycle of Airworthiness**



#### **Lifecycle of Airworthiness**

- Design elements shown to meet the airworthiness standards associated with the product, which include:
  - Operating limitations and flight manuals.
  - Maintenance requirements and the methods and techniques necessary for continued airworthiness.
- Production must ensure every part meets the design requirements and is in a condition for safe operation before release from the quality system.
- Operations must be with an airworthy aircraft and within the operating parameters of the design.
- Maintenance activities must return an article and therefore the aircraft to at least its original (or properly altered) condition.

# **Description**

This session explores mechanic and repairman certificates issued and held under 14 CFR part <u>65</u>.

It examines the eligibility for and privileges/limitations of each certificate.

It puts those certificates in context of part 43 requirements and describes their need within and under the quality systems of other certificate holders.

#### **Objectives**

Upon completion of this session, participants will have the tools to understand:

- The structure of part 65.
- The eligibility for and privileges/limitations of mechanic and repairman certificates.
- The relationship between individual certificates and other elements of 14 CFR.
- How to determine when an individual is exercising the privileges of their certificate and when the certificate is used as a qualification for employment by another certificate holder.

# Understanding "Personhood"

§ 1.1 General definitions.

<u>Person</u> means 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.

#### **More Definitions to Know**

- Maintenance (§ 1.1) means inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance.
- <u>Preventive Maintenance</u> (§ 1.1) means simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations.
- Alteration has no regulatory definition, suffice to say it means "change"—usually a change from one approved state to another. Order 8900.1 Vol. 3 Ch. 15 Sec. 1 notes that it is not maintenance. Ancillary functions that go along with performing an alteration are maintenance.

# **Starting with Part 43**

- Governs the performance of maintenance, preventive maintenance, rebuilding, and alteration of and approval for return to service of U.S. civil aviation products and articles.
- Sets the required information and performance standards to be upheld by all "persons" performing the tasks and steps.
- Understanding which "person" is involved informs which certificate(s) are being "exercised.

#### Part <u>43</u> – Overview

- To whom and what it applies ("applicability") (§ 43.1).
- Who may perform work (§ 43.3) (Including Canadian "persons" on U.S. aeronautical products (§ 43.17)).
- How and what work is to be performed the instructional ("how-to") documents (§§ 43.13(a) & 43.16), the quality standard (§ 43.13(b), and inspection items (§ 43.15)).
- What must be done when the work is completed and <u>before</u> approval for return to service (§ 43.5).
- Who may approve the work for return to service (§ 43.7).
- How the work should be recorded (§§ 43.2, 43.9, 43.11, Appendix A, Appendix B).
- Prohibition on maintenance records falsification and consequences (§ 43.12).
- Safe disposition of life limited parts (§ 43.10).

## § 43.1 – Applicability

- (a) Except as provided in <u>paragraphs</u> (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 <u>Part 121</u> or <u>135 of this chapter</u>; and
- (3) Airframe, aircraft engines, propellers, appliances, and component parts of such aircraft.

## § 43.1 – Applicability

- Each "person" (any individual, firm, partnership, corporation, company, association, joint stock association or government entity. It includes a trustee, receiver, assignee or similar representative of any of them)...
- Performing maintenance, preventive maintenance, rebuilding and alteration...
- On aircraft having a...U.S. airworthiness certificate or foreign-registered civil aircraft used under part <u>121</u> or part <u>135</u>, and..."related" components.
- All life-limited parts removed from a type certificated product.
- Doesn't apply to certain experimental aircraft and small, unmanned aircraft systems (part <u>107</u>).

- § 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.

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

- Manufacturer (may rebuild or alter its own products; inspect its TC'd aircraft operated under parts 91 or 125) (see, § 43.3(j)).
- Part <u>121</u> and certain part <u>135</u> operators (see, § 43.3(<u>f</u>) and (<u>i</u>)).
- Repair stations (see, § 43.3(e)).
- Airmen other than flight crewmembers—
  - Mechanic with airframe and/or powerplant ratings (A&P) and/or Inspection authorization holders (IA) (see, § 43.3(b).
  - Repairmen (see, § 43.3(<u>c</u>)).
- Persons working under the supervision and control of the listed certificate holders listed above (see, § 43.3(d)).
- Under certain circumstances and within very confined parameters, pilots may perform preventative maintenance on aircraft they own or operate if not used under part 121, part 129, or part 135 (see, § 43.3(g)).

