

Aviation Technology- Maintenance
Standard Course Outline

AVTG 1101 - MAINTENANCE FORMS AND RECORDS/MAINTENANCE
PUBLICATIONS/MECHANIC PRIVILEGES AND LIMITATIONS

Catalog Description: The student is introduced to the use of technical literature, FAA publications, forms and records, microfiche, and Federal Regulations regarding maintenance personnel. Clock hours: 20 lecture, 28 shop

Prerequisite: AVTG 1001

Credit hours/ Contact hours/ Load hours: 1/48/6 hours per day for 8 days

Target Audience & Transferability:

This course is designed for students seeking a Certificate of Proficiency, Technical Certificates in Airframe and Powerplant, an AAS in Aviation Maintenance Technology, or an AS in Aviation Maintenance Management. Individual AVT courses or Certificates may be transferable to other FAA Certified Aviation Maintenance Technician schools under Federal Regulations.

Student Outcomes/ Course Topics:

MAINTENANCE FORMS AND RECORDS

REFERENCES: 14 CFR parts 1, 43, and 91.

FAA Standard: *FAA-S-8081-26* 1-9, Change 2 (9/24/03)

By the end of the course, students will:

1. Exhibits knowledge of at least two of the following—
 - a. writing descriptions of work performed and approval for return to service after minor repairs or minor alterations.
 - b. the content, form, and disposition of aircraft maintenance records reflecting approval for return to service after a 100-hour inspection.
 - c. the content, form, and disposition of aircraft maintenance records reflecting disapproval for return to service after a 100-hour inspection.
 - d. the recording content, form, and disposition requirements for certificated aviation mechanics (without an Inspection Authorization) who perform major repairs and/or major alterations.
 - e. the inoperative instruments or equipment provisions of 14 CFR part 91.
 - f. the definition/explanation of any of the terms used in relation to aircraft maintenance, such as overhaul(ed), rebuilt, time in service, maintenance, preventive maintenance, inspection, major alteration, major repair, minor alteration, and minor repair.
2. *Demonstrate the ability to:
 - a. Write appropriate entries on FAA Form 337, Major Repair and Major Alteration, indicating performance of a major repair, and make appropriate corresponding aircraft maintenance record entry. (Level 3)

*Core competency element.
3. Demonstrate the ability to perform at least one of the following—
 - a. performance of minor repair or minor alteration. (Level 3)
 - b. performance of preventive maintenance. (Level 3)
 - c. compliance with an airworthiness directive. (Level 3)

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- d. performance of a 100-hour inspection with approval for return to service, including a list of some allowable inoperative instruments or equipment in accordance with the provision of 14 CFR part 91. (Level 3)
- e. performance of a 100-hour inspection with disapproval for return to service because of needed maintenance, or noncompliance with applicable specifications or airworthiness directive(s). (Level 3)
- f. FAA Form 337, Major Repair and Major Alteration, for additional equipment installation or an alteration in accordance with a supplemental type certificate (STC) and make appropriate maintenance record entry. (Level 3)
- g. FAA Form 8010-4, Malfunction or Defect Report. (Level 3)

MAINTENANCE PUBLICATIONS

REFERENCES: ABS.

FAA Standard: *FAA-S-8081-26* 1-11, Changes 2 (9/24/03) & 3 (6/21/04)

By the end of the course, students will:

1. Exhibit knowledge of at least two of the following—
 - a. how a mechanic makes use of Type Certificate Data Sheets (TCDSs) and/or Aircraft Specifications in conducting maintenance or inspections.
 - b. aircraft maintenance manuals and associated publications including any of the following types of publications and how they are used: service bulletin, maintenance manual, overhaul manual, structural repair manual, or instructions for continued airworthiness.
 - c. the requirements of 14 CFR parts 43.13, 43.15, or 43.16 in the performance of maintenance.
 - d. Airworthiness Directives (AD), including purpose and/or AD categories and/or ADs issued to other than aircraft.
 - e. in what form individuals may receive FAA published AD summaries and/or how they may be obtained.
 - f. the AD identification numbering system.
 - g. FAA Advisory Circulars (ACs) including any of the following: significance of the AC numbering system, one or more examples of ACs issued to provide information in designated subject areas, one or more examples of ACs issued to show a method acceptable to the FAA complying with the CFRs.
 - h. the intent or function of the Aviation Maintenance Alerts.
 - i. the Air Transport Association (ATA) Specification 100.
2. *Demonstrate the ability to perform both of the following—
 - a. read, comprehend, and apply information contained in a manufacturer's maintenance manual or illustrated parts manual. (Level 3)
 - b. locate and list all applicable ADs for at least one particular make, model, and serial number of an aircraft, engine, propeller, or appliance. (Level 2)

