# Federal Aviation Agency



AC NO:	AC 65-3
AIF	RMEN
EFFECTIV	E:
7/	26/63

SUBJECT: PUBLIC MEETINGS TO DISCUSS MODERNIZATION OF AVIATION MECHANIC CERTIFICATION REQUIREMENTS

- 1. <u>PURPOSE</u>. This circular informs the aviation community of a series of public meetings on a national scale during August and September 1963, to discuss the modernization of regulatory certification requirements for aviation mechanics.
- 2. SCOPE. These meetings will be at the grassroots level to provide an opportunity for the expression and exchange of individual ideas by aviation maintenance personnel as well as their employers. Areas of discussion will cover such items as aviation mechanic experience, knowledge, skill, privileges and limitations requirements, and the FAA examination and rating system.
- 3. BACKGROUND. The mechanic certification program has remained relatively unchanged for more than 30 years, and perhaps should be realigned with the responsibilities of maintaining modern complex aircraft.

The Agency has been studying and evaluating the mechanic certification program for quite some time and has received many suggestions and recommendations from individuals and various industry groups for the general improvement of this program. A review of these suggestions and recommendations reflects a wide diversity of opinion as to exactly what regulatory changes should be made to modernize the requirements.

The FAA has no fixed idea on what the solution to this problem should be. We believe that only through the combined discussions, by the FAA and the aviation community, of the rules and regulations governing aviation mechanics will we arrive at the proper course and direction of any regulatory action.

4. MEETING AGENDA ITEMS. A list of the agenda items that will be discussed at the aviation mechanic meetings is attached. All interested persons are invited to send in written comments on the agenda items whether or not they can attend the meetings.

For the convenience of those persons who attend the meetings, an Aviation Mechanic Meeting Notebook has been developed. This notebook is designed so that the user can enter comments opposite each of the discussion items and return it to the FAA. The comments should be returned to the meeting chairman at the end of the meeting or to the local FAA district office no later than September 30, 1963.

5. SCHEDULE OF MEETINGS. The aviation mechanic meetings will be held at the time, places and dates indicated on the attached schedule.

eorge S. Moore

Director

Flight Standards Service

# ATTACHMENT 1. AVIATION MECHANIC MEETING AGENDA ITEMS

#### ITEM 1 - Experience Requirements

The FAA has received a number of comments from the aviation industry on the experience requirements in FAR 65. Some people feel that the requirements should "spell out" the specific areas in which an applicant should gain experience. Others feel that 18 months' experience for each mechanic rating is insufficient time to gain the required skill and knowledge for a mechanic certificate.

#### DISCUSSION

Considering the various types of aircraft in operation today and the wide range of skills and knowledges necessary to maintain them, should the experience requirement be changed?

One course of action might be for the FAA to retain the 18-month requirement and establish specific mechanical functions or projects that an applicant must complete while working as a helper or trainee.

#### OR

Should the 18 months' experience requirement be increased? Decreased?

#### ITEM 2 - Knowledge Requirements

Employers of aviation mechanics say that today's mechanic should have a good theoretical background to help him solve mechanical difficulties and to troubleshoot. Newly certificated mechanics are not coming up to this expectation.

#### DISCUSSION

Should knowledge requirements for the mechanic written examinations be raised to include testing in theoretical understanding of specific aircraft systems; i.e., electrical, air conditioning, air pressurization systems, etc.?

#### OR

Should more emphasis be placed on physics, mathematics, and basic operating principles of aircraft systems, and should the actual familiarization of specific systems come after certification and employment?

#### ITEM 3 - Skill Requirements

Aviation mechanics! duties have changed over the years. Fifteen or twenty years ago, he may have been expected to maintain, overhaul, or even rebuild a complete aircraft. Such duties required a number of skills. Today, he may only maintain one part of the aircraft, and when a failure occurs or troubles are analyzed only the replacement of certain parts or certain units may be involved.

#### DISCUSSION

To update the skill requirements, should the FARs be revised to require a demonstration of only limited skills such as servicing an aircraft, replacing a cylinder, and repairing a metal skin?

#### OR

Should we continue to require engine overhaul, fabric recovering, cable splicing, etc., to teach the newly certificated mechanic an appreciation for the art of aircraft maintenance?

# ITEM 4 - General Privileges and Limitations

Current regulations permit an appropriately rated certificated mechanic to perform or supervise the maintenance or alteration of an aircraft. Regulations further provide that he may not supervise this maintenance or alteration unless he has satisfactorily performed this work at an earlier date.

Some industry segments think that newly certificated mechanics are granted too many privileges for their limited experience; yet, others think the aviation maintenance industry is self-regulating in this respect.

#### DISCUSSION

Should the privileges of a newly certificated mechanic be limited to performance privileges during the first year, with supervisory privileges added a year or two later, after an appropriate FAA examination?

# <u>OR</u>

Should the FARs continue to grant broad privileges to newly certificated mechanics, with the FAA establishing an individual recordkeeping system (logbook)? Such a system would require a certificated mechanic to log or document the different types of work he previously performed to assure that supervisory privileges are current.

## ITEM 5 - Additional Privileges

A certificated mechanic with airframe and powerplant ratings may approve and return to service any airframe, powerplant, or related parts after he has performed, supervised, or inspected the maintenance or alteration of same (excluding major repairs and major alterations). In addition, he may also perform 100-hour inspections.

#### DISCUSSION

Consider the various types of current aircraft and their complexity. Many different job functions are involved in maintaining and altering these aircraft. Is a newly certificated mechanic sufficiently skilled and knowledgeable to approve and return them to service?

