

**September 22, 2023** 

Brandon Roberts Executive Director, Office of Rulemaking, ARM-1 Federal Aviation Administration 800 Independence Avenue, SW Washington, DC 20591

#### *Re: Preliminary Recommendation Report – Repairman Certificate Portability Working Group*

Dear Mr. Roberts,

On behalf of the Aviation Rulemaking Advisory Committee (ARAC), I am pleased to submit the enclosed Preliminary Recommendation Report from the Repairman Certificate Portability Working Group.

At the September 21, 2023, ARAC meeting at FAA's Washington, DC headquarters, Mr. Ric Peri, the working group chair presented the preliminary recommendations regarding a repairman certificate issued under § 65.101 of 14 CFR to be portable from one employing certificate to another.

ARAC members who attended the meeting, in-person and virtually, accepted the report, as presented. Although the working group will continue its task, furthering its review and refining its recommendations, I would encourage the agency to review and act upon the preliminary recommendations presented in the report of (1) amending FAA policy; (2) align repairman and organizational ratings; (3) amend Advisory Circular 65-24; and (4) amend 14 CFR Part 65.

Sincerely,

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David Oord ARAC Chair

Enclosure: Preliminary Recommendation Report – Repairman Certificate Portability Working Group

Federal Aviation Administration Aviation Rulemaking Advisory Committee Repairman Certificate Portability Working Group

**Preliminary Report** 

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### **Executive Summary**

The Federal Aviation Administration (FAA) assigned the Aviation Rulemaking Advisory Committee (ARAC) the task to make recommendations on the feasibly of allowing a repairman certificate issued under § 65.101 of title 14, Code of Federal Regulations (CFR) to be portable from one employing certificate holder to another.

#### Task

The Repairman Certificate Portability Working Group will provide advice and recommendations to ARAC on the most effective ways to allow a repairman certificate issued under § 65.101 to be more portable from one employing certificate holder to another. The Working Group will review all relevant materials to assist in achieving their objective.

The Work Group is tasked:

- (1) To perform a comprehensive review of internal and external guidance material and regulations, that pertain to certificating a repairman under § 65.101. This review will include reviewing–
  - (a) The pertinent sections of the part 65 preamble(s) to gain a thorough understanding of the intent of the limitation of a repairman working under an entity.
  - (b) FAA Guidance as necessary: i.e., FAA Orders, Notices, Advisory Circulars, Job Aids and Data Collection Tools.
  - (c) Processes and requirements by which the FAA process the application and issue the Repairmen Certificate.
- (2) Develop recommendations:
  - (a) That could increase the portability of repairmen certification issued under § 65.101 across employing certificate holders.
  - (b) That maintain, or improve, the current level of safety with regard to repairmen training and certification under § 65.101.
  - (c) That will clearly identify the need and the benefits of a portable repairman certificate while taking into consideration the costs and ramifications if any.
- (3) Provide qualitative and quantitative cost and benefits analysis and source documents for all recommendations that result in a change to either the CFR or FAA guidance.
- (4) Develop a preliminary and final report containing recommendations based on the analysis and recommendations. The reports should document both majority and dissenting positions on the recommendations and the rationale for each position. Disagreements should be documented, including the reason and rationale for each position.
- (5) The Working Group may be reinstated to assist the ARAC in responding to the FAA's questions or concerns after the recommendation report has been submitted.

#### Summary of Work Performed

Following the thorough historical review summarized in the **Regulatory and Guidance Material Review**, the Working Group evaluated three key issues:

- (1) Do current regulations support portability?
- (2) Does the agency guidance support or discourage portability?
- (3) Does the term repairman appropriately address the roles, responsibilities, and privileges of the certificate, and, in that light, does the term help or hurt technical workforce recruitment, retention, and career development?

The Working Group determined that:

- (1) 14 CFR part 65 currently prohibits portability of a repairmen's certificate.
- (2) The FAA guidance discourages the portability of qualifications.
- (3) The term repairman is misunderstood with inconsistent interpretation of the roles, responsibilities, privileges, and issuance of the certificates.

The Working Group has determined there are two approaches to "portability".

- □ Allowing the qualifications to be portable, an approach that would require the reissuance of the certificate whenever the individual changes employers.
- □ Permanent issuance of a certificate with appropriate limitations.

Both approaches were reviewed, discussed, and vetted and the conclusions of the Working Group are set forth in the **Background** 

The Working Group held its first meeting on May 6, 2022. The FAA's Office of Rulemaking (ARM) provided a presentation on the role and expectations of the Working Group. The Working Group reviewed each element of the assigned task to ensure its discussions and work focused on its requirements so consensus could be reached. Following the May 2022 introductory meeting, the Working Group met monthly with every third meeting being a face-to-face meeting.

