

system includes component replacement and adjustment, but not component repair.

(6) *Overhaul* means to disassemble, inspect, repair as necessary, and check.

(b) *Teaching levels.* (1) Level 1 requires:

(i) Knowledge of general principles, but no practical application.

(ii) No development of manipulative skill.

(iii) Instruction by lecture, demonstration, and discussion.

(2) Level 2 requires:

(i) Knowledge of general principles, and limited practical application.

(ii) Development of sufficient manipulative skill to perform basic operations.

(iii) Instruction by lecture, demonstration, discussion, and limited practical application.

(3) Level 3 requires:

(i) Knowledge of general principles, and performance of a high degree of practical application.

(ii) Development of sufficient manipulative skills to simulate return to service.

(iii) Instruction by lecture, demonstration, discussion, and a high degree of practical application.

(c) *Teaching materials and equipment.* The curriculum may be presented utilizing currently accepted educational materials and equipment, including, but not limited to: calculators, computers, and audio-visual equipment.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970, as amended by Amdt. 147-5, 57 FR 28960, June 29, 1992]

APPENDIX B TO PART 147—GENERAL CURRICULUM SUBJECTS

This appendix lists the subjects required in at least 400 hours in general curriculum subjects.

The number in parentheses before each item listed under each subject heading indicates the level of proficiency at which that item must be taught.

Teaching level

A. BASIC ELECTRICITY

- (2) 1. Calculate and measure capacitance and inductance.
 - (2) 2. Calculate and measure electrical power.
 - (3) 3. Measure voltage, current, resistance, and continuity.
 - (3) 4. Determine the relationship of voltage, current, and resistance in electrical circuits.
 - (3) 5. Read and interpret aircraft electrical circuit diagrams, including solid state devices and logic functions.
 - (3) 6. Inspect and service batteries.
- ##### B. AIRCRAFT DRAWINGS
- (2) 7. Use aircraft drawings, symbols, and system schematics.
 - (3) 8. Draw sketches of repairs and alterations.
 - (3) 9. Use blueprint information.
 - (3) 10. Use graphs and charts.

Teaching level

C. WEIGHT AND BALANCE

- (2) 11. Weigh aircraft.
- (3) 12. Perform complete weight-and-balance check and record data.

D. FLUID LINES AND FITTINGS

- (3) 13. Fabricate and install rigid and flexible fluid lines and fittings.

E. MATERIALS AND PROCESSES

- (1) 14. Identify and select appropriate nondestructive testing methods.
- (2) 15. Perform dye penetrant, eddy current, ultrasonic, and magnetic particle inspections.
- (1) 16. Perform basic heat-treating processes.
- (3) 17. Identify and select aircraft hardware and materials.
- (3) 18. Inspect and check welds.
- (3) 19. Perform precision measurements.

F. GROUND OPERATION AND SERVICING

- (2) 20. Start, ground operate, move, service, and secure aircraft and identify typical ground operation hazards.
- (2) 21. Identify and select fuels.

G. CLEANING AND CORROSION CONTROL

- (3) 22. Identify and select cleaning materials.
- (3) 23. Inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning.

H. MATHEMATICS

- (3) 24. Extract roots and raise numbers to a given power.
- (3) 25. Determine areas and volumes of various geometrical shapes.
- (3) 26. Solve ratio, proportion, and percentage problems.
- (3) 27. Perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers.

I. MAINTENANCE FORMS AND RECORDS

- (3) 28. Write descriptions of work performed including aircraft discrepancies and corrective actions using typical aircraft maintenance records.
- (3) 29. Complete required maintenance forms, records, and inspection reports.

J. BASIC PHYSICS

- (2) 30. Use and understand the principles of simple machines; sound, fluid, and heat dynamics; basic aerodynamics; aircraft structures; and theory of flight.

K. MAINTENANCE PUBLICATIONS

- (3) 31. Demonstrate ability to read, comprehend, and apply information contained in FAA and manufacturers' aircraft maintenance specifications, data sheets, manuals, publications, and related Federal Aviation Regulations, Airworthiness Directives, and Advisory material.
- (3) 32. Read technical data.

L. MECHANIC PRIVILEGES AND LIMITATIONS

- (3) 33. Exercise mechanic privileges within the limitations prescribed by part 65 of this chapter.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970, as amended by Amdt. 147-5, 57 FR 28960, June 29, 1992]