# § 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.

# § 43.5 – Approval for return to service after maintenance, preventive maintenance, rebuilding, or alteration.

§ 43.5 sets forth what must be done before an approval for return to service can be issued:

- Appropriate maintenance or inspection entry must be made (§§ 43.9, 43.11).
- The appropriate repair or alteration form has been completed (for major repairs or alterations, Appendix B).
- If the aircraft operating limitations or the flight data in the approved flight manual have changed, those documents have been revised and set forth as prescribed in § 91.9.

- § 43.7 Persons authorized to approve ... 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.

# § 43.7 – Persons authorized to approve ... for return to service after maintenance, preventive maintenance, rebuilding, or alteration.

- Persons "provided in this section" are:
  - The Administrator (see, 43.7(a)).
  - A and/or P mechanics and IAs (see, 43.7(b)).
  - Repair stations (see, § 43.7(c)).
  - Manufacturers (limited) (see, § 43.7(d)).
  - Part <u>121</u> and certain part <u>135</u> operators (see, § 43.7(e).
  - Pilots (preventive maintenance only) (see, § 43.7(f)).

Applies only to the work performed (see, §  $43.9(a)(\frac{4}{2})$ ).

Make sure description of work is complete and accurate.

# The Structure of Part 65

- Subpart A General
  - Application, issuance and duration.
  - Testing and retesting.
  - Grounds for denial or disqualification.
  - Procedures for changes or replacement.
- Subpart B Air Traffic Control Tower Operators
- Subpart C Aircraft Dispatchers
- Subpart D Mechanics
- Subpart E Repairmen
- Subpart F Parachute Riggers

### § 65.1 – Applicability

This part prescribes the requirements for issuing the following certificates and associated ratings and the general operating rules for the holders of those certificates and ratings:

- (a) Air-traffic control-tower operators.
- (b) Aircraft dispatchers.
- (c) Mechanics.
- (d) Repairmen.
- (e) Parachute riggers.

# **Structure of Subparts B-F**

Each certificate for an airman other than a flight crewmember has qualifications, in general they are:

- Eligibility.
- Training.
- Experience.
- Skills.
- Knowledge.
- Performance, duties or appropriate ratings.

### Structure of Part 65, Subpart D – Mechanics

- § 65.71 Eligibility Requirements: General.
- § 65.<u>73</u> Ratings.
- § 65.75 Knowledge requirements.
- § 65.77 Experience requirements.
- § 65.79 Skill requirements.
- § 65.80 Certificated AMTS students.
- § 65.81 General privileges and limitations.
- § 65.83 Recent experience requirements.
- § 65.85 Airframe rating; additional privileges.
- § 65.87 Powerplant rating; additional privileges.
- § 65.89 Display of certificate.

# Structure of Part 65, Subpart D — Mechanics — IA

- § 65.91 Inspection authorization.
- § 65.92 Inspection authorization: Duration.
- § 65.93 Inspection authorization: Renewal.
- § 65.95 Inspection authorization: Privileges and limitations.

# **Subpart D – Application/Exercise**

- These sections of subpart D define the application process:
  - §§ 65.<u>71</u>, 65.<u>75</u>, 65.<u>77</u>, 65.<u>79</u>, 65.<u>80</u> & 65.<u>91</u>
- Subpart D also defines the general parameters for exercising the privileges of a certificate and/or authorization:
  - §§ 65.<u>73</u>, 65.<u>81</u>, 65.<u>83</u>, 65.<u>85</u>, 65.<u>87</u>, 65.<u>89</u>, 65.<u>92</u>, 65.<u>93</u> & 65.<u>95</u>

#### Exercise – Use It or Lose It

#### § 65.83 - Recent experience requirements.

A certificated mechanic may not exercise the privileges of his certificate and rating unless, within the preceding 24 months—

- (a) The Administrator has found that he is able to do that work; or
- (b) He has, for at least 6 months—
  - (1) Served as a mechanic under his certificate and rating;
  - (2) Technically supervised other mechanics;
  - (3) Supervised, in an executive capacity, the maintenance or alteration of aircraft; or
  - (4) Been engaged in any combination of paragraph (b)(1), (2) or (3) of this section

### **Exercise – Using a Mechanic's Certificate**

§ 65.81 – General privileges and limitations.

