U.S. Department of Transportation

Federal Aviation Administration

# Advisory Circular

Subject: Reference Materials and Subject Matter	Date: 5/12/2005	AC No: 60-25G
Subject Reference materials and Subject matter	Dutter 5/12/2005	110 1101 00 250
Knowledge Codes for Airman Knowledge Testing	Initiated by: AFS-630	Change:

**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 60-25F, Reference Materials and Subject Matter Knowledge Codes for Airman Knowledge Testing, dated 6/8/04, 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.

Joseph K. Tintera, Manager Regulatory Support Division Flight Standards Service AC 60-25G

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

#### Title 14 of the Code of Federal Regulations (14 CFR) part 1—Definitions and Abbreviations

- A01 General Definitions
- A02 Abbreviations and Symbols

#### 14 CFR part 21—Certification Procedures for Products and Parts

A108 Airworthiness Certificates

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

A150 General

#### 14 CFR part 25—Airworthiness Standards: Transport Category Airplanes

- A07 Powerplant
- A11 Appendix H: Instructions for Continued Airworthiness

#### 14 CFR part 39—Airworthiness Directives

A13 Airworthiness Directives

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

- A15 Maintenance, Preventive Maintenance, Rebuilding, and Alteration
- A16 Appendixes

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

- A20 General
- A21 Aircraft Ratings and Pilot Authorizations
- A22 Student Pilots
- A23 Recreational Pilot
- A24 Private Pilots
- A25 Commercial Pilots
- A26 Airline Transport Pilots
- A27 Flight Instructors Other than Flight Instructors with a Sport Pilot Rating
- A29 Ground Instructors
- A33 Sport Pilot
- A34 Flight Instructor with a Sport Pilot Rating

#### 14 CFR part 63—Certification: Flight Crewmembers Other Than Pilots

- A30 General
- A31 Flight Engineers
- A32 Flight Navigators

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

A60 General

- A62 Class A Airspace
- A66 Class E Airspace

#### 14 CFR part 91—General Operating and Flight Rules

- B07 General
- B08 Flight Rules—General
- B09 Visual Flight Rules
- B10 Instrument Flight Rules
- B11 Equipment, Instrument, and Certificate Requirements
- B12 Special Flight Operations
- B13 Maintenance, Preventive Maintenance, and Alterations
- B14 Large and Turbine-Powered Multiengine Airplanes and Fractional Ownership Program Aircraft
- B15 Additional Equipment and Operating Requirements for Large and Transport Category Aircraft
- 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

B97 General

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

- C20 General
- 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

- D05 Approval of Routes: Domestic and Flag Air Operations
- D07 Manual Requirements
- D09 Airplane Performance Operating Limitations
- D10 Special Airworthiness Requirements
- D11 Instrument and Equipment Requirements
- D12 Maintenance, Preventive Maintenance, and Alterations
- D13 Airman and Crewmember Requirements
- D14 Training Program
- D15 Crewmember Qualifications
- D16 Aircraft Dispatcher Qualifications and Duty Time Limitations: Domestic and Flag Operations
- D17 Flight Time Limitations and Rest Requirements: Domestic Operations
- D18 Flight Time Limitations: Flag Operations
- D19 Flight Time Limitations: Supplemental Operations
- D20 Flight Operations
- D21 Dispatching and Flight Release Rules
- D22 Records and Reports
- D23 Crewmember Certificate: International
- D25 Special Federal Aviation Regulation SFAR No. 58

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

D30 General

D36 Maintenance

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

- E01 General
- E02 Flight Operations
- E03 Aircraft and Equipment
- E04 VFR/IFR Operating Limitations and Weather Requirements
- E05 Flight Crewmember Requirements
- E06 Crewmember Flight Time and Duty Period Limitations and Rest Requirements
- E07 Crewmember Testing Requirements
- E08 Training
- E09 Airplane Performance Operating Limitations
- E10 Maintenance, Preventive Maintenance, and Alterations
- E11 Appendix A: Additional Airworthiness Standards for 10 or More Passenger Airplanes

#### 49 CFR part 172—Hazardous Materials Table

- F03 General
- F04 Table of Hazardous Materials and Special Provisions
- F05 Shipping Papers
- F06 Marking
- F07 Labeling
- F08 Placarding
- F09 Emergency Response Information
- F10 Training
- F11 Security Plans

