



U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

Subject: Reference Materials and Subject Matter
Knowledge Codes for Airman Knowledge Testing

Date: 6/8/04
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Change:

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- 1. PURPOSE.** This advisory circular contains the listings of reference materials and subject matter knowledge codes for airman knowledge testing. It includes codes for pilots, instructors, flight engineers, dispatchers, navigators, pilot examiners, inspection authorization, parachute riggers, and aircraft mechanics.
 - 2. CANCELLATION.** AC 60-25E, Reference Materials and Subject Matter Knowledge Codes for Airman Knowledge Testing, dated 4/16/01, is canceled.
 - 3. GENERAL.** The listings of reference materials and subject matter knowledge codes have been prepared by the Federal Aviation Administration (FAA) to establish specific references for all knowledge standards. The listings contain reference materials to be used when preparing for all airman knowledge tests. The subject matter knowledge codes should be referred to when reviewing areas of deficiency on airman knowledge test reports.
 - 4. HOW TO OBTAIN ELECTRONICALLY.** The subject matter knowledge codes, some of the reference materials listed, and knowledge test guides specific to each certification testing level can be obtained from the Regulatory Support Division's web site at <http://afs600.faa.gov>.

/s/ 6/8/2004
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Regulatory Support Division
Flight Standards Service

**REFERENCE MATERIALS AND SUBJECT MATTER KNOWLEDGE CODES
FOR PILOTS, INSTRUCTORS, FLIGHT ENGINEERS, DISPATCHERS,
NAVIGATORS, PILOT EXAMINERS, INSPECTION AUTHORIZATION, AND
PARACHUTE RIGGERS**

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- A01 General Definitions
- A02 Abbreviations and Symbols

14 CFR part 21—Certification Procedures for Products and Parts

- A100 General
- A102 Type Certificates
- A104 Supplemental Type Certificates
- A108 Airworthiness Certificates
- A110 Approval of Materials, Parts, Processes, and Appliances
- A112 Export Airworthiness Approvals
- A114 Approval of Engines, Propellers, Materials, Parts, and Appliances: Import
- A117 Technical Standard Order Authorizations

14 CFR part 23—Airworthiness Standards: Normal, Utility, Acrobatic, and Commuter Category Airplanes

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- A159 Appendix G: Instructions for Continued Airworthiness

14 CFR part 25—Airworthiness Standards: Transport Category Airplanes

- A03 General
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- A06 Design and Construction
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- A08 Equipment
- A09 Operating Limitations and Information
- A11 Appendix H: Instructions for Continued Airworthiness

14 CFR part 27—Airworthiness Standards: Normal Category Rotorcraft

- A250 General
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- A255 Strength Requirements

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A259 Powerplant
A261 Equipment
A263 Operating Limitations and Information
A265 Appendix A: Instructions for Continued Airworthiness

14 CFR part 39—Airworthiness Directives

A13 Airworthiness Directives

14 CFR part 43—Maintenance, Preventive Maintenance, Rebuilding, and Alteration

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A16 Appendixes

14 CFR part 45—Identification and Registration Marking

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A401 Identification of Aircraft and Related Products
A402 Nationality and Registration Marks

14 CFR part 61—Certification: Pilots, Flight Instructors, and Ground Instructors

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A21 Aircraft Ratings and Pilot Authorizations
A22 Student Pilots
A23 Recreational Pilot
A24 Private Pilots
A25 Commercial Pilots
A26 Airline Transport Pilots
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14 CFR part 63—Certification: Flight Crewmembers Other Than Pilots

A30 General
A31 Flight Engineers
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14 CFR part 65—Certification: Airmen Other Than Flight Crewmembers

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14 CFR part 71—Designation of Class A, Class B, Class C, Class D, and Class E Airspace Areas; Airways; Routes; and Reporting Points

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14 CFR part 91—General Operating and Flight Rules

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- B11 Equipment, Instrument, and Certificate Requirements
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- B14 Large and Turbine-Powered Multiengine Airplanes and Fractional Ownership Program Aircraft
- B15 Additional Equipment and Operating Requirements for Large and Transport Category Aircraft
- B16 Appendix A—Category II Operations: Manual, Instruments, Equipment, and Maintenance
- B17 Foreign Aircraft Operations and Operations of United States-Registered Civil Aircraft Outside of the United States; and Rules Governing Persons on Board Such Aircraft

14 CFR part 97—Standard Instrument Approach Procedures

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14 CFR part 119—Certification: Air Carriers and Commercial Operators