(a) A certificated mechanic may perform or supervise the maintenance, preventive maintenance or alteration of an aircraft or appliance, or a part thereof, for which he is rated (but excluding major repairs to, and major alterations of, propellers, and any repair to, or alteration of, instruments), and may perform additional duties in accordance with §§ 65.85, 65.87, and 65.95. However, he may not supervise the maintenance, preventive maintenance, or alteration of, or approve and return to service, any aircraft or appliance, or part thereof, for which he is rated unless he has satisfactorily performed the work concerned at an earlier date. If he has not so performed that work at an earlier date, he may show his ability to do it by performing it to the satisfaction of the Administrator or under the direct supervision of a certificated and appropriately rated mechanic, or a certificated repairman, who has had previous experience in the specific operation concerned.

# **Exercise – Using a Mechanic's Certificate**

§ 65.81 – General privileges and limitations.

- A certificated mechanic may:
  - Perform or supervise work on aircraft, appliances or parts thereof under the powerplant and/or aircraft rating.
  - Use privileges of §§ 65.85 (airframe rating) or 65.87 (powerplant rating) to perform, inspect supervise, and approve for return to service work.
- A certificated mechanic's limitations:
  - No major repairs to, and major alterations of, propellers, and any repair to, or alteration of, instruments.
  - May not supervise or approve for return to service any work not previously "satisfactorily performed."

# Exercise – Using a Mechanic's Certificate

§ 65.81 – General privileges and limitations.

If a mechanic *has not* satisfactorily performed the operation at an earlier date, ability may be established by:

- Satisfying the Administrator, or
- Direct supervision of a certificated mechanic or repairman who has previous experience.

# **Exercise – Additional Privileges of Ratings**

# §§ 65.85 and 65.87

- "Approve and [for] return to service" an airframe/powerplant/propeller or any related part or appliance after performing, supervising or inspecting <u>minor</u> maintenance or alteration.
- Perform, approve/disapprove for return to service 100-hour inspection required by § 91.409(b).
- Perform, inspect, approve for return to service major repairs or alterations on light sport aircraft (§ 21.175(b)).

# **Exercise – Limitations**

The limitations of a mechanic's certificate are woven throughout subpart D, but to highlight them:

- § 65.81 explicitly excludes *major* repairs/alterations to <u>propellers</u> and *any* repair/alteration to <u>instruments</u>.
- §§ 65.85 and 65.87 explicitly excludes the ability to approve for return to service major repairs or alterations.
- §§ 65.85 and 65.87 only allow appropriately rated mechanics to perform the 100-hour inspections required by § 91.409(b).

# **Exercise – Inspection Authorization**

§ 65.95 – Inspection authorization: Privileges and limitations.

A person holding a *currently effective* mechanic certificate with airframe and powerplant ratings and inspection authorization may:

- Inspect and approve for return to service any aircraft or related part or appliance after a major repair or alteration (except aircraft maintained under part 121 subpart L).
- Perform annual inspections according to §§ 43.13 and 43.15.
- Perform or supervise progressive inspections according to §§ 43.13 and 43.15.

# Structure of Part 65, Subpart E – Repairman

- § 65.<u>101</u> Eligibility requirements: General.
- § 65.103 Repairman certificate: Privileges and limitations.
- § 65.<u>104</u> Repairman certificate—experimental aircraft builder—Eligibility, privileges and limitations.
- § 65.<u>105</u> Display of certificate.
- § 65.<u>107</u> Repairman certificate (light-sport aircraft): Eligibility, privileges, and limits.

# **Exercise – Repairman Privileges and Limitations**

- § 65.103 Repairman certificate: Privileges and limitations.
- (a) A certificated repairman may perform or supervise the maintenance, preventive maintenance, or alteration of aircraft or aircraft components appropriate to the job for which the repairman was employed and certificated, but only in connection with duties for the certificate holder by whom the repairman was employed and recommended.
- (b) A certificated repairman may not perform or supervise duties under the repairman certificate unless the repairman understands the current instructions of the certificate holder by whom the repairman is employed and the manufacturer's instructions for continued airworthiness relating to the specific operations concerned.
- (c) This section does not apply to the holder of a repairman certificate (light-sport aircraft) while that repairman is performing work under that certificate.

# **Summary of Part 65**

- The requirements of subpart D enforce a natural flow from knowledge to skill and place a premium on practical experience.
- In general, a mechanic may perform or supervise work under each rating. The ability of a mechanic to inspect and approve work for return to service is more limited.
- Inspection Authorization is a means to "enhance" the privileges of an *effective* mechanic's certificate, particularly regarding inspection, but it does not eliminate all the certificate's limitations.
- The eligibility requirements of repairman certificates are tied closely to the applicant's specific job and employer.

