1-Aircraft Performance

Weight and Balance
Airplane
Weight-Shift Control
Powered Parachute
Computing Weight and Balance Problems Using a Table
Computing Weight and Balance Problems Using a Graph
Density Altitude and Aircraft Performance
Takeoff Distance
Cruise Power Setting Table
Landing Distance Graphs and Tables
Headwind and Crosswind Component Graph

2-Aircraft Systems

Reciprocating Engines
Ignition and Electrical Systems
Fuel Induction Systems
Carburetor Ice
Aviation Fuel
Engine Temperatures
Propellers
Torque
Preflight Inspection Procedures
Powered Parachute and Weight-Shift Control Operations

3-Basic Aerodynamics

Aerodynamic Terms
Axes of Rotation and the Four Forces Acting in Flight
Lift
Weight
Thrust
Drag
Stability
Turns, Loads, and Load Factors
Maneuvers
Rectangular Course
Turns Around a Point
S-Turns
Stalls and Spins
Flaps
Ground Effect
Wake Turbulence

4-Communication Procedures

Phraseology, Techniques, and Procedures
Airport Traffic Area Communications and Light Signals
Flight Plans
Radar Assistance to VFR Aircraft
Transponder and ADS-B Requirements
Emergency Locator Transmitter (ELT)

5-Enroute Navigation

Pilotage
Time
Topography
Dead Reckoning
Plotting Courses
Magnetic Variation
Magnetic Deviation
Wind and Its Effects
The Wind Triangle
The Flight Computer (E6-B)
Finding Wind Correction Angle (WCA) and Ground Speed (GS)
Flight Computer Calculator Face
Finding Time, Rate, and Distance
Calculating Fuel Consumption
Finding True Airspeed and Density Altitude
Airspace

6-Flight Instruments

Pitot-Static Instruments
Airspeeds and the Airspeed Indicator
The Altimeter and Altitudes
Gyroscopic Instruments
Attitude Indicator
Turn Coordinator
Heading Indicator
Magnetic Compass (Northern Hemisphere)

7-Radio Navigation

VHF Omnidirectional Range (VOR)
VOR Orientation
Course Determination
VOR Airways
VOR Receiver Check Points
Global Positioning System (GPS)

8-Procedures and Airport Operations

Uncontrolled and Tower-Controlled Airports
Airport Markings and Signs
Airport Lighting
Visual Approach Slope Indicator (VASI)
Surface Operations
Chart Supplements U.S.
Fitness for Flight
Aeronautical Decision Making (ADM)
Collision Avoidance
Aircraft Lighting

9-Regulations

Introduction
Pilot Certificate Privileges and Limitations
Pilot Ratings
Medical Certificates
Required Certificates
Recent Flight Experience
High-Performance Airplanes
Glider Towing
Change of Address
Responsibility and Authority of the Pilot-in-Command
Preflight Action
Seatbelts
Alcohol and Drugs
Right-of-Way Rules
Parachutes
Deviation from Air Traffic Control Instructions
Minimum Safe Altitudes
Basic VFR Weather Minimums
Special VFR Weather Minimums
VFR Cruising Altitudes
Categories of Aircraft
Formation Flight and Dropping Objects
VFR Flight Plans
Speed Limits
Airworthiness
Maintenance and Inspections
Light-Sport Repairman Certificates
ADs, ACs, and NOTAMs
Accident Reporting Requirements

10-Weather Services

Aviation Routine Weather Report (METAR)
Pilot Weather Reports (PIREPs) (UA)
Terminal Aerodrome Forecast (TAF)
Graphical Forecasts for Aviation (GFA)
Winds and Temperatures Aloft Forecast (FB)
Inflight Weather Advisories (WA, WS, WST)
Obtaining a Telephone Weather Briefing

11-Weather

The Heating of the Earth
Circulation and Wind
Temperature
Moisture
Air Masses and Fronts
Stability of the Atmosphere
Clouds
Turbulence
Thunderstorms
Wind Shear
Icing
Fog
Frost