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- C22 Certification, Operations Specifications, and Certain Other Requirements for Operations Conducted Under Part 121 or 135

14 CFR part 121—Operating Requirements: Domestic, Flag, and Supplemental Operations

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- D24 Special Federal Aviation Regulation SFAR No. 14

14 CFR part 125—Certification and Operations: Airplanes Having a Seating Capacity of 20 or More Passengers or a Maximum Payload Capacity of 6,000 Pounds or More; and Rules Governing Persons on Board Such Aircraft

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14 CFR part 135—Operating Requirements: Commuter and on Demand Operations and Rules Governing Persons on Board Such Aircraft

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- E12 Special Federal Aviation Regulations SFAR No. 36
- E13 Special Federal Aviation Regulations SFAR No. 38

14 CFR part 183—Representatives of the Administrator

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- E151 Certification of Representatives
- E152 Kinds of Designations: Privileges

US HMR 172—Hazardous Materials Table

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US HMR 175—Materials Transportation Bureau Hazardous Materials Regulations (HMR)

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G02 Loading, Unloading, and Handling

G03 Specific Regulation Applicable According to Classification of Material

NTSB 830—Rules Pertaining to the Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft, and Preservation of Aircraft Wreckage, Mail, Cargo, and Records

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G13 Reporting of Aircraft Accidents, Incidents, and Overdue Aircraft

The Powered Parachute Bible—Media Max, First Edition

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H02 Wing

H03 Powerplant

H04 4-cycle and 2-cycle Engines

H05 4-cycle vs. 2-cycle

H06 Electrical Output

H07 Ignition Systems

H08 Oil and Fuel

H09 Engine Gauges

H10 Propeller

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H12 Preflight

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Trikes, The Flex-Wing Flyers, H & L Press, Second Edition

H20 Principles of Flight

H21 Weight-Shift Ultralight

H22 Effects of Flight Controls

H23 Preflight and Postflight

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H27 Triking Activities

FAA-H-8083-1—Aircraft Weight and Balance Handbook

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- H102 Effects of Weight
- H103 Weight Changes
- H104 Stability and Balance Control
- H105 Weight and Balance Theory
- H106 Weight and Balance Documents
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- H110 Determining the Center of Gravity
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- H112 Determining the Loaded Weight and CG
- H113 Multiengine Airplane Weight and Balance Computations
- H114 Determining the Loaded CG
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- H202 Characteristics of Learning
- H203 Principles of Learning
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AC 61-23—Pilot’s Handbook of Aeronautical Knowledge [Superceded by FAA-H-8083-25]

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- T16 Reciprocating-Engine Overhaul Practices

- T17 Gas Turbine Engine: Theory, Construction, and Nomenclature
- T18 Gas Turbine Engine: Fuels and Fuel Systems
- T19 Turbine-Engine Lubricants and Lubricating Systems
- T20 Ignition and Starting Systems of Gas-Turbine Engines
- T21 Turbofan Engines
- T22 Turboprop Engines
- T23 Turboshaft Engines
- T24 Gas-Turbine Operation, Inspection, Troubleshooting, Maintenance, and Overhaul
- T25 Propeller Theory, Nomenclature, and Operation
- T26 Turbopropellers and Control Systems
- T27 Propeller Installation, Inspection, and Maintenance
- T29 Engine Indicating, Warning, and Control Systems

ATD—Aircraft Technical Dictionary—Jeppesen Sanderson, Inc.

- T30 Definitions

Aircraft Basic Science—Glencoe/McGraw-Hill, Seventh Edition

- T31 Fundamentals of Mathematics
- T32 Science Fundamentals
- T33 Basic Aerodynamics
- T34 Airfoils and their Applications
- T35 Aircraft in Flight
- T36 Aircraft Drawings
- T37 Weight and Balance
- T38 Aircraft Materials
- T39 Fabrication Techniques and Processes
- T40 Standard Aircraft Hardware
- T41 Aircraft Fluid Lines and their Fittings
- T42 Federal Aviation Regulations and Publications
- T43 Ground Handling and Safety
- T44 Aircraft Inspection and Servicing

Aircraft Maintenance and Repair—Glencoe/McGraw-Hill, Sixth Edition

- T45 Aircraft Structures
- T46 Aircraft Fluid Power Systems
- T47 Aircraft Landing-Gear Systems
- T48 Aircraft Fuel Systems
- T49 Environmental Systems
- T50 Aircraft Instruments and Instrument Systems
- T51 Auxiliary Systems
- T52 Assembly and Rigging

TCAS—Transport Category Aircraft Systems—Jeppesen Sanderson, Inc.

