

ORAL AND PRACTICAL TESTS

Completion of the oral and practical tests is usually the final step in becoming certificated or in adding a rating to a mechanic certificate. An oral and a practical test must be taken for each rating.

Oral and practical tests are administered by FAA Flight Standards inspectors or by FAA-designated mechanic examiners (DMEs). If an FAA inspector gives the tests, the required facility, tools, materials, and supplies must be furnished or arranged for by the applicant. The adequacy and suitability of the facilities can be determined at the time arrangements for the tests are being made.

If a DME gives the tests, he will furnish the facility and can usually arrange to furnish the tools, materials and supplies needed. DMEs are not paid by the FAA for their services or the use of their facilities and equipment during the examination of mechanic applicants and are authorized to charge a fee for administering oral and practical tests. The names and addresses of the FAA-designated mechanic examiners in each district can be obtained from the FAA Flight Standards district office that serves the area or from Advisory Circular No. 183-30, Directory of FAA Designated Mechanic Examiners.

The person administering the oral and practical tests will provide an application form and give detailed instructions on how it should be filled out. He will explain each of the projects to be assigned during the practical test and give some indication of the level of performance expected.

The oral test may be administered along with the practical test in the form of questions about the projects being performed, or it may be administered separately, before or after the practical test. The examiner will not attempt to trick or mislead you in any way with his oral questions or project assignments.

Any assignment or question that you do not understand should be clarified before continuing with the test.

THE ORAL TEST

Oral test questions cover the same subjects as the written tests and are intended to show how well the applicant can make use of his knowledge. Oral test questions fall generally into three types: (a) questions closely related to assigned practical projects—to further explore the applicant's understanding of the tasks being performed, (b) questions not related to a specific project—to evaluate the applicant's ability in areas in which a skill demonstration is not practical, and (c) questions to determine whether additional projects need to be assigned.

SAMPLE ORAL TEST QUESTIONS

Some examples of the type of questions asked during the oral test are:

1. How would you determine the leveling means for a specific aircraft?
2. What is a blind rivet and how is it used?
3. What is reinforcing tape and how is it used?
4. What is the difference between welding and brazing?
5. What is a circuit breaker and how does it work?
6. What are two causes of vapor lock in a fuel line?
7. What is the purpose of a pump-unloading valve in a hydraulic system?
8. What cylinder should be removed last during disassembly of a radial aircraft engine?
9. What is detonation and how is it harmful?
10. How would you check a magneto for correct internal timing?

11. What is the purpose of an engine oil-dilution system?
12. How would you check a propeller for correct track?
13. How is the moment of an item of equipment determined in computing aircraft weight and balance?
14. What precautions are required when fueling an aircraft?
15. What are the procedures for correcting generator brush arcing?
16. What is the most common method for determining the state of charge of a lead-acid battery?
17. How would you determine the effect that the installation of a new item of equipment has on the balance of an aircraft?
18. What is the purpose of a fuel tank sump and how is it inspected?
19. How would you determine the direction of rotation of a direct current motor?
20. Why is a reverse-current cutout relay required in a generator circuit?
21. What type compressor is most commonly used in aircraft turbine engines?
22. What are the installation practices for thermocouple leads?
23. What is the purpose and operation of the air/oil cooler in an engine lubrication system?
24. Explain the four-stroke, five-event cycle of a reciprocating engine.
25. What is the purpose of the turbine section in a jet engine?
26. What is an Airworthiness Directive?
27. What is the difference between a two-position propeller and a constant-speed propeller?
28. What are the general characteristics of the wood commonly used in aircraft construction?
29. How is stability about the horizontal axis of an aircraft obtained?

THE PRACTICAL TEST

The practical test consists of assigned work projects to test mechanical skill and ability to organize work, select and follow correct procedures, apply appropriate techniques, and determine an acceptable level of workmanship.

The person administering the test will select projects that utilize as much as possible equipment and procedures that are familiar to the applicant.

A high level of manipulative skill in performing complex operations is not expected. Some of the basic skills must have been developed, however, and must be demonstrated during the practical test.

Applicant's performance on projects in areas described as Level 3 in the section entitled "The Written Tests" will be expected to meet a return-to-service standard. If a project must be performed in accordance with a manufacturer's instruction or other data, the examiner will expect you to consult the instruction or data.

Any of the operations required to complete the actions in Level 2 and Level 3 action lines are potential practical projects. Notice, for instance, the entry under "E. Welding" of the Airframe Structures section of the listing. This entry is entitled "Solder, braze, gas- and arc-weld steel.—Level 2." Since this is a Level 2 action line, the applicant may be asked to perform basic welding operations, but he will not be required to be a highly skilled welder to pass the practical test.

On the other hand, consider the entry under "E. Materials and Processes" of the General section of the listing. The action line, "Inspect and check welds.—Level 3," indicates that the practical test may include a project that requires the applicant to inspect and make a dependable judgment about the quality of a welded joint. His judgment should be based upon (a) a generalized knowledge of welding materials, (b) a specific knowledge of the type of welded joint being inspected, and (c) the ability to find out all the things he needs to know about the weld in order to judge its quality.

SAMPLE PRACTICAL TEST PROJECTS

The following are typical of the projects assigned during mechanic practical tests.

1. Safety a turnbuckle.
2. Make a sheet metal splice.
3. Inspect a wood structure.

4. Remove, clean, inspect, and reinstall a brake master cylinder.
5. Gas-weld a steel tube.
6. Attach an electrical cable terminal.
7. Make up a section of fuel line and install fittings.
8. Bleed and adjust hydraulic brakes.
9. Compute empty weight center of gravity and the most forward and rearward loaded center of gravity of an aircraft.
10. Time the valves of an engine.
11. Adjust a carburetor float level.
12. Remove, clean, inspect, and reinstall an engine oil filter.
13. Install and time magnetos.
14. Remove and install a propeller.
15. Execute FAA Form 337, Major Repair and Alteration.
16. Perform a gear retraction test on an aircraft.
17. Replace shakeproof cowling fasteners.
18. Perform a fabric strength test.
19. Flash a direct current generator field.
20. Adjust turbine engine fuel controls.
21. Install packing seals and rings on hydraulic components.
22. Remove and install engine-driven hydraulic pumps.
23. Check an oxygen system for leaks.
24. Remove, clean, inspect, and install a fuel strainer.
25. Connect batteries to a constant-current battery charger.
26. Locate cracks in welded assemblies using dye penetrant.
27. Start an engine, and check for proper operation.
28. Adjust idle r.p.m. and mixture on a conventional carburetor.

29. Install engine cylinders and torque the holddown nuts.
30. Perform a cylinder compression test.

Oral and practical tests are graded as soon as they are completed, and the applicant is informed of his grade. If any part of either test is failed, the person administering the tests will issue a notice of disapproval of the application showing the titles of oral and practical subjects failed. He will also return the Airman Written Test Report that was presented by the applicant as evidence of having passed the written test.

An applicant who fails a test may apply for a retest as prescribed in FAR Part 65. An applicant has the option of returning to the same FAA office or DME or applying to any other office or DME for the retest. The retest will include only the subjects failed.

When all parts of the tests have been passed, the FAA office or DME will issue a temporary mechanic certificate. The following excerpts from FAR Part 65 pertain to temporary certificates.

“§ 65.13 Temporary certificate.

A certificate and ratings effective for a period of not more than 90 days may be issued to a qualified applicant, pending review of his application and supplementary documents and the issue of the certificate and ratings for which he applied.”