#### OR

Should the privileges of a beginner mechanic be limited to performance and supervision privileges for 2 or 3 years, with inspection, approval, and return-to-service privileges added later, after an appropriate FAA examination?

#### ITEM 6 - FAA Oral/Practical Examination

The present method of conducting a mechanic oral/practical examination, as required by FAR 65, is cumbersome and over the years has created many problems for mechanic applicants, mechanic examiners, and the FAA. For example (1) an applicant must make an appointment and wait sometimes as long as 2 or 3 weeks for the examination; (2) the facilities, equipment, and materials used for the examination must be arranged and paid for by the applicant; and (3) delays in waiting for examinations may cost applicants prospective jobs. Perhaps we should take another look at our method of conducting oral/practical examinations.

#### DISCUSSION

Should these FAA examinations be accomplished by the applicant during the experience or learning period on a progressive basis, with the demonstration of skill being observed and endorsed by qualified industry personnel?

#### OR

Should the FAA continue to require an applicant to satisfactorily complete a written, oral, and practical examination, in that order, regardless of difficulties mentioned above?

## ITEM 7 - Rating System

The present FAA mechanic rating system provides for two ratings, airframe and powerplant.

With the variety of makes and models of aircraft in operation today, and their increasing complexity, it has become impractical, if not impossible, for a mechanic to possess sufficient knowledge and skill to perform all of the job functions involved in maintaining these aircraft. The FAA mechanic rating system obviously needs improvement to meet the current needs of the aviation industry.

#### DISCUSSION

To update the rating system, should the FAA recognize such areas as turbine powerplants, rotary-wing aircraft, electronics, etc.?

OR

Should mechanics be rated by aircraft make and model?

OR

Should the A&P mechanic certificate with limited privileges be established as a basic certificate, with privileges added as experience is gained?

# ATTACHMENT 2. AVIATION MECHANIC MEETING SCHEDULE

STATE	CITY	LOCATION	DATE	TIME
Alabama	Birmingham	Redmont Hotel Emerald Room 2101-5th Avenue North	9/7/63	7:30 p.m.
Alaska	Anchorage	To Be Announced Locally	8/21/63	7:00 p.m.
	Fairbanks	To Be Announced Locally	8/22/63	7:00 p.m.
Arkansas	Little Rock	Lafayette Hotel	8/26/63	7:30 p.m.
California	Los Angeles	FAA Hangar No. 3 5885 West Imperial Highway	9/10/63	8:00 p.m.
	Oakland	Mezzanine Floor Oakland International Terminal	9/18/63	8:00 p.m.
Colorado	Denver	Combs Hangar Stapleton Airfield	9/16/63	7:00 p.m.
District of Columbia	Washington	FAA Hangar 6 Washington National Airport	8/14/63	7:30 p.m.
Florida	Miami	Crossway Inn 1850 N.W. LeJeune Road	8/20/63	7:30 p.m.
Georgia	East Point	FAA Regional Office Rooms 718 and 719 3400 Whipple Avenue	9/13/63	7:00 p.m.
Hawaii .	Honolulu	Honolulu Technical School Aero Tech Division Honolulu International Airport	9/10/63	5:00 p.m.
	Honolulu	Honolulu Technical School Aero Tech Division Honolulu International Airport	9/18/63	7:30 p.m.

STATE	CITY	LOCATION	DATE	TIME
Illinois	Chicago	O'Hare Inn 6600 North Mannheim Roa Des Plaines, Illinois	9/10/63 d	7:30 p.m.
Louisiana	New Orleans	Walnut Room Lakefront Airport Administration Building	8/5/63	7:30 p.m.
	Shreveport	Garden Room Captain Shreve Hotel	8/15/63	7:30 p.m.
Massachusetts	East Boston	TWA Hangar Boston Logan Airport Prescott Street	9/11/63	7:30 p.m.
Michigan	Detroit	Air National Guard Auditorium Middle Belt Road Metropolitan Airport	8/27/63	7:30 p.m.
Minnesota	Minneapolis	Northwest Airlines General Office Bldg. Minneapolis St. Paul International Airport	8/29/63	7:30 p.m.
Missouri	St. Louis	Air National Guard Post Theatre Building Lambert Airport	9/12/63	7:30 p.m.
New Mexico	Albuquerque	Conference Room FAA ARTC Building	9/25/63	7:00 p.m.
New York	White Plains	National Guard Hangar Auditorium Westchester County Airp	9/25/63 ort	7:00 p.m.
North Carolina	Winston-Salem	Community Center Theatre 610 Coliseum Drive	8/19/63	7:30 p.m.
Ohio	Cleveland	Hopkins Hotel Cleveland Hopkins Airpo	8/28/63 rt	8:00 p.m.

STATE	CITY	LOCATION	DATE	TIME
Oklahoma	Oklahoma City	Aeronautical Center Auditorium Headquarters Building Will Rogers Airport	9/16/63	7:30 p.m.
	Tulsa	Sales Showroom Tulsair Distributors, Inc. Tulsa Municipal Airport	9/17/63	7:30 p.m.
Texas	El Paso	Champ's Aviation International Airport	9/23/63	7:00 p.m.
	Fort Worth	Main Dining Room Administration Building Greater Southwest International Airport	9/5/63	7:30 p.m.
	Houston	Gulf Gate Auditorium Gulf Gate Shopping Center	9/12/63	7:30 p.m.
	Lubbock	Ground School Room Champ's Aviation Lubbock Municipal Airport	9/18/63	7:30 p.m.
	San Antonio	Hangar No. 2 International Airport	8/8/63	7:30 p.m.
Washington	Seattle	Holiday Inn of American Motel 11244 Pacific Highway Sout	8/23/63 h	7:00 p.m.