#### 49 CFR part 175—Carriage by Aircraft

- F12 General Information and Regulations
- F13 Loading, Unloading, and Handling
- F14 Special Regulations Applicable to Classification of Material

### 49 CFR part 830—Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft, and Preservation of Aircraft Wreckage, Mail, Cargo, and Records

- G10 General
- G11 Initial Notification of Aircraft Accidents, Incidents, and Overdue Aircraft
- G12 Preservation of Aircraft Wreckage, Mail, Cargo, and Records
- G13 Reporting of Aircraft Accidents, Incidents, and Overdue Aircraft

#### 49 CFR 1544—Aircraft Operator Security: Air Carriers and Commercial Operators

#### US HMR 172—Hazardous Materials Table

F02 General

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

- G01 General Information and Regulations
- G02 Loading, Unloading, and Handling
- G03 Specific Regulation Applicable According to Classification of Material

#### The Powered Parachute Bible—Media Max, First Edition

- H01 Airframe
- H02 Wing
- H04 4-cycle and 2-cycle Engines
- H05 4-cycle vs. 2-cycle
- H06 Electrical Output
- H07 Ignition Systems
- H09 Engine Gauges
- H11 Aerodynamics
- H12 Preflight
- H13 Operations

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

H22 Effects of Flight Controls

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

- H100 Why is Weight and Balance Important?
- H101 Weight Control
- H102 Effects of Weight
- H103 Weight Changes
- H104 Stability and Balance Control
- H105 Weight and Balance Theory
- H106 Weight and Balance Documents
- H107 Requirements
- H108 Equipment for Weighing
- H109 Preparation for Weighing
- H110 Determining the Center of Gravity
- H111 Empty-Weight Center of Gravity Formulas
- H112 Determining the Loaded Weight and CG
- H113 Multiengine Airplane Weight and Balance Computations
- H114 Determining the Loaded CG
- H115 Equipment List
- H116 Weight and Balance Revision Record
- H117 Weight Changes Caused by a Repair or Alteration
- H118 Empty-Weight CG Range
- H119 Adverse-Loaded CG Checks

- H120 Ballast
- H121 Weighing Requirements
- H122 Locating and Monitoring Weight and CG Location
- H123 Determining the Correct Stabilizer Trim Setting
- H124 Determining CG Changes Caused by Modifying the Cargo
- H125 Determining Cargo Pallet Loads with Regard to Floor Loading Limits
- H126 Determining the Maximum Amount of Payload That Can Be Carried
- H127 Determining the Landing Weight
- H128 Determining the Minutes of Fuel Dump Time
- H129 Weight and Balance of Commuter Category Airplanes
- H130 Determining the Loaded CG of a Helicopter
- H131 Using an Electronic Calculator to Solve Weight and Balance Problems
- H132 Using an E6-B Flight Computer to Solve Weight and Balance Problems
- H133 Using a Dedicated Electronic Computer to Solve Weight and Balance Problems
- H134 Typical Weight and Balance Problems
- H135 Glossary

#### FAA-H-8083-9—Aviation Instructor Handbook

- H201 Definition of Learning
- H202 Characteristics of Learning
- H203 Principles of Learning
- H204 Levels of Learning
- H205 Learning Physical Skills
- H206 Memory
- H207 Transfer of Learning
- H210 Human Needs
- H211 Defense Mechanisms
- H212 The Flight Instructor as a Practical Psychologist
- H213 Basic Elements
- H214 Barriers to Effective Communication
- H215 Developing Communication Skills
- H216 Preparation
- H217 Presentation
- H219 Review and Evaluation
- H220 Organizing Material
- H221 Lecture Method
- H222 Cooperative or Group Learning Method
- H223 Guided Discussion Method
- H224 Demonstration-Performance Method
- H225 Computer-Based Training Method
- H226 The Instructor as a Critic
- H227 Evaluation
- H228 Instructional Aid Theory
- H230 Guidelines for Use of Instructional Aids
- H231 Types of Instructional Aids
- H232 Test Preparation Material
- H233 Aviation Instructor Responsibilities
- H234 Flight Instructor Responsibilities
- H235 Professionalism
- H236 The Telling-and-Doing Technique