- T53 Types, Design Features and Configurations of Transport Aircraft
- T54 Auxiliary Power Units, Pneumatic, and Environmental Control Systems
- T55 Anti-Icing Systems and Rain Protection

- T56 Electrical Power Systems
- T57 Flight Control Systems
- T58 Fuel Systems
- T59 Hydraulic Systems
- T60 Oxygen Systems
- T61 Warning and Fire Protection Systems
- T62 Communications, Instruments, and Navigational Systems
- T63 Miscellaneous Aircraft Systems and Maintenance Information

Aircraft Electricity and Electronics—Glencoe/McGraw-Hill, Fifth Edition

- T64 Fundamentals of Electricity
- T65 Applications of Ohm's Law
- T66 Aircraft Storage Batteries
- T67 Alternating Current
- T68 Electrical Wire and Wiring Practices
- T69 Electrical Control Devices
- T70 Electric Measuring Instruments
- T71 Generators and Related Control Circuits
- T72 Alternators, Inverters, and Related Controls
- T73 Electric Motors
- T74 Power Distribution Systems
- T75 Design and Maintenance of Aircraft Electrical Systems
- T76 Radio Theory
- T77 Communication and Navigation Systems
- T78 Weather Warning Systems
- T79 Electrical Instruments and Autoflight Systems
- T80 Digital Electronics

FAA Accident Prevention Program Bulletins

- V01 FAA-P-8740-2, Density Altitude
- V02 FAA-P-8740-5, Weight and Balance
- V03 FAA-P-8740-12, Thunderstorms
- V04 FAA-P-8740-19, Flying Light Twins Safely
- V05 FAA-P-8740-23, Planning your Takeoff
- V06 FAA-P-8740-24, Tips on Winter Flying
- V07 FAA-P-8740-25, Always Leave Yourself an Out
- V08 FAA-P-8740-30, How to Obtain a Good Weather Briefing
- V09 FAA-P-8740-40, Wind Shear
- V10 FAA-P-8740-41, Medical Facts for Pilots
- V11 FAA-P-8740-44, Impossible Turns
- V12 FAA-P-8740-48, On Landings, Part I
- V13 FAA-P-8740-49, On Landings, Part II
- V14 FAA-P-8740-50, On Landings, Part III
- V15 FAA-P-8740-51, How to Avoid a Midair Collision
- V16 FAA-P-8740-52, The Silent Emergency

FTP—Flight Theory for Pilots—Jeppesen Sanderson, Inc.

- W01 Introduction
- W02 Air Flow and Airspeed Measurement
- W03 Aerodynamic Forces on Airfoils
- W04 Lift and Stall
- W05 Drag
- W06 Jet Aircraft Basic Performance
- W07 Jet Aircraft Applied Performance
- W08 Prop Aircraft Basic Performance
- W09 Prop Aircraft Applied Performance
- W10 Helicopter Aerodynamics
- W11 Hazards of Low Speed Flight
- W12 Takeoff Performance
- W13 Landing Performance
- W14 Maneuvering Performance
- W15 Longitudinal Stability and Control
- W16 Directional and Lateral Stability and Control
- W17 High Speed Flight

Fly the Wing—Iowa State University Press/Ames, Second Edition

- X01 Basic Aerodynamics
- X02 High-Speed Aerodynamics
- X03 High-Altitude Machs
- X04 Approach Speed Control and Target Landings
- X05 Preparation for Flight Training
- X06 Basic Instrument Scan
- X07 Takeoffs
- X08 Rejected Takeoffs
- X09 Climb, Cruise, and Descent
- X10 Steep Turns
- X11 Stalls
- X12 Unusual Attitudes
- X14 Maneuvers At Minimum Speed
- X15 Landings: Approach Technique and Performance
- X16 ILS Approaches
- X17 Missed Approaches and Rejected Landings
- X18 Category II and III Approaches
- X19 Nonprecision and Circling Approaches
- X20 Weight and Balance
- X21 Flight Planning
- X22 Icing
- X23 Use of Anti-ice and Deice
- X24 Winter Operation
- X25 Thunderstorm Flight
- X26 Low-Level Wind Shear

Aircraft Gas Turbine Engine Technology—Glencoe/McGraw-Hill, Second Edition

- Y01 History and Theory
- Y02 Construction and Design
- Y03 Systems and Accessories
- Y04 Maintenance and Testing
- Y05 Representative Engines
- Y06 Appendixes