Permanent certificates are prepared and issued by the Airman Certification Branch of the Federal Aviation Administration and mailed to the address indicated by the applicant when he prepares the application form.

SAMPLE WRITTEN TEST QUESTIONS

The questions in this section are similar to those contained in FAA written tests for mechanics. They are included to show the type of questions used. No attempt has been made to cover any particular subjects.

1. What must a certificated mechanic with both airframe and powerplant ratings do prior to returning to service an aircraft on which he has performed and approved a 100-hour inspection?

1. Make the proper entries in the appropriate logbooks.
2. Present his work and records to a mechanic holding an Inspection Authorization for final approval and release.
3. Complete the required copies of FAA Form 337 including an accurate description of the work performed, date, mechanic's name, and certificate number.
4. Notify the local FAA maintenance inspector in writing of his intention to return the aircraft to service.

2. After making a major structural repair to an aircraft that is to be returned to service, FAA Form 337, Major Repair and Alteration, must be prepared. How many copies are required and what is the final disposition of the completed forms?

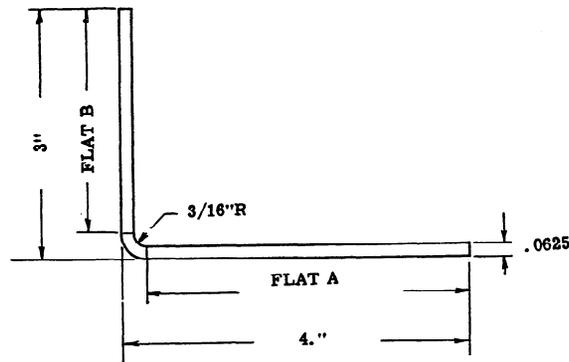
1. Three—one copy for the aircraft owner and two copies for the FAA.
2. Two—one copy for the aircraft owner and one copy for the FAA.
3. Three—one copy for the aircraft owner, one copy for the FAA, and one copy for the permanent records of the repairing agency or individual.
4. Two—both copies for the FAA.

3. If the container volume of a confined gas is doubled (assume temperature remains constant), the pressure will

1. increase in direct proportion to the volume increase.
2. remain the same.
3. be doubled.
4. be reduced to one-half its original value.

4. How many AN470AD-4-6 rivets will be required to attach a 10'' x 5'' splice plate if single-row, minimum edge distance, 4D spacing is used?

1. 60 rivets.
2. 56 rivets.
3. 62 rivets.
4. 52 rivets.

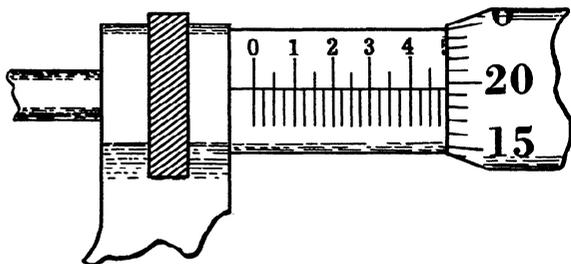


5. The length of flat A in the above drawing is

1. 3.750 inches.
2. 3.875 inches.
3. 3.813 inches.
4. 3.937 inches.

6. When making a forward weight and balance check to determine that the center of gravity (c.g.) will not exceed the forward limit during extreme conditions, the items of useful load which should be computed at their minimum weights are those located aft of the

1. forward c.g. limit
2. rearward c.g. limit.
3. datum.
4. empty weight c.g.



7. The micrometer scale shown above indicates a measurement of

1. 0.5195 inch.
 2. 0.4945 inch.
 3. 0.4695 inch.
 4. 0.4819 inch.
8. As the velocity of the air across an aircraft wing increases, the pressure of the air on the upper surface
1. increases.
 2. decreases.
 3. drops to zero.
 4. remains unchanged.
9. If the cross-sectional area of a given conductor is increased to four times its original value and the length and temperature remain constant, the resistance of the conductor will be
1. one-fourth its original value.
 2. four-times its original value.
 3. the same as its original value.
 4. found by multiplying the original resistance by the percentage increase in cross-sectional area.
10. Which of the following sequences of connecting and tightening the battery leads should result in the safest procedure for installation of a battery in an aircraft with a single-wire, ground-return electrical system?
1. Connect and tighten the negative (ground) lead before connecting the positive lead.
 2. Connect the negative (ground) lead, connect the positive lead, then tighten in the same order.
 3. Connect the positive lead, connect the negative (ground) lead, then tighten in the same order.
 4. Connect and tighten the positive lead before connecting the negative (ground) lead.
11. Which of the following statements relating to the conduct of a 100-hour inspection is true?
1. The inspecting agency shall use an inspection form as a checklist while performing a 100-hour inspection.
 2. The inspecting agency is not required to use an inspection form as a checklist while performing a 100-hour inspection.
 3. The inspecting agency shall use only the inspection form furnished and prescribed by the FAA Administrator as a checklist while performing a 100-hour inspection.
 4. The inspecting agency shall use only the inspection form furnished and prescribed by the manufacturer as a checklist while performing a 100-hour inspection.
12. Which of the following has little or no effect upon the rate of vaporization of a given fuel?
1. The pressure of the surrounding air.
 2. The temperature of the fuel.
 3. The temperature of the surrounding air.
 4. The antiknock value of the fuel.
13. If an aircraft is cruising in level flight and the stick or control column is moved forward, the elevator will
1. go down and the nose of the aircraft will go down.
 2. go up and the nose of the aircraft will go down.
 3. go down and the nose of the aircraft will go up.
 4. go up and the nose of the aircraft will go up.
14. During the inspection of an aircraft equipped with a push-pull tube-type control system, the threaded rod ends should
1. be checked for the amount of thread engagement by means of the inspection hole provided.

2. be checked to determine that the ball-bearing end is properly safetied to the push-pull rod with brass or stainless steel safety wire.
 3. be lubricated with waterproof high-pressure grease.
 4. not be adjusted in length for rigging purposes because the rod ends have been properly positioned and staked during manufacture
15. How should loosely adhering dust and dirt be removed from the exterior surfaces of aircraft transparent plastics?
1. Spray the surface with any commercial window cleaner.
 2. Wipe the surface with a moist chamois.
 3. Flush the surface with water.
 4. Wipe the surface with a dry cloth.
16. When rigging the wings on a monoplane equipped with front and rear lift struts, the general practice is to
1. control dihedral angle by the length of the front struts.
 2. establish the incidence angle by the length of the front struts, and wash-in and wash-out by adjusting the length of the rear struts.
 3. pre-rig the rear struts and adjust the length of front struts for propeller-torque correction as required.
 4. use struts of fixed length and rig in propeller-torque correction by the use of ground-adjustable rudder tabs.
17. It is not considered good aircraft finishing technique to
1. spray enamels over dopes or lacquers.
 2. spray bituminous paint on wood.
 3. spray dope or lacquer over unbaked enamels.
 4. use zinc chromate primer on aluminum-alloy structures.
18. A lapped and doped spanwise seam at the trailing edge of a wing should be covered with surface tape at least 3 inches wide. Prior to application, the surface tape should be notched at intervals not to exceed 6 inches to
1. make it easier to put on severe curvatures.
 2. prevent the entire tape from loosening in the event the tape begins to separate.
 3. increase the length of the tape's edges for better doping.
 4. prevent raveling of the tape.
19. Repairs or splices involving stringers on the lower surface of stressed-skin metal wings are usually
1. not permitted.
 2. permitted but are normally more critical in reference to strength than similar repairs to the stringers on the upper surface.
 3. permitted but are normally more critical in reference to aerodynamic cleanliness than similar repairs to the upper surface.
 4. permitted only if the damage does not exceed 6 inches in any direction.
20. Which of the following is *not* indicated by the aluminum sheet designation ALCLAD 2024-T36?
1. The process or combination of operations used to produce the stable temper.
 2. The thickness of the sheet.
 3. Major alloying element.
 4. Method used to produce stable temper (whether strain hardened or heat treated).
21. When steel hi-shear rivets are used to assemble aluminum alloy structural components, they should be
1. used at no greater ratio than one hi-shear rivet for each three aluminum alloy rivets.
 2. driven at 830° to 860° F. in order to reduce the possibility of cracking.
 3. coated with zinc chromate primer prior to assembly to reduce dissimilar-metal corrosion.
 4. fitted to extremely close tolerances.
22. The type of fluid to be used in an aircraft hydraulic system can be determined
1. only by a chemical analysis of a sample of fluid from the system.
 2. by the markings on or near the reservoir filler opening.
 3. by the color code attached to the hydraulic lines.