The Working Group researched and reviewed the historical records beginning in 1945 to the present to better understand the origins, intent, and scope of repairmen privileges. The need for a certificate to bridge the gap between the authority of an air carrier or a repair station and the individual certificated mechanic was addressed in 1945 by the Civil Aeronautics Board. It developed the limited mechanic certificate to allow for the inspection and supervision of propeller and instrument maintenance. In 1952, limited mechanic certificate was replaced with the repairman certificate, which was given the expanded privilege to "supervise or perform the inspection, maintenance, overhauling, or repair of aircraft, aircraft engines, propellers, or appliances in connection with the particular job for which he was employed and certificated."

Title 14 CFR part 65 subpart E remains substantially unchanged since its publication 70 years ago as 14 CFR part 24, subpart B. However, the FAA has significantly altered the application for and issuance of the repairman certificates through various guidance changes that have inconsistently attempted to limit the privileges and opportunities of those certificates. Additionally, without knowledge of the regulatory history, the FAA workforce issues the certificate based on the misunderstanding that the repairman is a

lesser certificate than a mechanic certificate. Rather, the repairman certificate is a limited mechanic certificate that needs to be held to the same technical standard as today's mechanic's certificate with respect to the task, function, or specialty performed. (See, Finding 3, **Inconsistent Issuance of Repairman Certificates**.)

The result of the first year's work is captured in the **Preliminary Recommendations** section of this report.

### **Regulatory and Guidance Material Review**

The Working Group performed an exhaustive historical review of the regulations and guidance materials governing repairmen. The history of limited mechanic and repairman certificates extends from the Civil Air Regulations (CARs) through to amendment 63 to 14 CFR part 65. The Working Group review included internal and external guidance material, from Civil Aeronautics Manuals 18 and 24 through the current Advisory Circular 65-24 and Order 8900.1.

#### **Regulatory Review**

Regulations governing individuals authorized to perform maintenance, preventive maintenance and alteration on civil aircraft were introduced in 1938 as part 24 to the CARs. The limited mechanic certificate was originally issued to address the limitations of the mechanic certificate for certificated repair stations and manufacturers with privileges to perform work on propellers or aircraft instruments. Mechanics have never had the privilege of performing "major repairs to or major alterations of propellers, and any repair to or alteration of an instrument."

In a 1952 rulemaking (see, 17 FR 2978) the agency introduced the repairman certificate with privileges well beyond the original "limited mechanic ratings" for propeller and appliance work to include inspection, maintenance, overhauling, or repair of aircraft, aircraft engines, propellers, or appliances. Regulations governing repairmen have remained relatively unchanged from 1952 through recodification to the current amendment 65-63.

However, FAA guidance has amended the roles, responsibilities, privileges, limitations, and authorities of repairmen through policy changes without the benefit of rulemaking. As an example, paragraph D. 1) of FAA Order 8900.1 Volume 5 Chapter 5 Section 4 states: "In no instance should anyone issue a Repairman Certificate with an airframe and/or powerplant rating to circumvent the process of obtaining a Mechanic Certificate. If someone has issued a Repairman Certificate with airframe and/or powerplant ratings, request that the repairman surrender the certificate. Issue a Repairman Certificate with the appropriate privileges and limitations." This policy is in direct conflict with the original regulatory language implementing repairmen. The Working Group also noted that with the exception of propeller and instrument maintenance, all repairman certificates contain airframe or powerplant authority.

#### Guidance Material Review

The Working Group reviewed Advisory Circular 65-24 and discovered it is not aligned with the certification of repairmen employed by repair stations. The requirement for certification of repairmen employed by repair stations was amended to promote workforce development, however the language of the AC retains legacy guidance.

The Working Group has reviewed FAA Order 8900.1 Volume 5 Chapter 5 Section 4, Certificate Part 65 Repairman/Added Privileges. The FAA Order, like the advisory circular retains the pre-2004 legacy language for the issuance of repairmen certificates.

In addition, the FAA Order fails to recognize a previously issued repairman certificate as a means of establishing qualifications for reissuance under a new but similar employment situation. Processing every application as new discourages use of previous qualifications and the development of new skills.

Findings section below.

## Background

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#### Findings

There are five dominant findings from the regulatory review that are the basis for the **Preliminary Recommendations**:

- (1) The origin of repairman classification.
- (2) The origin of the repairman certificate and regulations.
- (3) Portability of qualifications.
- (4) Inconsistency in the issuance of the privileges and limitations of a repairman certificate.
- (5) The permanent issuance of a certificate with appropriate limitations.

