## APPENDIX A GLOSSARY

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Above Ground Level (AGL) Elevation above the surface of the ground.

Advisory Circular (AC)

A series of external FAA publications consisting of

all non-regulatory material of a policy, guidance,

and informational nature.

Aircraft A device that is used or intended to be used for

flight in the air.

Aircraft Operation A landing or takeoff by an aircraft.

Aircraft Owners and Pilots Association

(AOPA)

A not-for-profit individual membership association serving the interests and needs of general aviation

pilots and aircraft owners.

Aircraft Rescue and Fire Fighting (ARFF) A facility designed to house emergency vehicles,

extinguishing agents, and personnel responsible for minimizing the effects of an aircraft accident or

incident.

Airport Advisory Area The area within 10 statute miles of an airport where

a flight service station is located, but where there is

no control tower in operation.

Airport Authority Similar to a port authority but with the single

purpose of setting policy and management

direction for airports within its jurisdiction.

Airport Beacon A visual navigation aid displaying alternating lights

used to identify the type of airport.

Airport Elevation The highest point of an airport's usable runways

measured in MSL.

Airport Improvement Program (AIP)

A program created under the Airport and Airway

Improvement Act of 1982 to provide continued

funding for airport planning and development.

Airport Layout Plan (ALP)

A plan for an airport showing boundaries and

proposed additions to all areas owned or controlled by the sponsor for airport purposes, the location and nature of existing and proposed airport facilities and structures, and the location on the airport of existing and proposed non-aviation areas

and improvements thereto.

Airport Master Plan (AMP)

A plan of the ultimate development of a specific



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airport. It presents the research and logic from which the plan was evolved and displays the plan in a graphic and written format.

Airport Movement Area Safety System (AMASS)

Enhances the function of the ground mapping radar by providing automated alerts and warnings of potential runway incursions and other hazards.

Airport Obstruction Chart (AOC)

A 1:12,000 scale graphic depicting Federal Aviation Regulations Part 77 surfaces, a representation of objects that penetrate these surfaces, runway, taxiway, and ramp areas, navigational aids, prominent airport buildings, plus a selection of roads and other planimetric detail in the airport vicinity.

Airport Surveillance Radar (ASR)

Approach and departure control radar used to detect and display an aircraft's position in the terminal area.

Airport Reference Point (ARP)

The latitude and longitude of the approximate center of the airport.

Airport Sponsor

A public agency or tax-supported organization, such as an airport authority, that is authorized to own and operate the airport, to obtain property interests, to obtain funds, and to be legally, financially, and otherwise able to meet all applicable requirements of current laws and regulations.

Airport Surveillance Radar (ASR)

Radar providing position of aircraft by azimuth and range data. It does not provide elevation data. It is designed for range coverage up to 60 nautical miles and is used by terminal area air traffic control.

Air Route Traffic Control Center (ARTCC)

A facility established to provide air traffic control service to aircraft operating on an IFR flight plan within controlled airspace and principally during the enroute phase of light.

Airspace

Space in the air above the surface of the earth or a particular portion of such space, usually defined by the boundaries of an area on the surface projected upward.

Air Taxi Aircraft

An aircraft operated by the holder of an Air Taxi Operating Certificate, which authorizes the carriage of passengers, mail, or cargo for revenue in accordance with FAR Parts 135 and 121.



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Air Traffic Control (ATC)

A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

Air Traffic Control System Command Center (ATCSCC)

A facility responsible for the operation of four distinct but integrated functions: central flow control, central altitude reservations, airport reservation position, and the air traffic service contingency command post.

Air Traffic Control Tower (ATCT)

A central operations facility in the terminal air traffic control system, consisting of a tower cab structure including an associated IFR room if radar equipped, using air/ground communications and/or radar, visual signaling, and other devices to provide safe and expeditious movement of terminal air traffic.

Air Transport Association (ATA)

An organization for the principal U.S. airlines that supports and assists its members by promoting the air transport industry and the safety, cost effectiveness, and technological advancement of its operations; advocating common industry positions before state and local governments; conducting designated industry-wide programs; and assuring governmental and public understanding of all aspects of air transport.

Alert Area

Special use airspace that may contain a high volume of pilot training activities or an unusual type of aerial activity.

Altitude

Height expressed in units of distance above a reference plane, usually above mean sea level or above ground level.