4. by mixing a sample of the fluid to be added with a sample of the fluid in the system and observing the reaction.
23. What will cause an engine-driven hydraulic pump of the correct capacity to fail to maintain normal system pressure during the operation of a cowl flap actuating unit?
 1. Severe bends in the cowl flap actuating cylinder lines.
 2. Severe restriction in the pump outlet.
 3. A partial restriction in the in-port of the selector valve.
 4. A partial restriction in the out-port of the selector valve.
24. Many landing gear systems use sequence valves to cause one hydraulic operation to follow another in a definite order. These valves are classified as
 1. pressure control valves.
 2. flow control valves.
 3. timelag valves.
 4. automatic crossflow valves.
25. Shuttle valves installed in large aircraft braking systems allow
 1. two independent systems to operate the same actuator if necessary.
 2. the safe application of brakes regardless of ground speed due to the compensating action of the valves.
 3. fluid to bypass from the right wheel cylinder to the left wheel cylinder if braking pressures are different.
 4. the compensating port, interconnecting both master cylinders, to discharge fluid alternately from one to the other.
26. Cabin pressurization differential pressure is normally controlled by
 1. varying the outflow valve position with changes of engine r.p.m. at constant altitude.
 2. maintaining cabin supercharger speed at a fixed rate regardless of altitude by a constant-speed drive.
 3. constant-volume cabin superchargers and an automatically positioned cabin outflow valve.
 4. manually regulating the setting of the butterfly valve located between the supercharger and the cabin.
27. The wing leading edges of transport category turbojet airplanes are generally protected from ice accumulation by
 1. hot air bleed from the engine compressor section to the leading edge.
 2. hot air from combustion heaters which are located in each wing.
 3. electrically heated synthetic rubber boots over the leading edge.
 4. pneumatically operated expansion boots on the leading edge.
28. Aircraft equipped with a d.c. electrical system often require a source of a.c. to operate communication or navigation equipment. What electrical device is used to convert d.c. to a.c.?
 1. A rectifier.
 2. An inverter.
 3. An exciter.
 4. A capacitor.
29. Which of the following methods will be effective in reversing the direction of rotation of a d.c. electric motor?
 1. Reverse the direction of current flow through either the field or the armature.
 2. Reverse the direction of current flow through the motor.
 3. Rotate the brush assembly approximately 90 degrees.
 4. Move the starting winding 180 degrees from its present position.
30. Which of the following is *not* a recommended aircraft electric cable practice?
 1. All cables to single items of equipment should be grouped separately.
 2. Insulating tubing should be installed over terminals and disconnect splices.
 3. All splices in adjacent parallel conductors should be staggered.
 4. Alternating current cables should be grouped with direct current cables.
31. What effect will increased humidity have on engine power output?
 1. No appreciable change in power output.
 2. Power output will decrease at all altitudes.
 3. Power output will increase at all altitudes.
 4. No effect at sea level but greater power output at altitude.

32. Where in the airstream is the induction system screen located in a reciprocating engine?

1. After the carburetor.
2. Before the carburetor if the engine is equipped with a downdraft carburetor and after the carburetor if the engine is equipped with an updraft carburetor.
3. Before the carburetor.
4. Before the carburetor if the engine is equipped with an updraft carburetor and after the carburetor if the engine is equipped with a downdraft carburetor.

33. What method is ordinarily used to make idle speed adjustments on a float-type carburetor?

1. An adjustable throttle stop or linkage.
2. A variable restriction in the drilled passageway which connects the air space of the float chamber and the carburetor venturi.
3. An orifice and adjustable tapered needle.
4. A variable restriction in the idle system fuel supply.

34. The use of water injection permits a reciprocating engine to be operated at high power output by

1. enriching the mixture.
2. suppressing detonation.
3. cooling the fuel-air charge as it passes through the intake manifold.
4. increasing the octane rating of the fuel.

35. Which of the following is *not* a factor in the operation of an automatic fuel control unit used on a turbojet engine?

1. Mixture control position.
2. Compressor inlet air density.
3. Compressor r.p.m.
4. Throttle position.

36. When does ignition occur in a four-stroke cycle engine?

1. Before the piston reaches top center on the compression stroke.
2. At top center of the compression stroke.
3. At the beginning of the power stroke.
4. After the piston begins its downward travel on the power stroke.

37. Burned or electrically distorted magneto breaker point contact surfaces usually indicate

1. primary circuit condenser not functioning properly.
2. use of improper fuel.
3. poor point lubrication.
4. shorted spark plug leads.

38. To what does the term "spark plug reach" refer?

1. The length of the threaded portion of the shell.
2. The amount of center electrode exposed to the heat of combustion.
3. The heat range within which the spark plug is designed to operate.
4. The amount of insulator exposed to the heat of combustion.

39. An impulse coupling gives a momentary high spin to the magneto rotor and

1. retards the spark a predetermined amount during the starting process.
2. disengages the trailing electrode.
3. feeds battery current into the primary circuit of the magneto.
4. momentarily shorts out the primary condenser; thus, assists in giving a very "hot" spark for starting.

40. What is the number of crankshaft revolutions required to cause the five-lobe cam plate of a nine-cylinder radial engine to turn one complete revolution?

1. 2.
2. 5.
3. 10.
4. $4\frac{1}{2}$.

41. If an engine equipped with a constant-speed propeller is operated at part throttle and at cruising r.p.m., a reduction in r.p.m. with no change in throttle setting will result in

1. no change in manifold pressure.
2. an increase in manifold pressure.
3. a decrease in bmeP.
4. a decrease in manifold pressure.