*Core competency element.
3. Demonstrate the ability to read, comprehend, and apply the information contained in at least one of the following—
 - a. service bulletin. (Level 3)
 - b. overhaul manual. (Level 3)

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- c. structural repair manual. (Level 3)
- d. instructions for continued airworthiness. (Level 3)
- e. at least one maintenance related section, or appendix, or portion(s) thereof, of 14 CFR. (Level 3)
- f. an AD. (Level 3)
- g. Aircraft Specifications or TCDSs to specific maintenance or inspection operations, or portions thereof. (Level 3)

AVIATION MECHANIC PRIVILEGES AND LIMITATIONS

REFERENCES: 14 CFR part 65; AC 65-30A.

FAA Standard: *FAA-S-8081-26* 1-12, Changes 2 (9/24/03) & 3 (6/21/04)

By the end of the course, students will:

1. Exhibit knowledge of mechanic privileges and limitations and exercise thereof, including at least two of the following—
 - a. required evidence of eligibility experience satisfactory to the Administrator.
 - b. length of experience required for eligibility.
 - c. practical experience required for eligibility.
 - d. the privileges of a mechanic in relation to 100-hour and annual inspections.
 - e. change of address reporting requirements.
 - f. minimum age requirements.
 - g. recent experience requirements to exercise privileges of a certificate.
 - h. who is authorized to perform maintenance/inspection, preventive maintenance, rebuilding, or alteration and/or approve for return to service afterwards.
 - i. causes for revocation or suspension.
 - j. criteria for determining major and minor repair or alteration.
2. N/A
3. When given a copy of 14 CFR part 65, demonstrate the ability to understand mechanic privileges and limitations by finding and interpreting/explaining essential information contained in at least two of the following—
 - a. Offenses involving alcohol or drugs. (Level 2)
 - b. Written tests: Cheating or other unauthorized conduct. (Level 2)
 - c. Applications, certificates, logbooks, reports, and records: falsification, reproduction, or alteration. (Level 2)
 - d. Refusal to submit to a drug or alcohol test. (Level 2)
 - e. General privileges and limitations. (Level 2)
 - f. Recent experience requirements. (Level 2)
 - g. Airframe rating; additional privileges and/or Powerplant rating; additional privileges. (Level 2)
 - h. Display of certificate. (Level 2)

Required Text(s):

General Textbook (ASA)
General Test Study Guide (ASA)
FAR Handbook for AMT (ASA)

ISBN # 1-56027-550-3
ISBN # 1-56027-570-7
ISBN # 1-56027-563-4

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AC43.13-1B Acceptable Methods, Practices, & Techniques (ASA) ISBN # 1-56027-488-3

Optional Text(s):

Technician General Textbook (Jeppesen)	ISBN # 0-88487-203-3
Technician General Workbook (Jeppesen)	ISBN # 0-88487-212-2
AC65-9A Aircraft Mechanics Handbook General (FAA)	ISBN # 1-56027-064-0

Supporting Reference(s)

O&P Study Guide (ASA)	ISBN # 1-56027-406-9
Maintenance Handbook (ASA)	ISBN # 1-56027-518-9
Dictionary of Aeronautical Terms (ASA)	ISBN # 1-56027-587-2

The workbooks and test study guides may be used to aid the instructor and students to reinforce the textbook information. Other Textbooks may be issued depending upon availability.

Required Methods of Instruction:

Classes are taught off-campus in a full time day or night format, requiring maximum attendance. Attendance is taken every hour. Missed time must be made up outside of regular scheduled class time before moving to the next subject.

Required Forms of Assessment:

Periodic exams will be performed by FAA approved instructors as required to insure progress. Students must pass this course with a 70% or better to qualify for an FAA approved Certificate of Completion in the General Section.