- H237 Integrated Flight Instruction
- H238 Obstacles to Learning During Flight Instruction
- H239 Positive Exchange of Flight Controls
- H241 Aeronautical Decision Making
- H242 Factors Affecting Decision Making
- H245 Course of Training
- H246 Blocks of Learning
- H247 Training Syllabus
- H248 Lesson Plans

#### FAA-H-8083-11—Balloon Flying Handbook

- H401 Physics
- H404 Support Equipment
- H407 Preflight Operations
- H414 Landing
- H415 Standard Burn
- H418 Ascents and Descents
- H419 Maneuvering
- H427 Propane Management and Fueling
- H431 Maintenance
- H439 Glossary

#### FAA-H-8083-21—Rotorcraft Flying Handbook

#### Helicopter

- H701 Introduction to the Helicopter
- H702 General Aerodynamics
- H703 Aerodynamics of Flight
- H704 Autorotation
- H705 Helicopter Flight Controls
- H706 Helicopter Systems
- H707 Engines
- H708 Transmission System
- H709 Main Rotor System
- H710 Fuel Systems
- H717 Rotorcraft Flight Manual
- H718 Operating Limitations
- H719 Weight and Balance
- H720 Performance
- H721 Performance Charts
- H722 Basic Flight Maneuvers
- H726 Hovering
- H727 Taxiing
- H728 Turns
- H729 Normal Takeoff
- H732 Approaches
- H739 Rapid Deceleration (Quick Stop)
- H741 Shallow Approach and Running/Roll-On Landing
- H742 Slope Operations

- H743 Confined Area Operations
- H744 Pinnacle and Ridgeline Operations
- H745 Helicopter Emergencies
- H746 Autorotation
- H747 Height/Velocity Diagram
- H748 Retreating Blade Stall
- H749 Ground Resonance
- H754 Systems Flight Diversion Malfunctions
- H758 Flight Instruments

#### Gyroplanes

- H762 Aerodynamics of the Gyroplane
- H763 Autorotations
- H765 Retreating Blade Stall
- H766 Rotor Force
- H767 Stability
- H770 Gyroplane Flight Controls
- H776 Rotorcraft Flight Manual
- H777 Weight and Balance
- H778 Performance
- H780 Gyroplane Flight Operations
- H783 Takeoff
- H794 Pilot-Induced Oscillation (PIO)

#### FAA-H-8083-15—Instrument Flying Handbook

#### Human Factors

H800 Sensory Systems

#### Aerodynamics

H807 Basic Aerodynamics

#### **Flight Instruments**

H808 Pitot StaticH809 CompassH810 GyroscopicH812 Systems Preflight

#### **Airplane Attitude Instrument Flying**

H813 Fundamental Skills

#### **Airplane Basic Flight Maneuvers**

- H814 Straight-and-level Flight
- H815 Straight Climbs and Descents
- H816 Turns
- H818 Unusual Attitude Recoveries

#### Helicopter Attitude Instrument Flying

- H821 Instrument Flight
- H822 Straight-and-level
- H823 Straight Climbs
- H824 Straight Descents
- H825 Turns
- H826 Unusual Attitude Recoveries
- H827 Emergencies
- H828 Instrument Takeoff

#### **Navigation Systems**

- H829 Basic Radio Principles
- H830 Nondirectional Beacon (NDB)
- H831 Very High Frequency Omnidirectional Range (VOR)
- H832 Distance Measuring Equipment (DME)
- H833 Area Navigation (RNAV)
- H837 Instrument Landing System (ILS)
- H838 Microwave Landing System (MLS)
- H839 Flight Management Systems (FMS)

#### **National Airspace System**

H842 IFR Enroute Charts

#### **IFR Flight**

H848 Planning H852 Holding

#### **Emergency Operations**

H859 Aircraft System Malfunction

#### Glossary

H862 Glossary

#### Gyroplane Flight Training Manual—Jean-Pierre Harrison

- H660 General Aerodynamics
- H661 Aerodynamics of Flight
- H662 Rotor RPM During Autorotations

- H663 Function of the Controls
- H664 Some Hazards of Gyroplane Flight
- H665 Precautionary Measures and Critical Conditions
- H666 Gyroplane Flight Maneuvers