# Responsibilities – Aircraft and Work Performed

# § 91.7 Civil aircraft airworthiness.

- (a) No person may operate a civil aircraft unless it is in an airworthy condition.
- (b) The pilot in command of a civil aircraft is responsible for determining whether that aircraft is in condition for safe flight. The pilot in command shall discontinue the flight when unairworthy mechanical, electrical, or structural conditions occur.

# Maintenance Under Part 91, Subpart E

# § 91.<u>401</u> – Applicability.

- (a) This subpart prescribes rules governing the maintenance, preventive maintenance, and alterations of U.S.-registered civil aircraft operating within or outside of the United States.
- (b) Sections 91.405, 91.409, 91.411, 91.417, and 91.419 of this subpart do not apply to an aircraft maintained in accordance with a continuous airworthiness maintenance program as provided in part 121, 129, or §§ 91.1411 or 135.411(a)(2) of this chapter.
- (c) Sections 91.405 and 91.409 of this part do not apply to an airplane inspected in accordance with part 125 of this chapter.

# Maintenance Under Part 91, Subpart E

### § 91.<u>403</u> – General.

- (b) No person may perform maintenance, preventive maintenance, or alterations on an aircraft other than as prescribed in this subpart and other applicable regulations, including part 43 of this chapter.
- § 91.407 Operation after maintenance, preventive maintenance, rebuilding, or alteration.
- (a) No person may operate any aircraft that has undergone maintenance, preventive maintenance, rebuilding, or alteration unless—
  - (1) It has been approved for return to service by a person authorized under § 43.7 of this chapter; and
  - (2) The maintenance record entry required by § 43.9 or § 43.11, as applicable, of this chapter has been made.

# Maintenance Under Part 91, Subpart E

# § 91.<u>409</u> – Inspections.

- (a) Except as provided in paragraph (c) of this section, no person may operate an aircraft unless, within the preceding 12 calendar months, it has had—
  - (1) An annual inspection in accordance with part 43 of this chapter and has been approved for return to service by a person authorized by § 43.7 of this chapter; or
  - (2) An inspection for the issuance of an airworthiness certificate in accordance with part 21 of this chapter.

# § 121.<u>361</u> – Applicability.

(a) Except as provided by paragraph (b) of this section, this subpart prescribes requirements for maintenance, preventive maintenance, and alterations for all certificate holders.

# § 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) [Nine seats or less].
  - (2) [Ten seats or more].

§§ 121.363 & 135.413 – Responsibility for airworthiness.

- (a) Each certificate holder is primarily responsible for—
  - (1) The airworthiness of its aircraft, including airframes, aircraft engines, propellers, appliances, and parts thereof; and
  - (2) The performance of the maintenance, preventive maintenance, and alteration of its aircraft, including airframes, aircraft engines, propellers, appliances, emergency equipment, and parts thereof, in accordance with its manual and the regulations of this chapter.

# Maintenance Under Parts <u>121</u> & <u>135</u> – Air Carriers

§§ 121.363 & 135.413 – Responsibility for airworthiness.

(b) A certificate holder may make arrangements with another person for the performance of any maintenance, preventive maintenance, or alterations. However, this does not relieve the certificate holder of the responsibility specified in paragraph (a) of this section.

§§ 121.378 and 135.435 – Certificate requirements.

(a) Except for maintenance, preventive maintenance, alterations, and required inspections performed by a certificated repair station that is located outside the United States, each person who is directly in charge of maintenance, preventive maintenance, or alterations, and each person performing required inspections must hold an appropriate airman certificate.

# "Directly in Charge"

For the purposes of the requirements in §§ 121.378 and 135.435—

- 1) Assigned position responsible for work of shop or station.
- 2) Shop or station performs maintenance, preventive maintenance, alterations, or other functions affecting aircraft airworthiness.
- 3) Need not physically observe and direct each worker constantly."
- 4) Must be available for consultation and decision on matters requiring instruction or decisions from higher authority.

- §§ 121.709 and 135.443 Airworthiness release or aircraft log/aircraft maintenance log entry.
- (b) The airworthiness release or log entry required by paragraph (a) of this section must—
- (3) Be signed by an authorized certificated **mechanic or repairman** except that a certificated repairman may sign the release or entry only for the work for which he is employed and certificated.

