



## Chapter 10: Aviation Glossary

# 01. Aviation Glossary

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## A

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**A&P Mechanic:** Airframe and Powerplant mechanic certified by the FAA to perform maintenance on aircraft. *Reference: 14 CFR Part 65*

**AC (Advisory Circular):** FAA publications that provide guidance and information on aviation safety, maintenance, and operations. *Reference: FAA website*

**AFSS (Automated Flight Service Station):** FAA facility providing pilot briefings, weather information, and flight plan services. *Reference: AIM Chapter 7*

**AGL (Above Ground Level):** Altitude measurement from the ground surface directly below the aircraft. *Reference: AIM Chapter 4*

**AIM (Aeronautical Information Manual):** Official guide to basic flight information and air traffic control procedures. *Reference: FAA AIM*

**Airworthiness Certificate:** Document issued by the FAA certifying that an aircraft meets applicable safety standards. *Reference: 14 CFR 21.181*

**ARFF (Aircraft Rescue and Fire Fighting):** Emergency response services for aircraft incidents. *Reference: 14 CFR Part 139*

**ASOS (Automated Surface Observing System):** Automated weather reporting system at airports. *Reference: AIM Chapter 7*

**ATC (Air Traffic Control):** Service operated by appropriate authority to promote safe, orderly flow of air traffic. *Reference: AIM Chapter 4*

**ATIS (Automatic Terminal Information Service):** Continuous broadcast of recorded information at busy airports. *Reference: AIM Chapter 4*

**AVGAS:** Aviation gasoline, typically 100LL (100 Low Lead) for piston aircraft engines. *Reference: 14 CFR 23.1521*

**AWOS (Automated Weather Observing System):** Automated system for collecting and disseminating weather information. *Reference: AIM Chapter 7*

## B

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**Base Leg:** Flight path at right angles to the landing runway off its approach end. *Reference: AIM Chapter 4*

**Beacon (Airport):** Rotating light beacon used to identify airports. *Reference: AIM Chapter 2*

**Best Glide Speed:** Airspeed that provides maximum gliding distance. *Reference: Aircraft POH/AFM*

## C

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**CAR (Civil Aviation Regulations):** Former aviation regulations, predecessor to current 14 CFR. *Reference: Historical aviation documents*

**Carburetor Heat:** System to prevent or remove ice formation in aircraft carburetors. *Reference: AC 20-113*

**CFI (Certified Flight Instructor):** Pilot certified to provide flight instruction. *Reference: 14 CFR Part 61*

**CFR (Code of Federal Regulations):** Official compilation of federal regulations, including aviation rules in Title 14. *Reference: 14 CFR*

**Class A/B/C/D/E/G Airspace:** Classifications of controlled and uncontrolled airspace. *Reference: AIM Chapter 3*

**Clearance:** Authorization by ATC for aircraft to proceed under specified traffic conditions. *Reference: AIM Chapter 4*

**Cross Country:** Flight between points more than 50 nautical miles apart. *Reference: 14 CFR 61.1*

**CTAF (Common Traffic Advisory Frequency):** Radio frequency designated for airport advisory at non-towered airports. *Reference: AIM Chapter 4*

## D

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**DA (Decision Altitude):** Specific altitude in an instrument approach where missed approach must be initiated if required visual reference is not established. *Reference: AIM Chapter 5*

**Density Altitude:** Pressure altitude corrected for non-standard temperature. *Reference: AIM Chapter 7*

**DME (Distance Measuring Equipment):** Equipment that measures distance from aircraft to ground station. *Reference: AIM Chapter 1*

**Downwind:** Flight path parallel to landing runway in direction opposite to landing. *Reference: AIM Chapter 4*

## E

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**EAA (Experimental Aircraft Association):** Organization promoting recreational aviation and homebuilt aircraft. *Reference: EAA.org*

**ELT (Emergency Locator Transmitter):** Equipment that transmits distress signals after aircraft accident.

*Reference: 14 CFR 91.207*

**Emergency Frequency:** 121.5 MHz for civilian aircraft emergencies. *Reference: AIM Chapter 6*

**Engine Out:** Emergency procedure for engine failure during flight. *Reference: Aircraft POH/AFM*

## F

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**FAA (Federal Aviation Administration):** U.S. government agency regulating civil aviation. *Reference: 49 USC 106*

**FAR (Federal Aviation Regulations):** Common term for aviation regulations found in 14 CFR. *Reference: 14 CFR*

**FBO (Fixed Base Operator):** Commercial business providing services to general aviation aircraft and pilots. *Reference: Airport/Facility Directory*

**Final Approach:** Flight path in direction of landing along extended runway centerline. *Reference: AIM Chapter 4*

**Flight Plan:** Specified information filed with ATC regarding proposed flight. *Reference: AIM Chapter 5*

**Flight Service Station (FSS):** FAA facility providing pilot briefings and communication services. *Reference: AIM Chapter 7*