42. Thermocouple-type temperature indicating instrument systems

1. require no external power source.
2. are classed as balanced type, variable resistor circuits.
3. usually contain a balancing circuit in the instrument case to prevent fluctu-

- ations of the aircraft electrical system voltage from affecting the temperature reading.
4. will not indicate a true reading if the aircraft electrical system voltage varies beyond the range for which the instruments are calibrated.
43. Which of the following is correct in reference to installation of aluminum alloy baffle brackets under cylinder holddown nuts?
1. The practice is not recommended.
 2. It is considered good practice because the soft aluminum will allow the nut to align perfectly with the cylinder flange surface.
 3. It is not recommended unless all contact surfaces are properly treated to eliminate the possibility of dissimilar-metal corrosion.
 4. It is considered good practice unless the added thickness of the bracket does not allow the nut slot to line up with the cotter pin hole within the range of recommended torque values.
44. What should be done before adjusting (to the "cold" clearance setting) the valve clearance of a nine-cylinder radial engine equipped with a four-lobe, double-track cam ring?
1. Remove and visually inspect all cam follower assemblies.
 2. Open all valve clearances to the "hot" or "timing" setting.
 3. Determine the least worn cam flat on each track.
 4. Open all valve clearances to approximately twice the required setting.
45. The purpose of the bypass valve on an oil cooler is to bypass the
1. hot oil into the hopper tank directly.
 2. cold oil into the oil filter.
 3. hot oil past the "Y" drain.
 4. cold oil into the hopper tank directly.
46. Which of the following is referred to as the propeller blade face?
1. The root end of a propeller blade.
 2. The flat side of a propeller blade.
 3. The cambered side of a propeller blade.
 4. The cuff around a propeller blade.
47. Hydraulically operated propellers, that are in the low r.p.m. position for starting, should not be changed to the high r.p.m. setting until a steady oil pressure is obtained. This procedure is followed to prevent
1. congealing of the oil in the nose case scavenger system.
 2. erratic pitch change during later propeller operation.
 3. oil starvation of the highly stressed engine bearings.
 4. the possibility of an air lock forming in the propeller governor boost pump.
48. What is the primary purpose of propeller cones, as used with propellers that are installed on engines with splined shafts?
1. To prevent contact between the shaft splines and the propeller hub splines.
 2. To prevent rotation of the propeller on the shaft.
 3. To reduce acceleration loads on the shaft splines.
 4. To center the propeller on the shaft.
49. If a constant-speed propeller control is set in the constant-speed range and the engine is being operated at cruising power,
1. retarding the throttle will result in an increase in blade pitch.
 2. movement of the throttle will have no effect on blade pitch.
 3. the r.p.m will vary directly with movement of the throttle.
 4. advancing the throttle will result in an increase in blade pitch.
50. Why is a double-field winding (split field) used in some d.c. electric motors?
1. To allow the motor to operate in either direction (reversible motor).
 2. One set of field windings is used as a magnetizing coil to actuate the armature brake.
 3. One set of field windings is used as a magnetizing coil to engage the motor clutch.
 4. One set of field windings is used as a magnetizing coil to disengage the motor clutch.

Answers to Sample Written Test Questions

*Question
Number Answer*

1 — 1
2 — 2
3 — 4
4 — 2
5 — 1
6 — 1
7 — 2
8 — 2
9 — 1
10 — 4
11 — 1
12 — 4
13 — 1
14 — 1
15 — 3
16 — 1
17 — 3

*Question
Number Answer*

18 — 2
19 — 2
20 — 2
21 — 4
22 — 2
23 — 2
24 — 2
25 — 1
26 — 3
27 — 1
28 — 2
29 — 1
30 — 4
31 — 2
32 — 3
33 — 1
34 — 2

*Question
Number Answer*

35 — 1
36 — 1
37 — 1
38 — 1
39 — 1
40 — 3
41 — 2
42 — 1
43 — 1
44 — 3
45 — 4
46 — 2
47 — 3
48 — 4
49 — 4
50 — 1

RECOMMENDED STUDY MATERIALS

The publications listed in this section will be helpful to persons studying for airframe and powerplant tests. However, they cannot be depended upon to provide the total technical information required for either rating. It is the responsibility of each applicant to obtain study material appropriate to his own needs.

A variety of excellent text and reference material is available from commercial publishers. Most public and institutional libraries maintain technical reference sections and can often recommend specific textbooks and authors. Manufacturers' operation, maintenance, and instructional manuals are also a good source of technical material.

Publications identified as (GPO) in this section are available from the:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402,

or from GPO bookstores located in major cities throughout the United States.

Publications identified as "(Free FAA)" in this section are available from:

U.S. Department of Transportation
Publications Section, TAD-443.1
Washington, D.C. 20590

Federal Aviation Regulations (FAR)—The following regulations should be useful to a person studying for mechanic tests. A knowledge of the rules they contain is often helpful and sometimes necessary during the performance of mechanic privileges. FARs contain direct references for answering present written test questions. The appendix contains complete titles and ordering instructions for FARs.

FAR PART	TITLE
1	Definitions and Abbreviations
21	Certification Procedures for Products and Parts
23	Airworthiness Standards: Normal, Utility, and Acrobatic Category Airplanes
25	Airworthiness Standards: Transport Category Airplanes
27	Airworthiness Standards: Normal Category Rotorcraft
29	Airworthiness Standards: Transport Category Rotorcraft
33	Airworthiness Standards: Aircraft Engines
35	Airworthiness Standards: Propellers
37	Technical Standard Order Authorizations
39	Airworthiness Directives
43	Maintenance, Preventive Maintenance, Rebuilding, and Alteration
45	Identification and Registration Marking
65	Certification: Airmen Other Than Flight Crewmembers
91	General Operating and Flight Rules
121	Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft

FAA Advisory Circulars—The FAA issues advisory circulars to inform the aviation public in a systematic way of nonregulatory material of interest. Advisory circulars are issued in a numbered-subject system corre-

sponding to the numbering system used for Federal Aviation Regulations.

The advisory circulars most often used for general study purposes are:

AC 00-2 [latest revision] Advisory Circular Checklist. Provides a list of current FAA advisory circulars. (Free FAA)

AC 25-5C Plane Sense. Provides general aviation information for the private aircraft owner. (Free FAA)

AC 20-9 Personal Aircraft Inspection Handbook. Provides a general guide, in simple nontechnical language, for the inspection of aircraft. (GPO)

AC 20-23D Interchange of Service Experience—Mechanical Difficulties. Advises of the malfunction and defect program and its relationship to the General Aviation Inspection Aids. (Free FAA)

AC 20-43A Aircraft Fuel Contamination. Informs the aviation community of the potential hazards of fuel contamination, its control, and recommended fuel servicing procedures. (Free FAA)

AC 43.13-1A Acceptable Methods, Techniques, and Practices—Aircraft Inspection and Repair. Contains methods, techniques, and practices acceptable to the Administrator for inspection and repair to civil aircraft. (GPO)

AC 43.13-2 Acceptable Methods, Techniques, and Practices—Aircraft Alterations. Contains methods, techniques, and practices acceptable to the Administrator in altering civil aircraft. (GPO)

AC 65-9 Airframe & Powerplant Mechanics—General Handbook. This handbook may be used for training mechanics or for on-the-job training in basic information on electricity, weight and balance, physics, mathematics, mechanic privileges and limitations, etc. (GPO)

AC 65-12 Airframe & Powerplant Mechanics—Powerplant Handbook. This handbook may be used for training mechanics or for on-the-job training in the

construction, theory of operation, and maintenance of aircraft powerplants. (GPO)

AC 65-15 Airframe & Powerplant Mechanics — Airframe Handbook. This handbook may be used for training mechanics or for on-the-job training in airframe construction, repair, and the operating theory of airframe systems. (GPO)

Many other advisory circulars may be useful to a mechanic or mechanic applicant. The Advisory Circular Checklist should be consulted for titles, descriptions, and ordering information. A partial list of related circulars is shown below:

AC 20-7 [latest revision] General Aviation Inspection Aids Summary. Contains information on reported service difficulties of various aircraft during the year. (Sub. GPO)