Technical Standard Orders

- Y60 TSO-C23b, Parachute
- Y61 TSO-C23c, Personnel Parachute Assemblies
- Y62 TSO-C23d, Personnel Parachute Assemblies

Type Certificate Data Sheets and Specifications

- Y300 Type Certificate Data Sheets and Specifications Alphabetical Index and Users Guide
- Y301 Type Certificate Data Sheet No. 2A13 Piper
- Y302 Type Certificate Data Sheet No. 3A19 Cessna
- Y303 Type Certificate Data Sheet No. E-295 Lycoming
- Y304 Type Certificate Data Sheet No. A7CE Cessna
- Y305 Type Certificate Data Sheet No. 3A13 Cessna
- Y306 Type Certificate Data Sheet No. A7S0 Piper
- Y307 Type Certificate Data Sheet No. A11EA Gulfstream American
- Y308 Type Certificate Data Sheet No. E-273 Continental
- Y309 Aircraft Specification No. 1A6 Piper
- Y310 Type Certificate Data Sheet No. P57GL McCauley
- Y311 Type Certificate Data Sheet No. P920 Hartzell
- Y312 Type Certificate Data Sheet No. 2A4 Twin Commander
- Y313 Type Certificate Data Sheet No. E-284 Textron Lycoming

Practical Test Standards

- Z01 FAA-S-8081-6, Flight Instructor Practical Test Standards for Airplane
- Z02 FAA-S-8081-7, Flight Instructor Practical Test Standards for Rotorcraft
- Z03 FAA-S-8081-8, Flight Instructor Practical Test Standards for Glider

NOTE: AC 00-2, Advisory Circular Checklist, transmits the status of all FAA advisory circulars (ACs), as well as FAA internal publications and miscellaneous flight information, such as Aeronautical Information Manual, Airport/Facility Directory, knowledge test guides, practical test standards, and other material directly related to a certificate or rating. The checklist is available on the Internet at:

http://www.faa.gov/aba/html_policies/ac00_2.html

LIST OF REFERENCE MATERIALS AND SUBJECT MATTER KNOWLEDGE CODES

The publications listed in the following pages contain study material you need to be familiar with when preparing for aviation mechanic knowledge tests. These publications can be purchased through the U.S. Government Printing Office (GPO), commercial aviation supply houses, or industry organizations. The latest revision of the listed references should be requested. Additional study material is also available through these sources that may be helpful in preparing for aviation mechanic knowledge tests. All publications listed would be excellent for a mechanic to have in a personal reference library.

AVIATION MECHANIC—GENERAL

ABBREVIATIONS AND REFERENCES

AMT-G	Aviation Maintenance Technician Series General—Aviation Supplies and Academics (ASA), Inc.
ABS	Aircraft Basic Science—Glencoe Division, Macmillan/McGraw-Hill Publication Co.
AP	Aircraft Powerplants—Glencoe Division, Macmillan/McGraw-Hill Publication Co.
AEE	Aircraft Electricity and Electronics—Glencoe Division, Macmillan/McGraw-Hill Publication Co.
AC	Advisory Circular—Federal Aviation Administration (FAA), Government Printing Office (GPO)
AIM	Aeronautical Information Manual—FAA, Government Printing Office (GPO)
14 CFR	Title 14 of the Code of Federal Regulations (part or § [section])—Government Printing Office (GPO)
FAA-G-8082	Guide—FAA, Government Printing Office (GPO)
FAA-H-8083	Handbook—FAA, Government Printing Office (GPO)
MBM	Marathon Battery Instruction Manual
ECD	Electronic Circuit Devices—Jeppesen Sanderson, Inc.
AB	Aircraft Batteries, Lead Acid/Nickel-Cadmium—Jeppesen Sanderson, Inc.
ATD	Aircraft Technical Dictionary—Jeppesen Sanderson, Inc.
JSGT	A & P Technician General Textbook—Jeppesen Sanderson, Inc.
JSPT	A & P Technician Powerplant Textbook—Jeppesen Sanderson, Inc.