**FTU (Flight Training Unit):** Organized aviation training provider. *Reference: 14 CFR Part 61*

## G

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**Ground Control:** ATC service for aircraft and vehicles on airport surface. *Reference: AIM Chapter 4*

**Ground Effect:** Increased lift and decreased drag when aircraft operates close to ground. *Reference: Aerodynamics references*

**GPS (Global Positioning System):** Satellite-based navigation system. *Reference: AIM Chapter 1*

**Gross Weight:** Maximum allowable weight of aircraft and contents. *Reference: Aircraft POH/AFM*

## H

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**Hangar:** Building for aircraft storage and maintenance. *Reference: Airport planning documents*

**HIRL (High Intensity Runway Lights):** Bright runway edge lighting system. *Reference: AIM Chapter 2*

**Hold Short:** Instruction to remain short of specified point. *Reference: AIM Chapter 4*

**Hypoxia:** Condition resulting from insufficient oxygen. *Reference: AIM Chapter 8*

## I

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**IA (Inspection Authorization):** Certificate allowing A&P mechanics to perform annual inspections. *Reference: 14 CFR Part 65*

**ICAO (International Civil Aviation Organization):** UN agency establishing international aviation standards. *Reference: ICAO documents*

**IFR (Instrument Flight Rules):** Rules governing flight primarily by reference to instruments. *Reference: 14 CFR Part 91*

**ILS (Instrument Landing System):** Precision instrument approach system. *Reference: AIM Chapter 1*

**IMC (Instrument Meteorological Conditions):** Weather conditions requiring flight by instrument reference. *Reference: 14 CFR 91.155*

## J

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**Jet A:** Kerosene-based fuel for turbine engines. *Reference: ASTM D1655*

**Jet A-1:** International specification for jet fuel with lower freezing point. *Reference: DEF STAN 91-91*

## K

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**KIAS (Knots Indicated Airspeed):** Airspeed as shown on aircraft instruments. *Reference: Aircraft POH/AFM*

**KTAS (Knots True Airspeed):** Actual speed of aircraft through air mass. *Reference: Aircraft POH/AFM*

## L

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**Landing Lights:** High-intensity lights used during takeoff and landing. *Reference: 14 CFR 91.205*

**Line Service:** FBO services including fueling, parking, and basic aircraft services. *Reference: FBO operations manuals*

**Logbook:** Required record of aircraft maintenance and pilot experience. *Reference: 14 CFR Parts 43, 61, 91*

# M

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**Magneto:** Engine ignition system component providing spark to spark plugs. *Reference: AC 43.13-1B*

**METAR (Meteorological Aerodrome Report):** Aviation weather report format. *Reference: AIM Chapter 7*

**Mixture Control:** Engine control adjusting fuel-to-air ratio. *Reference: Aircraft POH/AFM*

**MSL (Mean Sea Level):** Standard reference for altitude measurements. *Reference: AIM Chapter 4*

# N

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**NOTAM (Notice to Airmen):** Notice containing time-critical aeronautical information. *Reference: AIM Chapter 5*

**NTSB (National Transportation Safety Board):** Agency investigating transportation accidents. *Reference: 49 CFR Part 830*

# O

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**OSHA (Occupational Safety and Health Administration):** Federal agency regulating workplace safety. *Reference: 29 CFR*

**Oil Pressure:** Engine parameter indicating lubrication system function. *Reference: Aircraft POH/AFM*

# P

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**Part 61:** Federal regulation governing pilot certification. *Reference: 14 CFR Part 61*

**Part 91:** Federal regulation governing general operating rules. *Reference: 14 CFR Part 91*

**Part 121:** Federal regulation governing scheduled air carrier operations and commercial passenger service. *Reference: 14 CFR Part 121*

**Part 135:** Federal regulation governing commuter and on-demand operations. *Reference: 14 CFR Part 135*

**Part 141:** Federal regulation governing pilot schools and training programs with approved curricula. *Reference: 14 CFR Part 141*

**Part 145:** Federal regulation governing certificated repair stations for aircraft maintenance. *Reference: 14 CFR Part 145*

**Pattern Altitude:** Standard altitude for airport traffic pattern. *Reference: AIM Chapter 4*

**PIC (Pilot in Command):** Pilot responsible for operation and safety of aircraft. *Reference: 14 CFR 91.3*

**Pitot Static System:** System providing airspeed, altitude, and vertical speed information. *Reference: AC 43.13-1B*

**POH (Pilot's Operating Handbook):** Manufacturer's operating instructions for specific aircraft. *Reference: 14 CFR 91.9*

**Preflight Inspection:** Required inspection before each flight. *Reference: 14 CFR 91.7*

## Q

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**QNH:** Barometric pressure setting to indicate altitude above sea level. *Reference: ICAO Annex 5*