#### (1) Origin of Repairmen

The repairman concept was originally introduced in 1945 in the form of a limited mechanic certificate, a certificate issued to address the limitations of the mechanic certificate, which has always prohibited the

holder from performing "major repairs to or major alterations of propellers, and any repair to or alteration of an instrument."

The limited mechanic certificate was issued with propeller or aircraft appliance rating(s) to persons working under the authority of a repair station or manufacturer. (See, 10 FR 7790, June 27, 1945.)

### (2) Origin of the Repairman Certificate

The 1952 rulemaking (see, 17 FR 2978, April 5, 1952) introduced privileges and limitations for a repairman with authority well beyond the original "limited mechanic ratings" for propeller and appliance work.

Since a repairman must have been employed by a certificated repair station, manufacturer, or appropriately certificated air carrier, when the regulation was promulgated in 1952, the repairman certificate was given the privilege to "supervise or perform the inspection, maintenance, overhauling, or repair of aircraft, aircraft engines, propellers, or appliances." (See, 14 CFR § 24.130.)

### (3) Inconsistent Issuance of Repairman Certificates

Today, FAA Order 8900.1 Volume 5 Chapter 5 Section 4 page 4 directs:

Repairmen do not have a rating other than 'Repairman'. Rather, they have specific duties in the form of privileges or jobs listed under the 'Limitations' section of the Repairman Certificate, since each repairman is specially qualified to perform maintenance on aircraft or components thereof, appropriate to the job for which the repairman is employed.

Following a review of over 20,000 repairman certifications issued by the agency, the Working Group found little consistency. Repairmen certificates are issued with myriad ratings and/or limitations, forever placing the individual's privileges under scrutiny, which precludes any reasonable attempt at portability.

### (4) **Portability of Qualifications**

After the thorough review of the applicable statutes, regulations, and internal and external guidance it was determined that there are no prohibitions against the portability of qualifications. In fact, the agency has full discretion in determining qualifications through public guidance and directives to its Aviation Safety workforce. Once qualifications are established, there are no statutes, regulations, or guidance that would negate the applicant's showing without formal legal action.

Unfortunately, the current guidance lacks instructions regarding the issuance of a repairman certificate for a previously qualified person, when requested by the former certificate holder and recommended by the new employer.

### (5) **Permanent Issuance of the Certificate**

The thorough review of applicable statutes, regulations, and internal and external guidance revealed that the current regulations prohibit the permanent issuance of repairman certificates.

The regulation states, "Unless it is sooner surrendered, suspended, or revoked, a repairman certificate is effective until the holder is relieved from the duties for which the holder was employed and certificated." (See, 14 CFR § 65.15(b).)

## **Preliminary Recommendations**

The Working Group is continuing its review and adjustment to recommendations regarding the regulations and guidance material based upon the **Findings** and the following preliminary recommendations.

### (1) Amend FAA Policy

Amend FAA Order 8900.1 (Volume 5, Chapter 5, Section 4) to ensure repairman certificates are issued consistently and can be reissued based upon established qualifications.

When the FAA issues the repairman certificate, it is approving the individual's qualifications and capabilities. Those qualifications should be valid unless the individual's certificate was revoked or suspended due to lack of qualifications.

Therefore, the Working Group's recommends the agency establish criteria for issuance of repairman certificates and ratings consistent with recommendation 2 to **Align Repairman and Organizational Ratings**. This would allow a certification to be reissued based on a previously issued repairman certificate without additional justification provided the earlier certificate was not suspended or revoked and is consistent with the new employers' recommendation and tasks.

### (2) Align Repairman and Organizational Ratings

Repairman must be employed by either a repair station or an air carrier; the ratings of those certificate holders are defined by regulations. Aligning a repairman's ratings with those of the certificated organization that employs them would enhance consistency and standardization of qualifications. The Working Group recommends repairman's rating include aircraft, airframe, powerplant, propeller, radio, instrument, accessory, or limited services.

When issued, the repairman's limitations would be consistent with the duties, responsibilities, and privileges established by the individual's competency to perform assigned tasks consistent with the amendments to the agency's guidance being developed by the Working Group.

### (3) Amend Advisory Circular 65-24

The AC must align with the changes to part 65, subpart E and other associated regulations, e.g., part 145. Also, to provide consistency and repeatability in the qualifications for and issuance of repairmen certificates amendments to AC 65-24 must be made.