#### FAA-H-8083-25—Pilot's Handbook of Aeronautical Knowledge

#### Aerodynamics of Flight

- H912 Forces Acting on the Airplane
- H914 Ground Effect
- H915 Axes of an Airplane
- H917 Design Characteristics
- H918 Aerodynamic Forces in Flight Maneuvers
- H919 Stalls
- H921 Load Factors
- H922 Weight and Balance

#### **Flight Controls**

H924 Flight Controls H926 Secondary Flight Controls

#### Aircraft Systems

H928 Powerplant

#### Flight Instruments

H931 Pitot-Static Flight Instruments H933 Magnetic Compass

#### **Flight Manuals and Other Documents**

H935 Airplane Flight Manuals

H937 Aircraft Maintenance

#### Weight and Balance

H940 Balance, Stability, and Center of Gravity

H941 Determining Loaded Weight and Center of Gravity

#### Aircraft Performance

- H942 Aircraft Performance
- H944 Structure of the Atmosphere
- H945 Performance
- H946 Takeoff and Landing Performance
- H948 Performance Charts
- H949 Transport Category Airplane Performance
- H950 Examples of Performance Charts

#### Weather Theory

- H951 Weather Theory
- H953 The Cause of Atmosphere Circulation
- H954 Atmospheric Stability
- H955 Air Masses

#### Weather Reports, Forecasts, and Charts

- H957 Weather Reports, Forecasts, and Charts
- H959 Service Outlets
- H960 Weather Briefings
- H961 Aviation Weather Reports
- H962 Aviation Forecasts
- H963 Weather Charts

#### **Airport Operations**

H966 Sources for Airport Data

H972 Wake Turbulence

#### Navigation

- H979 Navigation
- H981 Latitude and Longitude (Meridians and Parallels)
- H982 Effect of Wind
- H983 Basic Calculations
- H984 Pilotage
- H985 Dead Reckoning
- H986 Flight Planning
- H987 Charting the Course
- H989 Radio Navigation

#### **Aeromedical Factors**

H994 Environmental and Health Factors Affecting Pilot Performance

H995 Vision in Flight

#### **Aeronautical Decision Making**

- H996 The Decision-Making Process
- H998 Factors Affecting Decision Making

#### FAA-H-8083-13—Glider Flying Handbook

#### Introduction

H1007 Risk Management

#### **Components and Systems**

H1013 Lift/Drag Devices

#### **Aerodynamics of Flight**

- H1017 Aerodynamics of Flight
- H1018 Airfoil
- H1019 Forces of Flight
- H1021 Stability
- H1022 Turning Flight/Turn Coordination
- H1024 Flight Instruments
- H1025 Pitot-Static Instruments
- H1026 Magnetic Compass
- H1030 Glider Performance
- H1031 Factors Affecting Performance
- H1032 Rate of Climb
- H1033 Center of Gravity
- H1034 Sample Weight and Balance Problems
- H1035 Ballast Weight
- H1036 Effects of Water Ballast
- H1037 Preflight and Ground Operations
- H1038 Assembly Techniques
- H1039 Launch and Recovery Procedures and Flight Maneuvers
- H1040 Aerotow Launch Signals
- H1041 Takeoff Procedures and Techniques
- H1042 Takeoff Emergency Procedures
- H1043 Aerotow Climbout and Release Procedures
- H1044 Aerotow Abnormal Procedures
- H1045 Slack Line
- H1047 Ground Launch Takeoff
- H1048 Tow Speeds
- H1049 Normal Into-the-Wind Ground Launch
- H1050 Crosswind Takeoff and Climb–Ground Launch
- H1051 Ground Tow Launch–Climbout and Release
- H1053 Emergency Procedures, Ground Launch
- H1064 Spiral Dive
- H1066 Maneuvering at Minimum Controllable Airspeed
- H1067 Stall Recognition and Recovery
- H1068 Spins
- H1072 Traffic Patterns
- H1074 Slips
- H1075 Downwind Landings
- H1083 Off-Field Landing Procedures
- H1086 Emergency Equipment and Survival Gear
- H1096 Understanding Soundings
- H1097 Air Masses Conductive to Thermal Soaring
- H1103 Mechanism for Wave Formation
- H1104 Lift Due to Convergence
- H1110 Soaring Techniques
- H1111 Thermal Soaring