## R

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**Ramp:** Airport area for aircraft parking, loading, and servicing. *Reference: AC 150/5300-13*

**Runway:** Defined rectangular area for aircraft takeoff and landing. *Reference: AIM Chapter 2*

**Runway Incursion:** Unauthorized presence of aircraft, vehicle, or person on runway. *Reference: AIM Chapter 4*

## S

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**Sectional Chart:** Aeronautical chart for visual navigation. *Reference: AIM Chapter 9*

**SIGMET:** Significant meteorological information affecting aircraft safety. *Reference: AIM Chapter 7*

**Squawk Code:** Four-digit transponder code for aircraft identification. *Reference: AIM Chapter 4*

**STC (Supplemental Type Certificate):** FAA approval for aircraft modifications. *Reference: 14 CFR Part 21*

## T

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**TAF (Terminal Aerodrome Forecast):** Aviation weather forecast for airports. *Reference: AIM Chapter 7*

**Taxiway:** Defined path for aircraft ground movement. *Reference: AIM Chapter 2*

**TBO (Time Between Overhauls):** Manufacturer's recommended engine overhaul interval. *Reference: Aircraft maintenance manuals*

**TCDS (Type Certificate Data Sheet):** FAA document specifying aircraft certification requirements. *Reference: FAA website*

**Tower:** ATC facility controlling aircraft in airport vicinity. *Reference: AIM Chapter 4*

**Transponder:** Equipment transmitting aircraft identification and altitude to ATC. *Reference: 14 CFR 91.215*

**TSA (Transportation Security Administration):** Agency responsible for transportation security. *Reference: 49 CFR Parts 1540-1562*

## U

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**Uncontrolled Airspace:** Airspace where ATC does not exercise operational control. *Reference: AIM Chapter 3*

**UNICOM:** Non-government communication facility providing airport information. *Reference: AIM Chapter 4*

**Upwind:** Flight path parallel to landing runway in same direction as landing. *Reference: AIM Chapter 4*

## V

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**V-Speeds:** Standard aircraft performance speeds ( $V_s$ ,  $V_r$ ,  $V_x$ ,  $V_y$ , etc.). *Reference: Aircraft POH/AFM*

**VFR (Visual Flight Rules):** Rules governing flight primarily by visual reference. *Reference: 14 CFR Part 91*

**VHF (Very High Frequency):** Radio frequency band used for aviation communication. *Reference: AIM Chapter 4*

**VMC (Visual Meteorological Conditions):** Weather conditions allowing visual flight. *Reference: 14 CFR 91.155*

**VOR (VHF Omnidirectional Range):** Ground-based navigation aid. *Reference: AIM Chapter 1*

## W

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**Wake Turbulence:** Turbulent air created by aircraft passage. *Reference: AIM Chapter 7*

**Weather Minimums:** Minimum weather conditions required for flight operations. *Reference: 14 CFR 91.155*

**Wind Shear:** Sudden change in wind speed or direction. *Reference: AIM Chapter 7*

## X

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**XPDR (Transponder):** Abbreviation for transponder equipment. *Reference: AIM Chapter 4*

# Y

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**Yaw:** Aircraft rotation about vertical axis. *Reference: Aerodynamics references*

# Z

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**Zulu Time:** Coordinated Universal Time (UTC) used in aviation. *Reference: AIM Chapter 4*

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## Primary Regulatory References

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### Federal Aviation Regulations (14 CFR)

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- **Part 1:** Definitions and Abbreviations
- **Part 21:** Certification Procedures for Products and Articles
- **Part 23:** Airworthiness Standards: Normal Category Airplanes
- **Part 43:** Maintenance, Preventive Maintenance, Rebuilding, and Alteration
- **Part 61:** Certification: Pilots, Flight Instructors, and Ground Instructors
- **Part 65:** Certification: Airmen Other Than Flight Crewmembers
- **Part 91:** General Operating and Flight Rules
- **Part 121:** Operating Requirements: Domestic, Flag, and Supplemental Operations
- **Part 135:** Operating Requirements: Commuter and On Demand Operations
- **Part 139:** Certification of Airports
- **Part 141:** Pilot Schools
- **Part 145:** Repair Stations

### FAA Publications

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- **AIM (Aeronautical Information Manual):** Basic flight information and ATC procedures
- **Advisory Circulars (AC):** Guidance on aviation safety and operations
- **Airport/Facility Directory:** Airport and navigation facility information

### Other Regulatory Sources

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- **OSHA Standards (29 CFR):** Workplace safety regulations



- **EPA Regulations (40 CFR):** Environmental protection standards
- **NTSB Regulations (49 CFR Part 830):** Accident reporting requirements
- **TSA Regulations (49 CFR Parts 1540-1562):** Transportation security requirements

## Industry Standards

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- **ASTM International:** Fuel and material specifications
- **ICAO Annexes:** International aviation standards
- **NFPA Codes:** Fire protection and safety standards