Approach Lighting System (ALS)

An airport lighting facility that provides visual guidance to landing aircraft by radiating light beams in a directional pattern by which the pilot aligns the aircraft with the extended centerline of the runway on the final approach and landing.

Approach Surface

An imaginary surface longitudinally centered on the extended centerline of the runway, beginning at the end of the primary surface and rising outward and upward to a specified height above the established airport elevation.

Apron

A defined area, on a land airport, intended to accommodate aircraft for purposes of loading or



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unloading passengers or cargo, refueling, parking, or maintenance.

Area Navigation (RNAV)

Application of the navigation process providing the capability to establish and maintain a flight path on any arbitrary chosen course that remains within the coverage area of navigation sources being used.

Automated Terminal Information Service (ATIS)

The continuous broadcast of recorded non-control information in selected terminal areas. Its purpose is to improve controller effectiveness and to relieve frequency congestion by automating the repetitive transmission of essential but routine information.

Automated Surface Observation System (ASOS)

Weather reporting system that provides surface observations every minute via digitized voice broadcasts and printed reports.

Automated Weather Observing System (AWOS)

Gathers weather data from unmanned sensors, automatically formulates weather reports, and distributes them to airport control towers.

Automatic Direction Finder (ADF)

An aircraft radio navigation system which senses and indicates the direction to an L/MF non-directional radio beacon (NDB) or commercial broadcast station.

**Avigation Easement** 

A grant or property interest in land over which a right of unobstructed flight in the airspace is established.

В

**Based Aircraft** 

The total number of active general aviation aircraft that use or may be expected to use an airport as a home base.

Basic Utility (BU) Airport

An airport that accommodates most single-engine and many of the small twin-engine aircraft.

Bearing

The horizontal direction to or from any point, usually measured clockwise from true north (true bearing), magnetic north (magnetic bearing), or some other reference point, through 360 degrees.

Blast Fence

A barrier that is used to divert or dissipate jet or propeller blast.

Blast Pad

A specially prepared surface placed adjacent to the ends of runways to eliminate the erosive effect of the high wind forces produced by airplanes at the



beginning of their takeoff rolls.

**Building Restriction Line** 

A line shown on the airport layout plan beyond which airport buildings must not be positioned in order to limit their proximity to aircraft movement areas.

C

Category I (CAT-I)

An ILS that provides acceptable guidance information from the coverage limits of the ILS to the point at which the localizer course line intersects the glide path at a height of 100 feet above the horizontal plane containing the runway threshold. Supports landing minima as low as 200 feet HAT and 1,800 feet RVR.

Category II (CAT-II)

An ILS that provides acceptable guidance information from the coverage limits of the ILS to the point at which the localizer course line intersects the glide path at a height of 50 feet above the horizontal plane containing the runway threshold. Supports landing minima as low as 100 feet HAT and 1,200 feet RVR.

Category III (CAT-III)

An ILS that provides acceptable guidance information from the coverage limits of the ILS with no decision height specified above the horizontal plane containing the runway threshold.

Capital Improvement Plan (CIP)

The primary planning tool used by the Federal Aviation Administration for systematically identifying, prioritizing, and assigning funds to critical airport development and associated capital needs for the National Airspace System. Also serves as the basis for distribution of grant funds under the Airport Improvement Program.

Ceiling

The height above the earth's surface of the lowest layer of clouds which is reported as broken or overcast or the vertical visibility into an obscuration.

Common Traffic Advisory Frequency (CTAF)

A frequency designed for the purpose of carrying out airport advisory practices while operating to or from an uncontrolled airport. The CTAF may be a UNICOM, MULTICOM, FSS, or tower frequency and it is identified in appropriate aeronautical publications.

Conical Service

A surface extending from the periphery of the horizontal surface outward and upward at a slope



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of 20 to 1 for the horizontal distances and to the elevations above the airport elevation as prescribed in FAR Part 77.

Controlled Airport An airport that has an operating control tower.

Controlled Airspace designed as a continental control area,

control area, control zone, terminal control area, or transition area, within which some or all aircraft

may be subject to air traffic control.

Crosswind A wind which is not parallel to a runway or the path

of an aircraft.

Crosswind Component A wind component which is at a right angle to the

runway or the flight path of an aircraft.

D

Decibel (dB)

A unit of noise level representing a relative

quantity. This reference value is a sound pressure

of 20 micronewtons per square meter.