Basic Electricity—AC 65-9A, AMT-G, AEE, MBM, ECD, AB, JSGT

A01	Calculate and measure capacitance and inductance
A02	Calculate and measure electrical power
A03	Measure voltage, current, resistance, and continuity
A04	Determine the relationship of voltage, current, and resistance in electrical circuits
A05	Read and interpret electrical circuit diagrams, including solid state devices and logic functions
A06	Inspect and service batteries

Aircraft Drawings—AC 65-9A, AC 65-15A, ABS, JSGT

B01	Use drawings, symbols, and system schematics
B02	Draw sketches of repairs and alterations
B03	Use blueprint information
B04	Use graphs and charts

Weight and Balance—AC 65-9A, 14 CFR § 23.29

- C01 Weigh aircraft
- C02 Perform complete weight and balance check and record data

Fluid Lines and Fittings—AC 65-9A, ABS, JSGT

- D01 Fabricate and install rigid and flexible fluid lines and fittings

Materials and Processes—AC 65-9A, AC 43-3, AC 65-15A, AC 43.13-1B, ABS, AP, ATD, JSPT, JSGT

- E01 Identify and select appropriate nondestructive testing methods
- E02 Perform dye penetrant, eddy current, ultrasonic, and magnetic particle inspections
- E03 Perform basic heat-treating processes
- E04 Identify and select aircraft hardware and materials
- E05 Inspect and check welds
- E06 Perform precision measurements

Ground Operation and Servicing—AC 65-9A, FAA-H-8083-3, AC 65-12A, AIM, ABS, JSGT

- F01 Start, ground operate, move, service, and secure aircraft and identify typical ground operation hazards
- F02 Identify and select fuels

Cleaning and Corrosion Control—AC 65-9A, AC 65-12A, AC 43.13-1B, AC 43-4A, AC 43-205, JSGT

- G01 Identify and select cleaning materials
- G02 Inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning

Mathematics—AC 65-9A, AC 65-12A, ABS, AMT-G, JSGT

- H01 Extract roots and raise numbers to a given power
- H02 Determine areas and volumes of various geometrical shapes
- H03 Solve ratio, proportion, and percentage problems
- H04 Perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers

Maintenance Forms and Records—AC 61-23C, AC 65-9A, AC 65-19H, AC 43.13-1B, 14 CFR § 91.417, 14 CFR part 43

- I01 Write descriptions of work performed including aircraft discrepancies and corrective actions using typical aircraft maintenance records
- I02 Complete required maintenance forms, records, and inspection reports

Basic Physics—AC 65-9A, FAA-H-8083-3, ABS, JSGT

- J01 Use and understand the principles of simple machines; sound, fluid, and heat dynamics; basic aerodynamics; aircraft structures; and theory of flight

Maintenance Publications—AC 65-9A, FAA-G-8082-11, 14 CFR part 21, 14 CFR part 39, 14 CFR part 43, ABS, JSGT

- K01 Demonstrate ability to read, comprehend, and apply information contained in FAA and manufacturer's aircraft maintenance specifications, data sheets, manuals, publications, and related Federal Aviation Regulations, Airworthiness Directives, and Advisory material
- K02 Read technical data

Mechanic Privileges and Limitations—AC 43.13-1B, AMT-A, 14 CFR part 43, 14 CFR part 65

- L01 Exercise mechanic privileges within the limitations prescribed by 14 CFR part 65

AVIATION—MECHANIC AIRFRAME

ABBREVIATIONS AND REFERENCES

- AC Advisory Circular
- AEE Aircraft Electricity and Electronics—Glencoe Division, Macmillan/McGraw-Hill Publication Co.
- AMR Aircraft Maintenance and Repair—Glencoe Division, Macmillan/McGraw-Hill Publishing Co.
- AP Aircraft Powerplants—Glencoe Division, Macmillan/McGraw-Hill Publishing Co.
- AMT-A Aviation Maintenance Technician Series Airframe—Aviation Supplies and Academics (ASA) Publications
- DAT Dictionary of Aeronautical Terms—Aviation Supplies and Academics (ASA) Publications
- AAC Aircraft Air Conditioning (Vapor Cycle)—Jeppesen Sanderson, Inc.
- FMS Aircraft Fuel Metering Systems—Jeppesen Sanderson, Inc.
- AHS Aircraft Hydraulic System—Jeppesen Sanderson, Inc.
- AOS Aircraft Oxygen Systems—Jeppesen Sanderson, Inc.
- JSAT A & P Technician Airframe Textbook—Jeppesen Sanderson, Inc.
- JSGT A & P Technician General Textbook—Jeppesen Sanderson, Inc.
- ABS Aircraft Bonded Structure—Jeppesen Sanderson, Inc.
- WG Welding Guidelines with Aircraft Supplement—Jeppesen Sanderson, Inc.
- ARS Aircraft Radio Systems—Jeppesen Sanderson, Inc.
- AC Advanced Composites—Jeppesen Sanderson, Inc.
- 14 CFR Title 14 of the Code of Federal Regulations (part or § [section])—Government Printing Office (GPO)
- 47 CFR Title 47 of the Code of Federal Regulations (part or § [section])—Government Printing Office (GPO)
- 49 CFR Title 49 of the Code of Federal Regulations (part or § [section])—Government Printing Office (GPO)
- MBM Marathon Battery Manual
- MMM Manufacturer's Maintenance Manual
- TSO Technical Standard Order
- SUND Sundstrand IDG and BITE 767 Line Maintenance/Serviceing