AC 20-30A Airplane Position Lights and Supplementary Lights. Provides an acceptable means for complying with the position light requirements for airplane airworthiness and acceptable criteria for the installation of supplementary lights on airplanes. (Free FAA)

AC 20-32B Carbon Monoxide (CO) Contamination in Aircraft—Detection and Prevention. Informs aircraft owners, operators, maintenance personnel, and pilots of the potential dangers of carbon monoxide contamination and discusses means of detection and procedures to follow when contamination is suspected. (Free FAA)

AC 20-35B Tie-down Sense. Provides information of general use on aircraft tie-down techniques and procedures. (Free FAA)

AC 20-36D Index of Materials, Parts and Appliances Certified Under the Technical Standard Order System—July 1, 1972. Lists the materials, parts, and appliances for which the Administrator has received statements of conformance under the Technical Standard

Order system. Such products are deemed to have met the requirements for FAA approval as provided in Part 37 of the Federal Aviation Regulations. (Free FAA)

AC 20-44 Glass Fiber Fabric for Aircraft Covering. Provides a means, but not the sole means, for acceptance of glass fiber fabric for external covering of aircraft structures. (Free FAA)

AC 20-45 Safelying of Turnbuckles on Civil Aircraft. Provides information on turnbuckle safelying methods that have been found acceptable by FAA during past aircraft type certification programs. (Free FAA)

Miscellaneous FAA Publications—Information contained in the following publications are often needed by a certificated mechanic during the exercise of certain privileges. Mechanic applicants should know what type of information they contain, but may find it inadvisable to purchase them for study purposes only.

Specifications—The Aircraft, Engine, and Propeller Specifications are available from the Government Printing Office. The basic subscription consists of Specifications and Type Data Sheets, listings and indexes, plus monthly supplementary service for approximately one year.

Aircraft Type Certificate Data Sheets and Specifications. (Sub. GPO)

Aircraft Engine and Propeller Type Certificate Data Sheets and Specifications. (Sub. GPO)

Airworthiness Directives—The airworthiness directives are summarized in two volumes, one covering small aircraft and the other large aircraft. Each volume may be purchased separately.

The January 1976 issues of the Summary of Airworthiness Directives—Volumes I and II, will be sold and distributed for the Superintendent of Documents by the Federal Aviation Administration from Oklahoma City, Oklahoma. Requests for subscriptions to either of these publications should be sent to:

U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 25461, Attn: AAC-23
Oklahoma City, OK 73125

Subscription service will consist of the summary and automatic biweekly updates to each summary for a 2-year period. Make certified checks or money orders payable to the Federal Aviation Administration.

Summary of Airworthiness Directives for Small Aircraft (1-1-76) Volume I. Presents, in volume form, all the Airworthiness Directives for small aircraft issued through December 31, 1975. AD's for engines, propellers, and equipment are included in each volume. Each volume is arranged alphabetically by product manufacturer. (Sub. GPO)

Summary of Airworthiness Directives for Large Aircraft (1-1-76) Volume II. Presents, in volume form, all the Airworthiness Directives for large aircraft (over 12,500 pounds maximum certificated takeoff weight) issued through December 31, 1975. AD's for engines, propellers, and equipment are included in each volume. (Sub. GPO)

APPENDIX

FEDERAL AVIATION REGULATIONS

The FAA publishes the Federal Aviation Regulations to make readily available to the aviation community the regulatory requirements placed upon them. These Regulations are sold as individual Parts by the Superintendent of Documents.

The more frequently amended Parts are sold on subscription service (that is, subscribers will receive Changes automatically as issued), while the less active Parts are sold on a single-sale basis. Changes to single-sale Parts will be sold separately as issued. Information concerning these Changes will be furnished by FAA through its "Status of the

Federal Aviation Regulations, AC 00-44." Instructions for ordering this free status list are given in the front of each single-sale Part.

The following list indicates the breakdown of the single-sale Parts and the subscription Parts. Check or money order made payable to the Superintendent of Documents should be included with each order. Submit orders for single-sales and subscription Parts on different order forms. No COD orders are accepted. All FAR Parts should be ordered from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

PARTS SOLD ON SUBSCRIPTION SERVICE

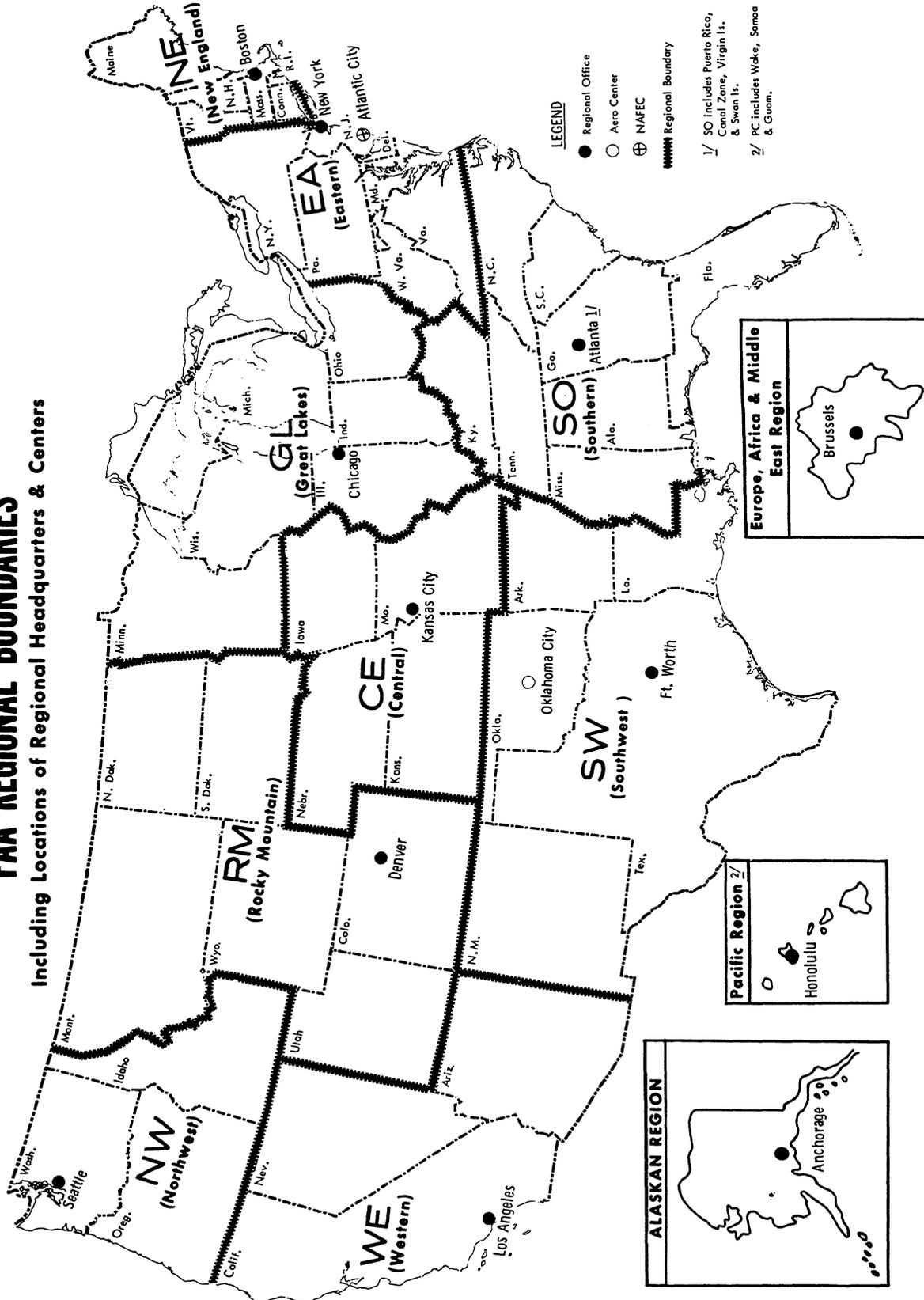
Part	Title	Catalog number	Publication date
1	Definitions and abbreviations	TD 4.6:1	June 1974
21	Certification procedures for products and parts	TD 4.6:21	May 1974
23	Airworthiness standards: Normal, utility, and acrobatic category airplanes	TD 4.6:23	June 1974
25	Airworthiness standards: Transport category airplanes	TD 4.6:25	do
33	Airworthiness standards: Aircraft engines	TD 4.6:33	August 1974
36	Noise standards: Aircraft type certification	TD 4.6:36	June 1974
37	Technical standard order authorizations	TD 4.6:37	May 1974
43	Maintenance, preventive maintenance rebuilding, and alteration	TD 4.6:43	January 1974
47	Aircraft registration	TD 4.6:47	May 1974
61	Certification: Pilots and flight instructors	TD 4.6:61	November 1974
63	Certification: Flight crewmembers other than pilots	TD 4.6:63	Sept. 1974
65	Certification: Airmen other than flight crewmembers	TD 4.6:65	do
91	General operating and flight rules	TD 4.6:91	March 1974
93	Special air traffic rules and airport traffic patterns	TD 4.6:93	do
103	Transportation of dangerous articles and magnetized materials	TD 4.6:103	do
105	Parachute jumping	TD 4.6:105	do
121	Certification and Operations: Domestic, flag, and supplemental air carriers and commercial operators of large aircraft	TD 4.6:121	April 1974
123	Certification and operations: Air travel clubs using large airplanes	TD 4.6:123	do
127	Certification and operations of scheduled air carriers with helicopters	TD 4.6:127	do
133	Rotorcraft external-load operations	TD 4.6:133	November 1974
135	Air taxi operators and commercial operators of small aircraft	TD 4.6:135	do
139	Certification and operations: Land airports serving CAB-certificated scheduled air carriers operating large aircraft (other than helicopters)	TD 4.6:139	December 1974
141	Pilot schools	TD 4.6:141	November 1974
152	Airport aid program	TD 4.6:152	December 1974