Decision Height (DH)

With respect to the operating of aircraft means the

height at which a decision must be made, during the ILS or PAR instrument approach, to either continue the approach or to execute a missed

approach.

Department of Transportation (DOT) Established in 1966 to promote coordination of

existing federal programs and to act as a focal point for future research and development efforts in

transportation.

Discretionary Funds Grants that go to projects that address goals

established by Congress, such as enhancing capacity, safety, and security or mitigating noise at

all types of airports

Displaced Threshold When the landing area begins at a point on the

runway other than the designated beginning of the

runway.

Distance Measuring Equipment (DME) Equipment (airborne and ground) to measure, in

nautical miles, the slant range distance of an

aircraft from the navigational aid.

Dual Tandem Wheel Gear (DTWG)

Dual Wheel Gear (DWG)



Ε

Emergency Locating Transmitter (ELT)

A battery-operated radio transmitter attached to the aircraft structure that transmits on 121.5 MHz and 243.0 MHz. It aids in locating downed aircraft.

Environmental Assessment (EA)

A concise public document for which a Federal agency is responsible that serves to briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement of a finding of no significant impact.

**Environmental Impact Statement (EIS)** 

A federal document that reflects the FAA's final evaluation of the environmental impact of a proposed action.

Essential Air Service (EAS)

Guarantees air carrier service to selected small cities and provides subsidies if needed so as to prevent these cities from losing service.

F

Federal Aviation Administration (FAA)

Created by the act that established the DOT. Assumed all of the responsibilities of the form Federal Aviation Agency.

Federal Aviation Regulations (FAR)

The codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government for aviation.

Federal Inspection Services (FIS)

Conducts customs and immigration services including passport inspection, inspection of baggage, and collection of duties on certain imported items, and sometimes inspection for agricultural materials, illegal drugs, or other restricted items.

Final Approach Fix (FAF)

Designated point at which the final approach segment begins for a non-precision approach.

Finding of No Significant Impact (FONSI)

A federal document prepared by a Federal agency that briefly presents the reasons why an action will not have a significant effect on the human environment and for which an environmental impact statement will not be prepared.

Fixed Base Operator (FBO)

A business located at an airport that provides a variety of services to pilots, which may include aircraft rental, training, fueling, maintenance,



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parking, and the sale of pilot supplies.

Flight Level (FL)

Designations for altitudes within controlled airspace Class A.

Flight Service Station (FSS)

A central operations facility in the national flight advisory system utilizing data interchange facilities for the collection and dissemination of NOTAM, weather, and administrative data and providing preflight and inflight advisory service and other services to pilots via air/ground communication facilities.

G

General Aviation (GA)

That portion of civil aviation that encompasses all facets of aviation except air carriers holding a certificate of convenience and necessity and large aircraft commercial operators.

General Utility (GU) Airports

Accommodates all general aviation aircraft.

Global Positioning System (GPS)

A satellite-based navigation system that will enhance user preferred routing, reduce separation standards, and increase access to airports under instrument meteorological conditions through more precision approaches.

Н

Height Above Touchdown (HAT)

A designated height measured from the touchdown zone elevation or the threshold elevation of the runway served by the instrument approach.

High Intensity Runway Lights (HIRL)

The highest classification for the intensity of the lights bordering the sides of the runway.

Horizontal Surface

A specified portion of a horizontal plane located 150 feet above the established airport elevation which established the height above which an object is determined to be an obstruction to air navigation.

I

Initial Approach Fix (IAP)

The designated point at which the initial approach segment begins for an instrument approach.

Instrument Approach Procedures (IAP)

A procedure that allows an aircraft to descend safely by reference to instruments from the enroute altitude to a point near the runway at the pilot's



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discretion from which a landing can be made visually.

Instrument Flight Rules (IFR) FAR rules that govern the procedures of

conducting flight in weather conditions below VFR weather minimums. The term IFR is also used to define weather conditions and the type of flight plan

under which an aircraft is operating.

Instrument Landing System (ILS) A system that provides, in the aircraft, the lateral,

longitudinal, and vertical guidance necessary for a

landing.

Instrument Meteorological Conditions (IMC) Meteorological conditions expressed n terms of

visibility and ceiling less than the minimum specified for visual meteorological conditions.

specified for visual meteorological conditions.

Operation by an aircraft other than local operations.