Wood Structures—AC 65-15A, AC 43.13-1B, AMR

- A01 Service and repair wood structures
- A02 Identify wood defects
- A03 Inspect wood structures

Aircraft Covering—AC 65-15A, AC 43.13-1B, AMR

- B01 Select and apply fabric and fiberglass covering materials
- B02 Inspect, test, and repair fabric and fiberglass

Aircraft Finishes—AC 65-15A, AC 43.13-1B, AMR, JSAT

- C01 Apply trim, letters, and touchup paint
- C02 Identify and select aircraft finishing materials
- C03 Apply finishing materials
- C04 Inspect finishes and identify defects

Sheet Metal and Non-Metallic Structures—AC 65-9A, AC 65-15A, AC 43.13-1B, 14 CFR part 23, TSO, AMR, AComp, ABStruc, JSAT, JSAT

- D01 Select, install, and remove special fasteners for metallic, bonded, and composite structures
- D02 Inspect bonded structures
- D03 Inspect, test, and repair fiberglass, plastics, honeycomb, composite, and laminated primary and secondary structures
- D04 Inspect, check, service, and repair windows, doors, and interior furnishings
- D05 Inspect and repair sheet-metal structures
- D06 Install conventional rivets
- D07 Form, lay out, and bend sheet metal

Welding—AC 65-15A, AC 43.13-1B, AMR, WG, JSAT

- E01 Weld magnesium and titanium
- E02 Solder stainless steel
- E03 Fabricate tubular structures
- E04 Solder, braze, gas-, and arc-weld steel
- E05 Weld aluminum and stainless steel

Assembly and Rigging—AC 65-9A, AC 65-15A, AC 61-13B, AC 43.13-1B & 2A, 14 CFR part 23, AMR, JSAT

- F01 Rig rotary-wing aircraft
- F02 Rig fixed-wing aircraft
- F03 Check alignment of structures
- F04 Assemble aircraft components, including flight control surfaces
- F05 Balance, rig, and inspect movable primary and secondary flight control surfaces
- F06 Jack aircraft

Airframe Inspection—AC 65-9A, 14 CFR part 43, 14 CFR part 65, 14 CFR part 91

- G01 Perform airframe conformity and airworthiness inspections
- HXX Reserved
- IXX Reserved
- JXX Reserved

Aircraft Landing Gear Systems—AC 65-9A, AC 65-15A, AC 43.13-1B, 14 CFR part 43, AMR, AHS, JSAT

- K01 Inspect, check, service, and repair landing gear, retraction systems, shock struts, brakes, wheels, tires, and steering systems

Hydraulic and Pneumatic Power Systems—AC 65-9A, AC 65-15A, AMR, AHS, JSAT, AMT-A

- L01 Repair hydraulic and pneumatic power system components
- L02 Identify and select hydraulic fluids
- L03 Inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems

Cabin Atmosphere Control Systems—AC 65-15A, AC 43.13-1B, AMR, AAC, JSAT, 49 CFR part 173

- M01 Inspect, check, service, troubleshoot, and repair heating, cooling, air-conditioning, pressurization, and air cycle machines
- M02 Inspect, check, troubleshoot, service, and repair oxygen systems

Aircraft Instrument Systems—AC 65-9A, AC 65-15A, 14 CFR part 23, 14 CFR part 65, 14 CFR part 91, AEE, AMR, AMT-A, JSAT

- N01 Inspect, check, service, troubleshoot, and repair electronic flight instrument systems and both mechanical and electrical heading, speed, altitude, temperature, pressure, and position indicating systems to include the use of built-in test equipment
- N02 Install instruments and perform a static pressure system leak test

Communication and Navigation Systems—AC 65-15A, AC 91-44A, AC 43.13-2A, AEE, AP, ARS, JSAT, 47 CFR § 87.89