- §§ 121.379 and 135.437 Authority to perform and approve maintenance, preventive maintenance, and alterations.
- (a) A certificate holder may perform or [it may] make arrangements with other persons to perform maintenance, preventive maintenance, and alterations as provided in its [continuous airworthiness maintenance program] and its maintenance manual. In addition, a certificate holder may perform these functions for another certificate holder as provided in the maintenance manual of the other certificate holder.

§§ 121.371 & 135.429 – Required inspection personnel.

(a) No person may use any person to perform required inspections unless the person performing the inspection is **appropriately certificated**, properly trained, qualified, and authorized to do so.

# **Maintenance Under Part 145 – Repair Stations**

# § 145.<u>151</u> – Personnel requirements.

- (a) Designate a repair station employee as the accountable manager;
- (b) Provide qualified personnel to plan, supervise, perform, and approve for return to service the maintenance, preventive maintenance, or alterations performed under the repair station certificate and operations specifications;
- (c) Ensure it has a sufficient number of employees with the training or knowledge and experience in the performance of maintenance, preventive maintenance, or alterations authorized by the repair station certificate and operations specifications to ensure all work is performed in accordance with part 43; and
- (d) Determine the abilities of its noncertificated employees performing maintenance functions based on training, knowledge, experience, or practical tests.

# **Maintenance Under Part 145 – Repair Stations**

# § 145.153 – Supervisory personnel requirements.

- (a) A certificated repair station must ensure it has a sufficient number of supervisors to direct the work performed under the repair station certificate and operations specifications. The supervisors must oversee the work performed by any individuals who are unfamiliar with the methods, techniques, practices, aids, equipment, and tools used to perform the maintenance, preventive maintenance, or alterations.
- (b) Each supervisor must—
- (1) If employed by a repair station located inside the United States, **be** appropriately certificated as a mechanic or repairman under part 65 of this chapter for the work being supervised.

# **Maintenance Under Part 145 – Repair Stations**

- § 145.157 Personnel authorized to approve an article for return to service.
- (a) A certificated repair station located inside the United States must ensure each person authorized to approve an article for return to service under the repair station certificate and operations specifications is appropriately certificated as a mechanic or repairman under part 65.

# **Summary**

- Part 43 identifies the "persons" authorized to perform maintenance and to approve work for return to service. It recognizes individual part 65 certificate holders as well as air carriers and repair stations.
- Part 65 establishes eligibility as well as the privileges and limitations of individual certificates.
- Holding an individual certificate is required by elements of the rules governing maintenance under parts 91, 121, 135, & 145.
- Depending on which parts of 14 CFR apply, the "person" performing work is different (regardless of the individuals involved and their personal certificates or lack thereof).

# **Questions?**



# Obadal, Filler, MacLeod & Klein, P.L.C.

117 North Henry Street, Alexandria, VA 22314–2903

## Sarah MacLeod

Managing Member

T: 703.299.0784 Ext. 114

M: 703.785.6605

sarah.macleod@potomac-law.com

www.potomac-law.com

Form: RTC-001
Page: 1 of 7
Revision 1.2
Date: 07272022

### (I) INTRODUCTION

This guide is a research tool for anyone working in or associated with the U.S. civil aviation industry. In most aviation companies, civil aviation regulatory law is "practiced" by engineers, quality control and quality assurance personnel. These "layman lawyers" – in the place of legal professionals –are often involved in day-to-day compliance decisions.

Whether you produce aviation products or parts, are an owner or operator of aircraft, repair aircraft or components, or sell or purchase civil aviation articles, the <u>Federal Aviation Administration's</u> (FAA) <u>Code of Federal Regulations</u> (CFRs) must be followed. Contract law, whether under military specifications or civil agreements, also dictates performance and quality standards. Additionally, federal and state health, environmental and criminal laws, the <u>Freedom of Information Act</u> (FOIA), the <u>Hazardous Materials Transportation Act</u>, the <u>Omnibus Transportation Employees Testing Act</u> and the <u>Independent Safety Board Act</u> are applicable to aviation activities. Although this guide focuses primarily on FAA regulatory issues, all laws must also be kept in mind when making day-to-day decisions.