Generally, the FAA's Aviation Mechanic General, Airframe, and Powerplant Airman Certification Standards (FAA-S-ACS-1) would be utilized to develop task specific qualifications for the repairman rating requested.

The Working Group believes that the qualifications for maintenance and alteration tasks and therefore repairman's qualifications should be consistent with a mechanic's with respect to performing maintenance or alteration on aircraft, airframe, powerplant, propeller, radio, instrument, accessory, or limited services tasks and functions. Further limitations associated with the certificate can be issued when necessary.

### (4) Amend 14 CFR Part 65

If the agency must consider changes to 14 CFR part 65, the Working Group recommends the following amendments to accommodate the changes to the regulations and to the guidance material being developed by the Working Group.

#### (a) Limited Mechanic

In general, the Working Group recommends changing the type of certificate issued from repairman to limited mechanic. Since the concept of a certificate for individuals employed by another certificate holder was introduced in 1945 as a limited mechanic's certificate, the scope and authority has expanded. The issuance of today's repairman certificate creates unforeseen problems and fails to provide a career and workforce development path for aviation maintenance professionals.

The use of the term limited mechanic for an individual certificate authorized to perform restricted maintenance functions or tasks enables the issuance of explicit ratings more consistent with the current regulations and the desire to provide career advancement opportunities in the aviation industry. The term also reinforces the standard that all work must be performed in accordance with the regulations and their quality standard, regardless of the certificate held.

The limited mechanic certificate better reflects an aviation maintenance activity or career path. The term more correctly represents the privileges of individuals that wish to remain limited, e.g., light sport, while allowing other limited mechanics to progressively added qualifications. In addition, individuals that wish to qualify for a full mechanic certificate with airframe or powerplant ratings are provided a discernible career path.

While reviewing the issue of aircraft maintenance workforce development, the Working Group discovered a disconnect between 14 CFR parts 65 and 145. In amendment number: 145-27 dated 2004, the FAA revised the certification of repairmen to promote and encourage workforce development (see, Sec. 145.159). However, part 65 was never amended to reflect these changes. As a result, the Working Group recommended changes to part 65 subpart E that align with the revised language of Sec. 145.159 and the intent of amendment 145-27.

#### (b) Amend 14 CFR § 65.15 by deleting paragraph (b)

Unless it is sooner surrendered, suspended, or revoked, a repairman certificate is effective until the holder is relieved from the duties for which the holder was employed and certificated.

### (c) Amend 14 CFR § 65.101(a)(2)

From: Be specially qualified to perform maintenance on aircraft or components thereof, appropriate to the job for which he is employed;

To: Be specifically qualified to perform, supervise, or approve for return to service, the maintenance and/or alteration of aircraft, aircraft engines, propellers, or appliance;

#### (d) Delete 14 CFR § 65.101(a)(3)

Be employed for a specific job requiring those special qualifications by a certificated repair station, or by a certificated commercial operator or certificated air carrier, that is required by its operating certificate or approved operations specifications to provide a continuous airworthiness maintenance program according to its maintenance manuals;

#### (e) Amend 14 CFR § 65.101(a)(4)

From: Be recommended for certification by his employer, to the satisfaction of the Administrator, as able to satisfactorily maintain aircraft or components, appropriate to the job for which he is employed;

To: Be recommended for certification by the employer, to the satisfaction of the Administrator, as able to satisfactorily perform, supervise or approve for return to service maintenance and/or alteration of aircraft, aircraft engines, propellers, or appliance under the employer's certificate;

### (f) Amend 14 CFR § 65.103(a)

From: 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.

To: A certificated limited mechanic may perform, supervise or approve for return to service the maintenance or alteration of aircraft, aircraft engines, propellers, or appliance for which a rating has been issued and within the limitations of the certificate while employed by a certificated repair station, commercial operator, or air carrier.

### Conclusion

The Working Group will continue its task and provide a final report with definitive recommendations for the improvement of the repairman certification process, assure portability, and clarify the authority and limitations consistent with the individual's capability and assigned job, position, or tasks, to enhance workforce development and promotion in the aerospace maintenance field.

To complete its task and issue a final report with definitive recommendations, the Working Group is spending its second year reviewing the agency's guidance material, e.g., FAA Order 8900.1 and AC 65-24. The Working Group will make recommended edits to better reflect the current regulatory requirements and the need for career development in aviation maintenance as set forth in Recommendations (1) **Amend FAA Policy**, (2) **Align Repairman and Organizational Ratings**, and (3) Amend Advisory Circular 65-24.