- O01 Inspect, check, and troubleshoot autopilot, servos and approach coupling systems
- O02 Inspect, check, and service aircraft electronic communication and navigation systems, including VHF, passenger address interphones and static discharge devices, aircraft VOR, ILS, LORAN, radar beacon transponders, flight management computers, and GPWS
- O03 Inspect and repair antenna and electronic equipment installations

Aircraft Fuel Systems—AC 65-9A, AC 65-12A, AC 65-15A, AC 43.13-1B & 2A, 14 CFR part 23, 14 CFR part 25, AMR, MMM, FMS, JSAT

- P01 Check and service fuel dump systems
- P02 Perform fuel management, transfer, and defueling
- P03 Inspect, check, and repair pressure fueling systems
- P04 Repair aircraft fuel system components

- P05 Inspect and repair fluid quantity indicating systems
- P06 Troubleshoot, service, and repair fluid pressure and temperature warning systems
- P07 Inspect, check, service, troubleshoot, and repair aircraft fuel systems

Aircraft Electrical Systems—AC 65-9A, AC 65-15A, AC 43.13-1B & 2A, 14 CFR part 23, AEE, MBM, JSJT, JSAT

- Q01 Repair and inspect aircraft electrical system components; crimp and splice wiring to manufacturer's specifications; and repair pins and sockets of aircraft connectors
- Q02 Install, check, and service airframe electrical wiring, controls, switches, indicators, and protective devices
- Q03 Inspect, check, troubleshoot, service, and repair alternating and direct current electrical systems
- Q04 Inspect, check, and troubleshoot constant speed and integrated speed drive generators

Position and Warning Systems—AC 65-9A, AC 65-15A, AC 43.13-1B, 14 CFR part 23, AMR, AMT-A, JSAT

- R01 Inspect, check, and service speed and configuration warning systems, electrical brake controls, and antiskid systems
- R02 Inspect, check, troubleshoot, and service landing gear position indicating and warning systems

Ice and Rain Control Systems—AC 65-15A, AMT-A

- S01 Inspect, check, troubleshoot, service, and repair airframe ice and rain control systems

Fire Protection Systems—AC 65-9A, AC 65-15A, AP, JSAT

- T01 Inspect, check, and service smoke and carbon monoxide detection systems
- T02 Inspect, check, service, troubleshoot, and repair aircraft fire detection and extinguishing systems

AVIATION MECHANIC—POWERPLANT

ABBREVIATIONS AND REFERENCES

ABS	Aircraft Basic Science—Glencoe Division, Macmillan/McGraw-Hill Publication Co.
AC	Advisory Circular
AEE	Aircraft Electricity and Electronics—Glencoe Division, Macmillan/McGraw-Hill Publication Co.
AMR	Aircraft Maintenance and Repair—Glencoe Division, Macmillan/McGraw-Hill Publication Co.
AMT-G	Aviation Maintenance Technician Series General—Aviation Supplies & Academics, (ASA) Inc.
AMT-P	Aviation Maintenance Technician Series Powerplant—Aviation Supplies & Academics, (ASA) Inc.
AP	Aircraft Powerplants—Glencoe Division, Macmillan/McGraw-Hill Publication Co.
DAT	Dictionary of Aeronautical Terms—Aviation Supplies & Academics (ASA), Inc.
TCAS	Transport Category Aircraft Systems—Jeppesen Sanderson, Inc.
APC	Aircraft Propellers and Controls—Jeppesen Sanderson, Inc.
ATD	Aircraft Technical Dictionary—Jeppesen Sanderson, Inc.
JSGT	A & P Technician General Textbook—Jeppesen Sanderson, Inc.
JSPT	A & P Technician Powerplant Textbook—Jeppesen Sanderson, Inc.
AGTP	Aircraft Gas Turbine Powerplants—Jeppesen Sanderson, Inc.
14 CFR	Title 14 of the Code of Federal Regulations (part or § [section])—Government Printing Office (GPO)
PSG	A&P Technician Powerplant Study Guide—Jeppesen Sanderson, Inc.