### (II) RESEARCH TOOLS

Untangling regulatory compliance matters demands command of the tools available to research and review them. Section (III) of this Guide chronicles and links to numerous resources while explaining each document type and Section (IV) includes a comprehensive list of online tools. Aviation professionals may use all of these and must invest in remaining up to date on requirements from non-aviation agencies, but for U.S.-based compliance issues the following tools are most important—

- The electronic Code of Federal Regulations (eCFR) is a government managed website providing navigation of the CFR. It allows users to browse the rules, make historical comparisons, search for keywords and access rulemaking updates related to any current regulation. <a href="https://www.ecfr.gov">www.ecfr.gov</a>. Rules promulgated by the FAA can be found in Title <a href="https://www.ecfr.gov">14</a>, with those from the Department of Transportation in Title <a href="https://www.ecfr.gov">49</a>.
- The Dynamic Regulatory System (DRS) is an FAA-managed online "knowledge center" for regulation and guidance material. Users may search more than two million documents of 65 types, including all of those listed in section (III)(C) below: drs.faa.gov.

### (III) THE REGULATORY BACKBONE

This guide provides information on how to find statutes, rules and related advisory and guidance materials issued by the United States government pertaining to aviation safety and related activities.

### (A) LAWS

Statutes are created by the legislative branch of the federal government (i.e., Congress). After they are signed by the president, the laws are included in the <u>United States Code</u>. The law that created the FAA (the <u>Federal Aviation Act of 1958</u>) and that dictates its powers and limitations can be found in <u>49 United States Code</u> (USC).

Form: RTC-001
Page: 2 of 7
Revision 1.2
Date: 07272022

Other <u>Public laws</u> (P.L.) can be found on government websites, most notably, the <u>National Archives</u>. A simple internet search for the "P.L." number will reveal several sources, including <u>Cornell University</u> (each section of the code includes notes a references, which describe relevant amendments and authorities).

### (B) FEDERAL REGULATIONS

Title 49 of the CFR (49 CFR) covers many Department of Transportation (DOT) activities, including the transportation of hazardous materials under Subtitle B, Chapter I parts 105 to 199. Part 7 of this title covers the handling of FOIA requests. Subtitle B, Chapter VIII parts 800 through 845 govern the reporting and investigation of incidents and accidents to and by the National Transportation Safety Board (NTSB). In Subtitle B, Chapter XII parts 1500 to 1584, you will find aviation rules from the Transportation Security Administration (TSA), an agency under the auspices of the Department of Homeland Security.

Title 14 of the CFR (14 CFR) covers regulations for Aeronautics and Space—

- Chapter <u>I</u> parts <u>1</u> through <u>198</u> govern the certification, operation and maintenance of civil aircraft.
- Chapter II parts 200 through 399 cover aviation economic regulation under the jurisdiction of the DOT.
- Chapter III parts 400 through 460 govern commercial space.
- Chapter  $\underline{V}$  parts  $\underline{1201}$  to  $\underline{1275}$  is reserved for the National Aeronautics and Space Administration (NASA).
- Chapter VI parts 1300 to 1310 control air transportation system stabilization.

The regulations described above can be obtained from the <u>eCFR</u>. They may also be obtained from the <u>Government Publishing Office (GPO)</u>.

### (C) FAA ADVISORY MATERIALS AND INTERNAL DOCUMENTS.

FAA guidance can be obtained from Advisory Circulars (ACs) or other internal government material such as orders, handbooks, bulletins and notices. Although the latter are directed to FAA employees, they are valuable sources of information on government expectations regarding regulatory compliance. Similarly, government reports and audits, legal interpretations and opinions and federal court decisions can all impact compliance issues and decisions.

#### (1) ACs

ACs are issued as guidance to the public; they are one means, but *not the only means*, of showing compliance with a particular regulation. Following this guidance is typically "the path of least resistance" since individual FAA inspectors know that compliance with the AC reflects accepted national policy on a given issue.

These documents are available online via the <u>FAA's AC database</u> as well as in the <u>Dynamic</u> Regulatory System.

Form: RTC-001
Page: 3 of 7
Revision 1.2
Date: 07272022

### (2) FAA Internal Documents—Orders, Notices, Bulletins and Policy Memoranda

FAA orders, notices, bulletins and policy memoranda are documents that provide information to FAA employees. However, these documents are also valuable sources of information on what the FAA expects of certificate holders...but their content *cannot create a compliance requirement* that does not exist in the rules.

The best sources of internal information are searching the internet, using the resources in this document or your aviation trade association. Many orders and notices can be found online in the Dynamic Regulatory System.

### (D) FLIGHT STANDARDS INFORMATION

Order 8900.1 "Flight Standards Information Management System (FSIMS)" was established as the repository of all Flight Standards policy and guidance concerning aviation safety inspector (ASI) job tasks. The primary audience for this order is Flight Standards ASIs, their managers and supervisors, and other operational and administrative employees. The aviation industry references the order to see requirements placed by the agency on its employees – such knowledge helps understand nuances of compliance through the instruction given to government personnel. The contents of 8900.1 are available in the Dynamic Regulatory System.