- H1112 Ridge and Slope Soaring
- H1116 Cross-Country Soaring
- H1122 Cross-Country Techniques
- H1123 Soaring Faster and Farther

#### FAA-H-8083-3A—Airplane Flying Handbook

#### **Basic Flight Maneuvers**

H1227 Level Turns

#### Slow Flight, Stalls, and Spins

H1232 Stalls

#### **Night Operations**

H1276 Night Emergencies

#### **Transition to Multiengine Airplanes**

H1303 Stalls

#### **Transition to Tailwheel**

H1316 Crosswind After-Landing Roll

#### FAA-H-8261-1—Instrument Procedures Handbook

- H1400 IFR Operations in the National Airspace System
- H1401 Brief History of the National Airspace System
- H1404 Managing Safety and Capacity
- H1413 Safety in the Departure Environment
- H1414 Take Off Minimums
- H1415 Departure Procedures
- H1425 En Route RNAV Procedures
- H1427 Transition From En Route
- H1430 Approaches
- H1431 Approach Planning
- H1432 Air Route Traffic Control Center
- H1433 Instrument Approach Procedure Briefing
- H1434 Instrument Approach Procedure Segments
- H1435 Types of Approaches
- H1438 Increasing Capacity and Safety
- H1465 Copter Only Approaches to an Airport or Heliport
- H1466 Copter GPS Approaches to an Airport or Heliport

#### AC 00-6—Aviation Weather

- I20 The Earth's Atmosphere
- I21 Temperature

- I22 Atmospheric Pressure and Altimetry
- I23 Wind
- I24 Moisture, Cloud Formation, and Precipitation
- I25 Stable and Unstable Air
- I26 Clouds
- I27 Air Masses and Fronts
- I28 Turbulence
- I29 Icing
- I30 Thunderstorms
- I31 Common IFR Producers
- I32 High Altitude Weather
- I33 Arctic Weather
- I34 Tropical Weather
- I35 Soaring Weather
- I36 Glossary of Weather Terms

#### AC 00-45—Aviation Weather Services

- 154 The Aviation Weather Service Program
- I55 Aviation Routine Weather Report (METAR)
- I56 Pilot and Radar Reports, Satellite Pictures, and Radiosonde Additional Data (RADATs)
- I57 Aviation Weather Forecasts
- I58 Surface Analysis Chart
- 159 Weather Depiction Chart
- I60 Radar Summary Chart
- I61 Constant Pressure Analysis Charts
- I62 Composite Moisture Stability Chart
- 163 Winds and Temperatures Aloft Chart
- I64 Significant Weather Prognostic Charts
- 165 Convective Outlook Chart
- 166 Volcanic Ash Advisory Center Products
- 167 Turbulence Locations, Conversion and Density Altitude Tables, Contractions and Acronyms, Station Identifiers, WSR-88D Sites, and Internet Addresses

#### AIM—Aeronautical Information Manual

- J01 Air Navigation Aids/Area Navigation (RNAV) and Required Navigation Performance (RNP)
- J02 Radar Services and Procedures
- J03 Airport Lighting Aids
- J04 Air Navigation and Obstruction Lighting
- J05 Airport Marking Aids and Signs
- J06 Airspace—General
- J07 Class G Airspace
- J08 Controlled Airspace
- J09 Special Use Airspace
- J10 Other Airspace Areas
- J11 Services Available to Pilots/Air Traffic Control
- J12 Radio Communications Phraseology and Techniques
- J13 Airport Operations
- J14 ATC Clearance/Separations
- J15 Preflight

- J16 Departure Procedures
- J18 Arrival Procedures
- J19 Pilot/Controller Roles and Responsibilities
- J21 Emergency Procedures—General
- J22 Emergency Services Available to Pilots
- J23 Distress and Urgency Procedures
- J24 Two-Way Radio Communications Failure
- J25 Meteorology
- J26 Altimeter Setting Procedures
- J27 Wake Turbulence
- J28 Bird Hazards, and Flight Over National Refuges, Parks, and Forests
- J29 Potential Flight Hazards
- J30 Safety, Accident, and Hazard Reports
- J31 Fitness for Flight
- J32 Type of Charts Available
- J33 Pilot Controller Glossary
- J50 Area Navigation (RNAV) and Required Navigation Performance (RNP)
- J51 Aircraft Rescue and Fire Fighting Communications
- J52 Helicopter Operations
- J53 Appendices