PARTS SOLD ON SINGLE-SALE BASIS

Part	Title	Catalog Number	Publication date
11	General rulemaking procedures	TD 4.6:11	May 1974
	Change 1	TD 4.6:11/Ch 1	Feb. 1, 1974 and Jan. 1, 1975
13	Enforcement procedures	TD 4.6:13	do
27	Airworthiness standards: Normal category rotorcraft	TD 4.6:27	August 1974
	Change 1	TD 4.6:27/Ch 1	Oct. 31, 1974
29	Airworthiness standards: Transport category rotorcraft	TD 4.6:29	August 1974
	Change 1	TD 4.6:29/Ch 1	Oct. 31, 1974
31	Airworthiness standards: Manned free balloons	TD 4.6:31	August 1974
35	Airworthiness standards: Propellers	TD 4.6:35	do
39	Airworthiness directives	TD 4.6:39	May 1974
45	Identification and registration marking	TD 4.6:45	do
49	Recording of aircraft titles and security documents	TD 4.6:49	do
67	Medical standards and certification	TD 4.6:67	September 1974
71	Designation of Federal airways, area low routes, controlled airspace, and reporting points	TD 4.6:71	January 1975
	Change 1	TD 4.6:71/Ch 1	July 28, 1975
73	Special use airspace	TD 4.6:73	January 1975
	Change 1	TD 4.6:73/Ch 1	July 28, 1975
75	Establishment of jet routes and high area routes	TD 4.6:75	January 1975
77	Objects affecting navigable airspace	TD 4.6:77	do
95	IFR altitudes	TD 4.6:95	do
	Change 1	TD 4.6:95/Ch 1	Feb. 13, 1975
97	Standard instrument approach procedures	TD 4.6:97	January 1975
99	Security control of air traffic	TD 4.6:99	March 1974
101	Moored balloons, kites, unmanned rockets, and unmanned free balloons	TD 4.6:101	do
	Change 1	TD 4.6:101/Ch 1	Aug. 20, 1974
107	Airport security	TD 4.6:107	March 1974
129	Operations of foreign air carriers	TD 4.6:129	April 1974
	Change 1	TD 4.6:129/Ch 1	Oct. 9, 1975
137	Agricultural aircraft operations	TD 4.6:137	November 1974
143	Ground instructors	TD 4.6:143	September 1974
145	Repair stations	TD 4.6:145	January 1974
147	Aviation maintenance technician schools	TD 4.6:147	September 1974
149	Parachute lofts	TD 4.6:149	January 1974
151	Federal aid to airports	TD 4.6:151	December 1974
153	Acquisition of U.S. land for public airports	TD 4.6:153	do
154	Acquisition of U.S. land for public airports under the Airports and Airway Act of 1970	TD 4.6:154	do
155	Release of Airport property from surplus property disposal	TD 4.6:155	do
157	Notice of construction, alteration, activation, and deactivation of airports	TD 4.6:157	January 1975
159	National Capital airports	TD 4.6:159	December 1974
169	Expenditure of Federal funds for nonmilitary airports or air navigational facilities thereon	TD 4.6:169	January 1975
171	Non-Federal navigation facilities	TD 4.6:171	do
	Change 1	TD 4.6:171/Ch 1	Aug. 19, 1975
183	Representatives of the Administrator	TD 4.6:183	May 1974
185	Testimony by employees and production of records in legal proceedings and service of legal process and pleadings	TD 4.6:185	do
187	Fees	TD 4.6:187	do
189	Use of Federal Aviation Administration communication system	TD 4.6:189	do

FAA REGIONAL BOUNDARIES

Including Locations of Regional Headquarters & Centers



**DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration**

**FAA Regional Offices, Flight Standards District Offices,
Air Carrier District Offices, General Aviation District Offices, and
International Field Offices**

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EASTERN REGION

Federal Building
John F. Kennedy International
Airport
Jamaica, New York 11430
Tel. 212-995-3333

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NEW ENGLAND REGION

12 New England Executive Park
Burlington, Massachusetts 01803
Tel. 617-273-7244

Area: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

SOUTHERN REGION

3400 Whipple St.
East Point, Georgia 30344
Tel. 404-526-7240

Mail: P.O. Box 20636
Atlanta, Georgia 30344

Area: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

ALASKAN REGION

Hill Building—632 Sixth Avenue
Anchorage, Alaska 99501
Tel. 907-272-5561

CENTRAL REGION

601 East 12th Street
Kansas City, Missouri 64106
Tel. 816-374-5626

Area: Iowa, Kansas, Missouri, Nebraska

NORTHWEST REGION

FAA Building, King County
International Airport
Seattle, Washington 98108
Tel. 206-767-2780

Area: Idaho, Oregon, Washington

SOUTHWEST REGION

4400 Blue Mound Rd.
P.O. Box 1639
Fort Worth, Texas 76101
Tel. 817-624-4911

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**EUROPE, AFRICA, & MIDDLE
EAST REGION**