### (E) AIRCRAFT CERTIFICATION SERVICE POLICY

Informational documents are issued by the Aircraft Certification Service (AIR) and its Divisions. They reflect FAA policy related to the design, manufacturing and certification of civil aviation products, articles and parts. These publications may be obtained online in the <a href="Dynamic Regulatory System">Dynamic Regulatory System</a>.

### (F) LEGAL INTERPRETATIONS AND CASES

### (1) OFFICE OF THE CHIEF COUNSEL LEGAL INTERPRETATIONS

Legal interpretations of the aviation statutes and <u>14</u> CFR are issued by the Office of the Chief Counsel in FAA headquarters and by the various Regional Counsel's offices in the nine FAA regions.

The interpretations are typically issued in response to inquiries from the aviation community or from one of the FAA's own field offices. The agency posts interpretations online through its Office of the Chief Counsel's Regulations Division—Legal Interpretations & Chief Counsel's Opinions page and they may be obtained under the FOIA.

### (2) CIVIL PENALTY CASES

Under Federal regulation 14 CFR § 13.202, the Administrator of the FAA serves as the "decision-maker" on appeals from the decisions of the DOT administrative law judges in civil penalty cases. You can search cases by Subject, Regulation or Statute, Name, or FAA Order Number, and see cases appealed to Federal Court.

Form: RTC-001
Page: 4 of 7
Revision 1.2
Date: 07272022

### (3) NATIONAL TRANSPORTATION SAFETY BOARD (NTSB) CASES

The final case decisions of the NTSB with regard to an airman or mariner's appeal of action on a certificate are found in <u>National Transportation Safety Board Decisions</u>, an online searchable index. Complete text for decisions issued since mid-1992 is also available in the Adobe Portable Document Format (PDF).

### (G) GOVERNMENT REPORTS AND AUDITS

Government agencies undergo federal audits, the results of which are publicly reported to provide correction and instruct the public on performance.

### (1) DOT OFFICE OF INSPECTOR GENERAL (OIG)

The <u>DOT OIG</u> is charged with auditing DOT agencies, including the FAA. It also has the power to investigate DOT agencies for fraud, waste, and abuse. When it exercises its auditing power, the report is provided to the FAA for comment and response. The agency's responses can reflect its interpretation and application of the regulations and internal orders and policy.

Reports on aviation activities can be found on its website.

### (2) GOVERNMENT ACCOUNTABILITY OFFICE (GAO)

The <u>GAO</u> is an arm of the legislative branch and can be directed by Congress to audit an agency's activities. The FAA's responses can reflect its interpretation of a congressional mandate, interpretation or application of the regulations and internal orders and policy.

Reports on FAA audits can be found on its website.

### (IV) RESOURCES

Resource	Url		
14 CFR	https://www.ecfr.gov/current/title-14		
49 CFR	https://www.ecfr.gov/current/title-49		
Administrative Procedure Act (5 United States Code)	https://www.law.cornell.edu/uscode/text/5/part-l/chapter-5		
Airworthiness Directives (current)	https://www.faa.gov/regulations_policies/airworthiness_directives		
DOT	https://www.transportation.gov/foia		
DOT FOIA requests	https://www.transportation.gov/foia		
DOT OIG audit reports	https://www.oig.dot.gov/audits?field_type_tid=3		
Electronic Code of Federal Regulations	https://www.ecfr.gov		
FAA	https://www.faa.gov		

Form: RTC-001
Page: 5 of 7
Revision 1.2
Date: 07272022

FAA's Civil Penalty Adjudication	https://www.faa.gov/about/office_org/headquarters_offices/agc/p_ractice_areas/adjudication		
FAA's Dynamic Regulatory System	https://drs.faa.gov		
FAA's Legal Interpretations & Chief Counsel Opinions	https://www.faa.gov/about/office_org/headquarters_offices/agc/p_ractice_areas/regulations/Interpretations/		
GAO reports and testimonies	https://www.gao.gov/reports-testimonies		
GPO online store	https://bookstore.gpo.gov/		
Hazardous Materials Transportation Act	https://www.phmsa.dot.gov/standards- rulemaking/hazmat/federal-hazardous-materials-transportation- law-overview		
Independent Safety Board Act of 1974	https://www.ntsb.gov/legal/Pages/ntsb_statute.aspx		
NTSB Case Decision Database	https://www.ntsb.gov/legal/alj/Pages/ONOQuery.aspx		
Omnibus Transportation Employees Testing Act	https://www.transportation.gov/odapc/omnibus-transportation- employee-testing-act-1991		
PHMSA	https://www.phmsa.dot.gov		
Title 49 United States Code (Transportation)	https://www.law.cornell.edu/uscode/text/49		
United States Code	http://uscode.house.gov/ https://www.law.cornell.edu/uscode/text		