#### **Other Documents**

- J34 Airport/Facility Directory
- J35 En Route Low Altitude Chart
- J36 En Route High Altitude Chart
- J37 Sectional Chart
- J40 Instrument Departure Procedure Chart
- J41 Standard Terminal Arrival (STAR) Chart
- J42 Instrument Approach Procedures
- J45 Air Force Pamphlet 11-216, Air Navigation

#### ADDITIONAL ADVISORY CIRCULARS

- K01 AC 00-24, Thunderstorms
- K02 AC 00-30, Atmospheric Turbulence Avoidance
- K04 AC 00-54, Pilot Wind Shear Guide
- K13 AC 20-43, Aircraft Fuel Control
- K20 AC 20-103, Aircraft Engine Crankshaft Failure
- K26 AC 20-138, Airworthiness Approval of Global Positioning System (GPS) Navigation Equipment for Use as a VFR and IFR Supplemental Navigation System
- K40 AC 25-4, Inertial Navigation Systems (INS)
- L05 AC 60-22, Aeronautical Decision Making
- L10 AC 61-67, Stall Spin Awareness Training
- L15 AC 61-107, Operations of Aircraft at Altitudes Above 25,000 Feet MSL and/or MACH numbers (Mmo) Greater Than .75
- L34 AC 90-48, Pilots' Role in Collision Avoidance
- L50 AC 91-6, Water, Slush, and Snow on the Runway
- L52 AC 91-13, Cold Weather Operation of Aircraft
- L57 AC 91-43, Unreliable Airspeed Indications
- L59 AC 91-46, Gyroscopic Instruments—Good Operating Practices

- L80 AC 103-4, Hazard Associated with Sublimation of Solid Carbon Dioxide (Dry Ice) Aboard Aircraft
- M08 AC 120-58, Pilot Guide for Large Aircraft Ground Deicing
- M35 AC 135-17, Pilot Guide—Small Aircraft Ground Deicing
- M51 AC 20-117, Hazards Following Ground Deicing and Ground Operations in Conditions Conducive to Aircraft Icing
- M52 AC 00-2, Advisory Circular Checklist

#### Soaring Flight Manual—Jeppesen-Sanderson, Inc.

- N20 Sailplane Aerodynamics
- N21 Performance Considerations
- N25 Flight Publications and Airspace
- N27 Computations for Soaring
- N31 Ground Launch Procedures
- N32 Basic Flight Maneuvers and Traffic
- N34 Cross-Country Soaring

#### **Balloon Digest—Balloon Federation of America**

- O150 Balloon—Theory and Practice
- O155 Structure of the Modern Balloon
- O170 Propane and Fuel Management

#### **Powerline Excerpts—Balloon Federation of America**

O30 Excerpts

#### Balloon Ground School—Balloon Publishing Co.

O220 Balloon Operations

#### How To Fly A Balloon—Balloon Publishing Co.

O252 Physics
O257 The Standard Burn
O259 Launch
O261 Ascents and Descents
O263 Maneuvering
O270 Propane: Management and Fueling
O277 Maintenance

#### **Goodyear Airship Operations Manual**

- P01 Buoyancy
- P02 Aerodynamics
- P03 Free Ballooning
- P04 Aerostatics
- P05 Envelope
- P11 Operating Instructions
- P12 History
- P13 Training

- S04 Fuels and Fuel Systems
- S08 Basic Electricity
- S09 Aircraft Generators and Motors
- S11 Ground Handling, Safety, and Support Equipment

#### AC 65-12—Airframe and Powerplant Mechanics Powerplant Handbook

- S12 Theory and Construction of Aircraft Engines
- S14 Engine Fuel and Metering Systems
- S17 Lubrication and Cooling Systems
- S18 Propellers
- S20 Engine Maintenance and Operation

#### AC 65-15—Airframe and Powerplant Mechanics Airframe Handbook

- S22 Assembly and Rigging
- S24 Ice and Rain Protection
- S26 Landing Gear Systems
- S27 Fire Protection Systems
- S28 Aircraft Electrical Systems
- S29 Aircraft Instrument Systems
- S31 Cabin Atmosphere Control Systems