FAA, 1 Place Madou,
1000 Brussels, Belgium
Tel. 13.38.30, Ext. 300 or 301

U.S. Mailing Address:
American Embassy—FAA
APO New York 09667

GREAT LAKES REGION

2300 E. Devon Avenue
Des Plaines, Illinois 60018
Tel. 312-694-4500

Area: Illinois, Indiana, Minnesota, Michigan, Ohio, Wisconsin

ROCKY MOUNTAIN REGION

10455 E. 25th Avenue
Aurora, Colorado 80010
Tel. 303-297-3646

Area: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

WESTERN REGION

15000 Aviation Blvd.
Hawthorne, California 90261
Tel. 213-536-6207

Mail: P.O. Box 92007 Worldway
Postal Center
Los Angeles, Calif. 90009

Area: Arizona, California, Nevada

PACIFIC-ASIA REGION

1833 Kalakaua Avenue
P.O. Box 4009
Honolulu, Hawaii 96813
Tel. 808-955-0401

**FLIGHT STANDARDS DISTRICT OFFICES (FSDO)
(Combined Air Carrier and General Aviation District Offices)**

ALASKA—Fairbanks 99701: 3788
University Ave.; Tel. 907-452-
1276

Juneau 99801: Terminal Bldg.,
Juneau Municipal Arpt.; Tel. 907-
586-3700/3755

ARIZONA—Phoenix: 15041 N. Arpt.
Dr.; Scottsdale, Ariz. 85260; Tel.
602-261-4763

CALIFORNIA—Long Beach 90806:
Long Beach Arpt., 2815 E. Spring
St.; Tel. 213-426-7134

Oakland 94614: Oakland Int'l Arpt.
P.O. Box 2397 Airport Station;
Tel. 415-569-8879

San Diego 92123: 3750 John J.
Montgomery Drive; Tel. 714-293-
5280

Van Nuys 91406: 7120 Havenhurst
Ave.; Tel. 213-785-8624

DISTRICT OF COLUMBIA—Washing-
ton 20001: West Bldg., Room
152, Washington National Arpt.;
Tel. 202-628-1555

HAWAII—Honolulu 96819: P.O. Box
9728, Air Service Corporation
Bldg., 218 Lagoon Drive; Tel.
808-847-0615

MICHIGAN—Detroit: Willow Run
Arpt., Ypsilanti, Mich. 48197;
Tel. 313-485-2550

MISSOURI—St. Louis: 9275 Genaire
Drive, Berkeley, Mo. 63134; Tel.
314-425-7100

NEW YORK—Rochester 14624: Ro-
chester-Monroe County Arpt.;
Tel. 716-235-3438

OHIO—Cleveland 44135: 21046 Brook-
park Road, Tel. 216-267-3700

PUERTO RICO—San Juan: Loiza Ex-
pressway; RFD No. 1 P.O. Box
29A, Loiza Station, Santurce
00914, Tel. 809-791-0374/5

TENNESSEE—Nashville 37217: 322
Knapp Blvd., Nashville Metro.
Arpt.; Tel. 615-749-5661

WASHINGTON—Seattle 98108: King
County Int'l Arpt., FAA Bldg.;
Tel. 206-767-2747/2570

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- ALASKA**—Anchorage 99502: Amick Bldg., 4510 Intl Arprt Rd.; Tel. 907-279-4919
- CALIFORNIA**—Los Angeles 90045: 5885 W. Imperial Highway; Tel. 213-536-6590
San Francisco: 831 Mitten Rd., Room 105, Burlingame, Calif. 94010; Tel. 415-692-2441 x462
- COLORADO** — Denver: 2525 Geneva Street, Aurora, Colo. 80010; Tel. 303-837-4101/2
- DELAWARE** — Wilmington: Greater Wilmington Airport, Atlantic Aviation Office Bldg., New Castle, Del. 19720; Tel. 302-571-6357
- FLORIDA** — Miami 33159: P.O. Box 59015, FAA/Nat'l Weather Service Bldg. 3050, Miami Int'l Arprt.; Tel. 305-526-2605
- GEORGIA**—Atlanta 30327: Rm. 116, Suite D, 1568 Willingham Dr., Willingham Sq., College Park, Ga.; Tel. 404-526-7265
- ILLINOIS** — Chicago: 2300 E. Devon Avenue, Des Plaines, Ill. 60018; Tel. 312-694-4500
- MASSACHUSETTS** — Boston: Logan Intl. Arprt.; Gen. Aviation Admin. Bldg., East Boston, Mass. 02128; Tel. 617-223-6354
- MINNESOTA**—Minneapolis: Rm. 202, 6201 34th Ave., South Minneapolis, Minn. 55450; Tel. 612-725-3361
- MISSOURI**—Kansas City 64153: Kansas City Intl. Arprt., 525 Mexico City Ave.; Tel. 816-243-3800
- NEW JERSEY** — Newark 07114: Rm. 220 Airmail & Express Terminal, Newark Arprt.; Tel. 201-645-2560
- NEW YORK**—Jamaica 11430: PONY Bldg. #141, John F. Kennedy Intl. Arprt.; Tel. 212-995-3709
- NORTH CAROLINA** — Winston-Salem 27105: 2nd Floor Terminal Bldg., Smith Reynolds Arprt.; Tel. 919-723-9211 X 366/7
- OKLAHOMA**—Tulsa 74115: Rm. 208, Tulsa International Airport, Tel. 918-835-2378
- PENNSYLVANIA** — Pittsburgh 15231: Southwing Term. Bldg., Greater Pittsburgh Arprt.; Tel. 412-644-5406/7/8
- TENNESSEE**—Nashville 37217: Bldg. #3 of Hilton Arprt. Inn, 100 Jetway Drive, Nashville Metropolitan Airport, Tel. 615-749-5196
- TEXAS** — Dallas 75235: 3323 Grove Street; Tel. 204-357-8297
Fort Worth 76125: Rm. 213, Terminal Bldg., Greater Southwest Intl. Arprt., Box 2506; Tel. 817-283-4401
Houston 77017: Rm. 224, 8800 Paul B. Koonce Drive; Tel. 713-645-6628