### (V) ACRONYMS

14 CFR The title of the Code of Federal Regulations with the federal aviation safety

regulations, formerly known as the Federal Aviation Regulations

A&P Airframe and Powerplant

AAIP Approved Aircraft Inspection Program

AC Advisory Circular

ACO Aircraft Certification Office (FAA)

ACSEP Aircraft Certification Systems Evaluation Program

AD Airworthiness Directive

AFS Flight Standards Service (FAA)
AIR Aircraft Certification Service (FAA)

ALJ Administrative Law Judge

ANSI American National Standards Institute

Copyright © 2022 Obadal, Filler, MacLeod & Klein, P.L.C.

www.potomac-law.com

Form: RTC-001
Page: 6 of 7
Revision 1.2
Date: 07272022

APA Administrative Procedure Act

APU Auxiliary Power Unit

ASA **Aviation Suppliers Association** Aviation Safety Inspector ASI **ASAP** Aviation Safety Action Program **ASRP** Aviation Safety Reporting Program **ATOS** Air Transportation Oversight System AVS Office of Aviation Safety (FAA) BAA Bilateral Airworthiness Agreement BASA Bilateral Aviation Safety Agreement

CAA Civil Aviation Authority

CAB Civil Aeronautics Board (FAA predecessor)
CAM Civil Aeronautics Manual (CAB guidance)
CASE Coordinating Agency for Supplier Evaluation

CFR Code of Federal Regulations
CMM Component Maintenance Manual

DAH Design approval holder

DAR Designated Airworthiness Representative
DER Designated Engineering Representative

DMIR Designated Manufacturing Inspection Representative

DOT Department of Transportation

EASA European Union Aviation Safety Agency

ECS Environmental Control System

EO Engineering Order

ETOPS Extended-range Twin-engine Operational Performance Standards

FAA Federal Aviation Administration

FAR Federal Acquisition Regulation (no longer Federal Aviation Regulations)

FBI Federal Bureau of Investigation FOIA Freedom of Information Act

FSDO Flight Standards District Office (FAA)
GPWS Ground Proximity Warning System

HazMat Hazardous Materials

HMR Hazardous Materials Regulations

IA Inspection Authorization

ICA Instructions for Continued Airworthiness ICAO International Civil Aviation Organization

IFO International Field Office (FAA)

IPC Illustrated Parts Catalog

ISO International Organization for Standardization

JAA Joint Aviation Authorities (no longer in existence, replaced by EASA)

JAR Joint Aviation Regulations (no longer in existence, adopted by individual CAAs)

MEL Minimum Equipment List

MIDO Manufacturing Inspection District Office (FAA)
NASA National Aeronautics and Space Administration

Form: RTC-001
Page: 7 of 7
Revision 1.2
Date: 07272022

NIST National Institute of Standards and Testing
NTSB National Transportation Safety Board
ODA Organization Designation Authorization
OEM Original Equipment Manufacturer
OIG Office of the Inspector General
PAH Production Approval Holder
PC Production Certificate

PHMSA Pipeline and Hazardous Materials Safety Administration

PMA Parts Manufacturer Approval
RII Required Inspection Item
RSQM Repair Station Quality Manual

RTCA Formerly known as the Radio Technical Commission for Aeronautics

SAE Society of Automotive Engineers

SDR Service Difficulty Report
STC Supplemental Type Certificate
SUP Suspected Unapproved Part

TC Type Certificate

TCAS Traffic Alert and Collision Avoidance System
TSA Transportation Security Administration
TSOA Technical Standard Order Authorization

UCC Uniform Commercial Code

USC United States Code

### (VI) RECORD OF REVISIONS

Issue date	Revision level	Reason for revision	Retraining recommended
02202015	0	Original issue	N
01052016	1	Basic content and organization updates. Change to "Regulatory Research Guide."	N
02072019	1.1	Updates to resource links in Section (III).	N
07272022	1.2	Reorganization and content updates in Sections (I), (II), and (III). Updates to resource links in Section (IV) and acronyms in Section (V).	