#### JSGT—A&P Technician General Textbook—Jeppesen Sanderson, Inc.

- S32 Mathematics
- S33 Physics
- S38 Fluid Lines and Fittings
- S42 Ground Handling and Servicing

#### JSPT—A&P Technician Powerplant Textbook—Jeppesen Sanderson, Inc.

- S45 Reciprocating Engines
- S46 Turbine Engines
- S48 Engine Maintenance and Operation
- S49 Induction and Exhaust Systems
- S51 Engine Ignition and Electrical Systems
- S52 Engine Lubrication and Cooling Systems
- S53 Engine Fire Protection Systems
- S54 Propellers

#### JSAT—A&P Technician Airframe Textbook—Jeppesen Sanderson, Inc.

- S55 Aircraft Structures
- S63 Hydraulic and Pneumatic Power Systems
- S64 Aircraft Landing Gear Systems
- S66 Aircraft Electrical Systems
- S67 Aircraft Instrument Systems

- S68 Aircraft Fuel Systems
- S69 Aircraft Cabin Atmosphere Control Systems

#### AGTP—Aircraft Gas Turbine Powerplants—Jeppesen Sanderson, Inc.

- S72 Turbine Engine Design and Construction
- S73 Engine Familiarization
- S76 Fuel Systems
- S78 Anti-Icing Systems
- S79 Starter Systems
- S81 Engine Instrument Systems
- S82 Fire/Overheat Detection and Extinguishing Systems for Turbine Engines
- S83 Engine Operation

# The Aircraft Gas Turbine Engine and Its Operation—United Technologies Corporation, Pratt Whitney, 1988

- T01 Gas Turbine Engine Fundamentals
- T02 Gas Turbine Engine Terms
- T03 Gas Turbine Engine Components
- T04 Gas Turbine Engine Operation
- T05 Operational Characteristics of Jet Engines

#### Aircraft Powerplants—Glencoe/McGraw-Hill, Seventh Edition

- T09 Internal-Combustion Engine Theory and Performance
- T10 Lubricants and Lubricating Systems
- T11 Induction Systems, Superchargers, Turbochargers, and Cooling and Exhaust Systems
- T12 Basic Fuel Systems and Carburetors
- T18 Gas Turbine Engine: Fuels and Fuel Systems
- T19 Turbine-Engine Lubricants and Lubricating Systems
- T24 Gas-Turbine Operation, Inspection, Troubleshooting, Maintenance, and Overhaul
- T25 Propeller Theory, Nomenclature, and Operation
- T26 Turbopropellers and Control Systems
- 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
- T33 Basic Aerodynamics
- T34 Airfoils and their Applications
- T35 Aircraft in Flight
- T39 Fabrication Techniques and Processes

#### 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

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

- T55 Anti-Icing Systems and Rain Protection
- T56 Electrical Power Systems
- T57 Flight Control Systems
- T58 Fuel Systems

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

- T64 Fundamentals of Electricity
- T66 Aircraft Storage Batteries
- T69 Electrical Control Devices
- T71 Generators and Related Control Circuits
- T72 Alternators, Inverters, and Related Controls
- T75 Design and Maintenance of Aircraft Electrical Systems

#### FAA Accident Prevention Program Bulletins

- V12 FAA-P-8740-48, On Landings, Part I
- V14 FAA-P-8740-50, On Landings, Part III

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

- 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
- 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

- X07 Takeoffs
- X09 Climb, Cruise, and Descent
- X15 Landings: Approach Technique and Performance
- X21 Flight Planning

#### **Practical Test Standards**

- Z01 FAA-S-8081-6, Flight Instructor Practical Test Standards for Airplane
- 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, FAA-G-8082-11, AC 43.13-1B, 14 CFR § 91.417, 14 CFR part 43

- 101 Write descriptions of work performed including aircraft discrepancies and corrective actions using typical aircraft maintenance records
- IO2 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 Sundtrand IDG and BITE 767 Line Maintenance/Servicing

#### 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, JSGT, 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, JSGT, 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, JSGT, 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

**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 (AIM), Airport/Facility Directory, knowledge test study guides, 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