Reciprocating Engines—AC 65-9A, AC 65-12A, 14 CFR part 43, AP, JSPT, AMT-P

A01	Inspect and repair a radial engine
A02	Overhaul reciprocating engine
A03	Inspect, check, service, and repair reciprocating engines and engine installations
A04	Install, troubleshoot, and remove reciprocating engines

Turbine Engines—AC 65-9A, AC 65-12A, AC 65-15A, 14 CFR part 33, AP, AGTP, JSPT

B01	Overhaul turbine engine
B02	Inspect, check, service, and repair turbine engines and turbine engine installations
B03	Install, troubleshoot, and remove turbine engines

Engine Inspection—AC 65-9A, AC 65-12A, AC 39-7B, AC 43.13-1B, 14 CFR part 23, 14 CFR part 33, 14 CFR part 43, 14 CFR part 65, ABS, AP, JSGT, JSPT

C01	Perform powerplant conformity and airworthiness inspections
DXX	Reserved
EXX	Reserved
FXX	Reserved
GXX	Reserved

Engine Instrument Systems—AC 65-12A, AC 65-15A, AC 20-88A, 14 CFR part 65, AMR, AP, AGTP, JSPT, ATD

- H01 Troubleshoot, service, and repair electrical and mechanical fluid rate-of-flow indicating systems
- H02 Inspect, check, service, troubleshoot, and repair electrical and mechanical engine temperature, pressure, and RPM indicating systems

Engine Fire Protection Systems—AC 65-9A, AC 65-12A, ABS, AMR, AMT-P, AP, JSPT

- I01 Inspect, check, service, troubleshoot, and repair engine fire detection and extinguishing systems

Engine Electrical Systems—AC 65-9A, AC 65-12A, AC 65-15A, AC 43.13-1B, 14 CFR part 23, 14 CFR part 25, AEE, AP, JSGT, JSPT

- J01 Repair engine electrical system components
- J02 Install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices

Lubrication Systems—AC 65-12A, AC 65-15A, 14 CFR part 33, AP, AGTP, JSPT, AMT-P

- K01 Identify and select lubricants
- K02 Repair engine lubrication system components
- K03 Inspect, check, service, troubleshoot, and repair engine lubrication systems

Ignition and Starting Systems—AC 65-12A, AC 65-15A, AEE, AMT-P, AP, AGTP, JSPT

- L01 Overhaul magneto and ignition harness
- L02 Inspect, service, troubleshoot, and repair reciprocating and turbine engine ignition systems and components
- L03 Inspect, service, troubleshoot, and repair turbine engine electrical starting systems
- L04 Inspect, service, and troubleshoot turbine engine pneumatic starting systems

Fuel Metering Systems—AC 65-9A, AC 65-12A, AP, AGTP, JSPT

- M01 Troubleshoot and adjust turbine engine fuel metering systems and electronic engine fuel controls
- M02 Overhaul carburetor
- M03 Repair engine fuel metering system components
- M04 Inspect, check, service, troubleshoot, and repair reciprocating and turbine engine fuel metering systems

Engine Fuel Systems—AC 65-9A, AC 65-12A, AC 43.13-1B, 14 CFR part 23, AP, JSPT

- N01 Repair engine fuel system components
- N02 Inspect, check, service, troubleshoot, and repair engine fuel systems

Induction and Engine Airflow Systems—AC 65-9A, AC 65-12A, AC 43.13-1B, AP, AGTP, JSPT, AMT-P

- O01 Inspect, check, troubleshoot, service, and repair engine ice and rain control systems
- O02 Inspect, check, service, troubleshoot, and repair heat exchangers, superchargers, and turbine engine airflow and temperature control systems
- O03 Inspect, check, service, and repair carburetor air intake and induction manifolds

Engine Cooling Systems—AC 65-12A, ABS, AP, JSPT, AMT-P

- P01 Repair engine cooling system components
- P02 Inspect, check, troubleshoot, service, and repair engine cooling systems

Engine Exhaust and Reverser Systems—AC 65-12A, AC 43.13-1B, AP, JSPT

- Q01 Repair engine exhaust system components
- Q02 Inspect, check, troubleshoot, service, and repair engine exhaust systems
- Q03 Troubleshoot and repair engine thrust reverser systems and related components

Propellers—AC 65-9A, AC 65-12A, AC 43.13-1B, 14 CFR part 43, 14 CFR part 65, AP, ATD, APC, JSPT, AMT-P

- R01 Inspect, check, service, and repair propeller synchronizing and ice control systems
- R02 Identify and select propeller lubricants
- R03 Balance propellers
- R04 Repair propeller control system components
- R05 Inspect, check, service, and repair fixed pitch, constant speed and feathering propellers, and propeller governing systems
- R06 Install, troubleshoot, and remove propellers
- R07 Repair aluminum alloy propeller blades

Auxiliary Power Units—DAT, TCAS, ATD, AGTP

- T01 Inspect, check, service, and troubleshoot turbine-driven auxiliary power units

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http://www.faa.gov/aba/html_policies/ac00_2.html