J

K

Knots (Kts) A unit of length used in navigation equivalent to the

distance spanned by one minute of arc in latitude

(1,852 meters or 6,076 feet)

L

Large Aircraft of more than 12,500 pounds maximum

certificated takeoff weight.

Local Area Augmentation System (LAAS) A differential GPS system that provides localized

measurement correction signals to basic GPS signals to improve navigation accuracy, integrity,

continuity, and availability.

Local Operation Operations performed by aircraft that (1) operate in

the local traffic pattern or within sight of the airport; (2) are known to be departing for, or arriving from, flight in local practice areas within a 20-mile radius of the airport; or (3) execute simulated instrument

approaches or low passes at the airport.

Longitude Measurement east or west of the Prime Meridian in

degrees, minutes, and seconds. Lines of longitude are also called meridians. The Prime Meridian is zero degrees longitude and runs through

Greenwich, England.

**Itinerant Operation** 

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Long Range Navigation System (LORAN)

A navigational system by which lines of position are determined by measuring the difference in the time of reception of synchronized pulse signals from fixed transmitters.

Low Intensity Runway Lights (LIRL)

The lowest classification for the intensity of the lights bordering the sides of the runway.

М

Mean Sea Level (MSL)

The average height of the surface of the sea for all stages of tide.

Medium Intensity Runway Lights (MIRL)

The middle classification for the intensity of the lights bordering the sides of the runway.

Microwave Landing System (MLS)

An instrument approach and landing system operating in the microwave frequencies that provides guidance in azimuth, elevation, and distance measurement.

Military Operations Area (MOA)

Special use airspace of defined vertical and lateral limits established to help VFR traffic identify locations where military activities are conducted.

Military Training Route (MTR)

Route depicted on an aeronautical chart for the conduct of military flight training at speeds above 250 knots.

Ν

National Airspace System (NAS)

A network of navigational aids and a number of air traffic control facilities designed to operate in conjunction with the various defined classes of airspace.

National Plan of Integrated Airport Systems (NPIAS)

A national airport system plan published and revised every two years by the Secretary of Transportation for the development of public-use airports in the United States.

National Transportation Safety Board (NTSB)

Created by the act that established the DOT to determine the cause of transportation accidents and review on appeal the suspension or revocation of any certificates or licenses issued by the Secretary of Transportation.

Nautical Mile (Nm)

A unit of length equivalent to 3.45 statute miles.

Navigational Aid (NAVAID)

Any facility used as, available for use as, or



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designed for use as an aid to air navigation, including landing area, lights, any apparatus or equipment for disseminating weather information, for signaling, for radio direction-finding, or for radio or other electronic communication, and any other structure or mechanism having similar purpose for guiding and controlling flight in the air or the landing or takeoff of aircraft

Non-Directional Beacon (NDB)

Ground-based navigational aid

Non-Precision Approach (NPA)

Provides an aircraft with horizontal course guidance to a runway surface.

Notice to Airmen (NOTAM)

A notice containing information concerning the establishment, condition, or change in any component of, or hazard in, the National Airspace System, the timely knowledge of which is essential to personnel concerned with flight operations.

0

**Obstruction Light** 

A light, or one of a group of lights, usually red or white, mounted on a surface structure or natural terrain to warn pilots of the presence of a flight hazard.

Ρ

Pilot Controlled Lighting

Runway lighting systems which are controlled by keying the aircraft's microphone on a specific frequency.

Precision Approach (PA)

A standards instrument approach procedure in which an electronic glideslope is provided.

Precision Approach Path Indicator (PAPI)

A visual-approach slope aid system consisting of four lights on either side of the approach runway that gives precise indication to the pilot of the approach path of the aircraft.

Precision Approach Radar (PAR)

A radar facility in the terminal air traffic control system used to detect and display, with a high degree of accuracy, azimuth, range, and elevation of an aircraft on the final approach to a runway.

**Primary Surface** 

A rectangular surface longitudinally centered about a runway.

**Prohibited Area** 

Airspace of defined dimensions identified by an



area on the surface of the earth within which the flight of aircraft is prohibited.

Q

R

Radial A navigational signal generated by a VOR or

VORTAC, measured as a magnetic bearing from

the station.

Restricted Area Designated special use airspace within which

aircraft flight, while not prohibited, is subject to

restrictions.