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- ALABAMA** — Birmingham 35206: Muni. Arprt. 6500 43rd Ave., North; Tel. 205-592-6371
- ALASKA**—Anchorage 99501: 1515 E. 13th Ave.; Tel. 907-272-1234 & 279-5213
- ARKANSAS**—Little Rock 72202: Room 201, FAA & Weather Service Bldg., Adams Fld.; Tel. 501-372-3437/8
- CALIFORNIA**—Fresno 93727: Fresno Air Terminal, 2401 North Ashley; Tel. 209-487-5306
Los Angeles: Suite 3, Muni. Arprt., 3200 Airport Ave., Santa Monica, Calif. 90405; Tel. 213-391-6701
Ontario 91761: Ontario Intl. Arprt.; Tel. 714-984-2411
Sacramento 95822: Executive Arprt.; Tel. 916-449-3169
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- COLORADO** — Denver: FAA Bldg., Jefferson Co. Arprt., Broomfield, Colo. 80020; Tel. 303-466-7326
- FLORIDA**—Jacksonville 32211: FAA Bldg., Craig Arprt., P.O. Box 8665 Tel. 904-641-7311
Miami: Bldg. 121, Opa Locka Arprt., P.O. Box 365, Opa Locka, Fla. 33054; Tel. 305-681-7431
- GEORGIA** — Atlanta 30336: FAA Bldg., Rm. 200; Fulton Co. Arprt.; 3999 Gordon Rd., S.W.; Tel. 404-691-2323
- IDAHO** — Boise 83705: 3113 Arprt. Way; Tel. 208-342-2711 X 238
- ILLINOIS** — Chicago: DuPage Co. Arprt., P.O. Box H; West Chicago, 60185; Tel. 312 584-4490/1/2
Springfield 67205: Capital Airport, New Terminal; Tel. 217-525-4238
- INDIANA**—Indianapolis 46241: FAA Bldg. #1, Municipal Airport, P.O. Box 41525; Tel. 317-247-2491
South Bend 46628: 1843 Commerce Drive; Tel. 219-232-5843
- IOWA**—Des Moines 50321: 3021 Army Post Rd.; Tel. 515-284-4094
- KANSAS**—Kansas City 66115: Room 100, Admin. Bldg., Fairfax Arprt.; Tel. 913-281-3491/2
Wichita 67209: Flight Standards Bldg., Municipal Airport; Tel. 316-943-3244
- KENTUCKY** — Louisville 40205: 2nd Fl., Central Am. Hangar Bowman Fld.; Tel. 502-582-6116/7/8
- LOUISIANA**—Lafayette 70501: Lafayette Arprt.; Tel. 318-234-2321
New Orleans 70126: Rm. 227, New Orleans Lakefront Arprt. Tel. 504-241-2506
Shreveport 71107: Rm. 202, Terminal Bldg., Downtown Arprt.; Tel. 318-222-8370/79
- MAINE** — Portland 04102: General Aviation Terminal, Portland Intl. Jetport; Tel. 207-774-4484
- MARYLAND** — Baltimore 21240: Baltimore-Washington Int'l Arprt.; Tel. 301-761-2610

MASSACHUSETTS — Norwood 02062: Muni. Arpt.; Tel. 617-762-2436/2675
Westfield 01085: 1st Floor Terminal Bldg., Barnes Muni. Arpt.; P.O. Box 544; Tel. 413-568-3121

MICHIGAN — Grand Rapids 49508: Kent Co. Arpt., 5500 44th St., SE.; Tel. 616-456-2427

MINNESOTA — Minneapolis 55450: Wold-Chamberlain Arpt., Room 201, 6201 34th Avenue South; Tel. 612-725-3341

MISSISSIPPI—Jackson 39208: FAA Bldg., Municipal Arpt., Allen C. Thompson Fld., P.O. Box 6273, Pearl Branch; Tel. 601-939-5231

MONTANA — Billings 59101: Rm. 216 Admin. Bldg., Billings-Logan Int'l Arpt.; Tel. 406-245-6170/9
Helena 59601: Rm. 3, FAA Bldg., Helena Arpt.; Tel. 406-442-4230

NEBRASKA — Lincoln 68524: Gen. Aviation Bldg., Lincoln Muni. Arpt.; Tel. 402-471-5485

NEVADA—Las Vegas 89119: 5700 C South Haven; Tel. 702-736-0666
Reno 89502: 2601 East Plumb Lane; Tel. 702-784-5321

NEW JERSEY — Teterboro 07608: 150 Riser Road; Tel. 201-288-1745/1874

NEW MEXICO — Albuquerque 87119: International Arrivals Bldg., P.O. Box 9045; Tel. 505-247-0156/7

NEW YORK — Albany 12211: Albany Co. Arpt.; Tel. 518 869-8482
Farmingdale 11735: Bldg 53, Republic Airport; Tel. 516 691-3100

NORTH CAROLINA — Charlotte 28208: FAA Bldg., Muni. Arpt.; Tel. 704-392-3214/5
Raleigh 27611: Rm. 324, Terminal Bldg., Raleigh-Durham Arpt., P.O. Box 26807; Tel. 919-755-4240

NORTH DAKOTA — Fargo 58102: Rm. 216, Admin. Bldg., Hector Fld., P.O. Box 5496; Tel. 701-232-8949

OHIO — Cincinnati 45226: Lunken Arpt. Executive Bldg.; 4242 Airport Rd.; Tel. 513-684-2183
Columbus 43219: 424 Lane Aviation Bldg., Port Columbus Arpt., Tel. 614-469-7476/7

OKLAHOMA — Oklahoma City: FAA Bldg., Wiley Post Arpt., Bethany, Okla. 73008; Tel. 405-789-5220/1/2
Tulsa 74115: General Aviation Terminal, Rm. 110, Tulsa Intl. Arpt.; Tel. 918-835-7619

OREGON — Eugene 97402: Mahlon Sweet Arpt., Rt. 1, Box 717; Tel. 503-688-9721
Hillsboro 97123: 3355 N. E. Cornell Road; Portland-Hillsboro Arpt.; Tel. 503-221-2104

PENNSYLVANIA — Allentown 18103: Allentown-Bethlehem-Easton Arpt.; Tel. 215 264-2888
Harrisburg: Rm. 201, Admin. Bldg., Capital City Airport, New Cumberland, Pa. 17070; Tel. 717-782-4528
Philadelphia 19114: North Philadelphia Arpt.; Tel. 215-673-0250/1/2
Pittsburgh: Room 213, Allegheny Co. Arpt., West Mifflin, Pa. 15122; Tel. 412-461-5507

SOUTH CAROLINA — Columbia: Metropolitan Arpt., Box 200, West Columbia, S.C. 29169; Tel. 803-794-9042

SOUTH DAKOTA — Rapid City 57701: Regional Arpt., R.R. 2, Box 633B Tel. 605-343-2403

TENNESSEE — Memphis 38130: 2488 Winchester, P.O. Box 30050; Tel. 901-398-2353

TEXAS—Corpus Christi 78410: Bledsoe Hangar No. 3, Intl. Arpt.; Tel. 512-884-9331/2
Dallas 75232: Redbird Arpt.; Tel. 214-339-7164
El Paso 79925: Rm. 202, FAA Aviation Bldg., 6795 Convair Rd.; Tel. 915-778-6389
Fort Worth 76106: Rm. 201, Admin. Bldg., Meacham Fld.; Tel. 817-624-1184/5
Houston 77017: 8800 Paul Koonce Dr., Tel. 713-643-6504
Lubbock 79401: P.O. Box 194Z Executive Air Terminal, Rt. #3; Tel. 806-762-0335
Midland 79701: Midland Regional Air Terminal; Tel. 915-563-0802
San Antonio 78216: 1115 Paul Wilkins Rd., Room 201; Tel. 512-824-9535/6/7

UTAH—Salt Lake City 84116: 116 North 2400 West, Room 103; Tel. 801-524-4247

VIRGINIA — Richmond: Byrd Fld., Sandston, Va. 23150; Tel. 804-222-7494

WASHINGTON—Spokane 99206: 5629 E. Rutter Avenue; Tel. 509-456-4618

WEST VIRGINIA — Charleston 25311: Kanawha Co. Arpt.; Tel. 304 343-4689

WISCONSIN — Milwaukee 53207: General Mitchell Fld.; Tel. 414 747-5531

WYOMING — Casper 82601: 1187 Fuller St., Casper Air Terminal; Tel. 307 234-8959

INTERNATIONAL FIELD OFFICES (IFO)

ALASKA—Anchorage 99502: 4800 International Airport Rd.; Tel. 907-274-4123

NEW YORK—Valley Stream 11581: 181 South Franklin Ave.; Tel. 212-995-8529