Runway (RWY) A defined rectangular area on a land airport

prepared for the landing and taking off of aircraft

along its length.

Runway Alignment Indicator Light (RAIL) A series of five or more sequenced flashing light

installed on the extended centerline of the runway. The maximum spacing between lights is 200 feet, extending out from 1,600 feet to 3,000 feet from the

runway threshold.

Runway End Identifier Lights (REIL)

An airport lighting facility in the terminal area

navigation system consisting of one flashing white high-intensity strobe light installed at each approach end corner of a runway and directed toward the approach zone, which enable the pilot

to identify the threshold of a usable runway.

Runway Gradient The amount of change in elevation over the length

of the runway.

Runway Visibility Zone (RVZ)

An area formed by imaginary lines connecting two

intersecting runways' visibility points.

Runway Visual Range (RVR)

An instrumentally derived value that represents the

horizontal distance a pilot can see down the

runway from the approach end.

S

Sectional Chart Most commonly used chart for VFR flight. Each

chart covers six degrees to eight degrees of longitude and approximately four degrees of latitude and is given the name of a primary city within its coverage. The scale of a sectional chart

is 1:500,000.



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Segmented Circle A set of visual indicators that provide traffic pattern

information at airports without operating control

towers.

Single Wheel Gear (SWG)

Special Use Airspace Defined airspace areas where aircraft operations

may be limited.

Small Aircraft of 12,500 pounds or less maximum

certificated takeoff weight.

Standard Instrument Departure Procedures

(SIDS)

A procedure used after takeoff to provide a transition between the airport and the enroute

structure.

Standard Terminal Arrival Route (STAR) A procedure for departing the enroute structure and

navigating to a destination.

Stopway An area beyond the takeoff runway which is

designed to support an airplane during an aborted takeoff without causing structural damage to the airplane. It cannot be used for takeoff, landing, or

taxiing.

T

Terminal Instrument Procedures Standards

(TERPS)

Procedures used for conducting independent instrument approaches to converging runways

under instrument meteorological conditions.

Terminal Radar Approach Control

(TRACON)

An air navigation system facility responsible for monitoring the enroute and terminal segment of air traffic in the airspace surrounding airports with

moderate to high-density traffic

Threshold The designated beginning of the runway that is

available and suitable for the landing of airplanes.

Threshold Crossing Height (TCH)

The height of the straight-line extension of the

visual or electronic glideslope above the runway

threshold.

Touchdown The point at which an aircraft first makes contact

with the landing surface.

Touchdown Zone (TDZ)

The area of a runway near the approach end where

aircraft normally alight.



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Traffic Pattern

The traffic flow that is prescribed for aircraft landing and taking off from an airport. The usual components are the departure, crosswind, downwind, and base legs; and the final approach.

U

Uncontrolled Airport A nontower airport where control of VFR traffic is

not exercised.

Uncontrolled Airspace Airspace within which aircraft are not subject to air traffic control.

Universal Communication (UNICOM)

A non-government communications facility which may provide airport information at certain airports.

V

Very High Frequency Omnidirectional Ranging (VOR)

Ground based navigational system consisting of very high frequency omnidirectional range stations that provide course guidance.

Victor Airway An airway system based on the use of VOR facilities.

Visual Approach Slope Indicator (VASI)

An airport lighting facility in the terminal area navigation system used primarily under VFR conditions. It provides vertical visual guidance to aircraft during approach and landing by radiating a direction pattern of high intensity red and white focused light beams that indicate to the pilot that the aircraft is on path, above path, or below path.

Visual Flight Rules (VFR)

Rules that govern the procedures for conducting flight under visual conditions.

Visual Meteorological Conditions (VMC) Meteorological conditions expressed in terms of visibility and ceiling equal o or better than specified minima.

VORTAC Combined VOR and TACAN

W

Warning Area Airspace of defined dimensions, extending from

three nautical miles outward from the coast of the United States, which contains activity that may be

hazardous to nonparticipating aircraft.

Wide-Area Augmentation System (WAAS) An augmentation of GPS that includes integrity



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broadcasts, differential corrections, and additional ranging signals; its primary objective is to provide accuracy, integrity, availability, and continuity required to support all phases of flight.

World Aeronautical Chart (WAC)

Similar to a sectional chart, but with a scale of 1:1,000,000 provides less detail and is best suited for flight planning.

X

Υ

Ζ

