



Appendix A: **GLOSSARY OF TERMS**

A

Above Ground Level (AGL)	The elevation of a point or surface above the ground.
Accelerate-Stop Distance Available (ASDA)	See Declared Distances.
Advanced Air Mobility (AAM)	A broad umbrella for an emerging air transportation system that safely and efficiently integrates highly automated, electric, or hybrid-electric aircraft (often called air taxis or electric vertical takeoff and landing [eVTOL] vehicles) into the National Airspace System.
Advisory Circular (AC)	External publications issued by the FAA that consist of non-regulatory material providing for the recommendations related to a policy. Guidance and information related to a specific aviation subject.
Air Carrier	An operator that: (1) performs at least five round trips per week between two or more points and publishes flight schedules that specify the times, days of the week, and places between which such flights are performed; or (2) transports mail by air pursuant to a current contract with the U.S. Postal Service. Certified in accordance with Federal Aviation Regulation (FAR) Parts 121 and 127.
Airlines for America (formerly Air Transport Association of America)	An organization consisting of the principal U.S. airlines that represents the interests of the airline industry on major aviation issues before federal, state, and local government bodies. Promotes air transportation safety by coordinating industry and governmental safety programs and serves as a focal point for industry efforts to standardize practices and enhance the efficiency of the air transportation system.
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 en-route phase of flight.
Air Taxi	An air carrier certificated in accordance with FAR Part 121 and FAR Part 135 and authorized to provide, on demand, public transportation of persons and property by aircraft. Generally operates small aircraft “for hire” for specific trips.
Air Traffic Control (ATC)	A service operated by an appropriate organization for the purpose of providing for the safe, orderly, and expeditious flow of air traffic.
Air Traffic Control System Command Center	A facility operated by the FAA that is responsible for the central flow control, the central altitude reservation system, the airport reservation position system, and the air traffic service contingency command for the air traffic control system.
Air Traffic Hub	A categorization of commercial service airports or group of commercial service airports in a metropolitan or urban area based on the proportion of annual national enplanements at the airport or airports. The categories are large hub, medium hub, small hub, and nonhub. Forms the basis for the apportionment of entitlement funds.



A *(continued)*

Aircraft	A device that is used or intended to be used for flight in the air.
Aircraft Approach Category (AAC)	A grouping of aircraft based on 1.3 times the stall speed in landing configuration at maximum certificated landing weight. The categories are as follows: • Category A: speed less than 91 knots • Category B: speed of 91 knots or more, but less than 121 knots • Category C: speed of 121 knots or more, but less than 141 knots • Category D: speed of 141 knots or more, but less than 166 knots • Category E: speed greater than 166 knots
Aircraft Operation	A landing, takeoff, or touch-and-go procedure by an aircraft on a runway at an airport.
Aircraft Operations Area (AOA)	A restricted and secure area on the airport property designed to protect all aspects related to aircraft operations.
Aircraft Owners and Pilots Association	A private organization that serves the interests and needs of general aviation pilots and aircraft owners.
Aircraft Rescue and Firefighting (ARFF)	A facility located at an airport that provides emergency vehicles, extinguishing agents, and personnel responsible for minimizing the impacts of an aircraft accident or incident.
Airfield	The portion of an airport that contains the facilities necessary for the operation of aircraft.
Airline Hub	An airport at which an airline concentrates a significant portion of its activity. Often has a significant amount of connecting traffic.
Airplane Design Group (ADG)	A grouping of aircraft based on wingspan. The groups are as follows: • Group I: up to but not including 49 feet • Group II: 49 feet up to but not including 79 feet • Group III: 79 feet up to but not including 118 feet • Group IV: 118 feet up to but not including 171 feet • Group V: 171 feet up to but not including 214 feet • Group VI: 214 feet or greater
Airport Authority	A quasi-governmental public organization responsible for setting the policies governing the management and operation of an airport or system of airports under its jurisdiction.
Airport Beacon	A navigational aid located at an airport that displays a rotating light beam to identify whether an airport is lighted.
Airports Capital Improvement Plan (ACIP)	The planning program used by the FAA to identify, prioritize, and distribute funds for airport development and the needs of the National Airspace System to meet specified national goals and objectives.



A (continued)

Airport Elevation	The highest point on the runway system at an airport expressed in feet above mean sea level (MSL).
Airport Improvement Program (AIP)	A program authorized by the <i>Airport and Airway Improvement Act of 1982</i> that provides funding for airport planning and development.
Airport Layout Drawing (ALD)	The drawing of the airport that shows the layout of existing and proposed airport facilities.
Airport Layout Plan (ALP)	A scaled drawing of the existing and planned land and facilities necessary for the operation and development of the airport.
Airport Layout Plan Drawing Set	A set of technical drawings depicting the current and future airport conditions. The individual sheets comprising the set can vary with the complexities of the airport, but the FAA-required drawings include the airport layout plan (sometimes referred to as the airport layout drawing), airport airspace drawing, inner portion of the approach surface drawing, on-airport land use drawing, and property map.
Airport Master Plan	A local planning document that serves as a guide for the long-term development of an airport.
Airport Movement Area Safety System	A system that provides automated alerts and warnings of potential runway incursions or other hazardous aircraft movement events.
Airport Obstruction Chart	A scaled drawing depicting the Federal Aviation Regulation Part 77 surfaces; a representation of objects that penetrate these surfaces; runway, taxiway, and ramp areas; navigational aids, buildings, and roads; and other details in the vicinity of an airport.
Airport Reference Code (ARC)	A coding system used to relate airport design criteria to the operational (aircraft approach category) and physical (airplane design group) characteristics of the airplanes intended to operate at the airport.
Airport Reference Point (ARP)	The latitude and longitude of the approximate center of the airport.
Airport Sponsor	The entity that is legally responsible for the management and operation of an airport, including the fulfillment of the requirements of laws and regulations related thereto.
Airport Surface Detection Equipment	A radar system that provides air traffic controllers with a visual representation of the movement of aircraft and other vehicles on the ground on the airfield at an airport.
Airport Surveillance Radar (ASR)	The primary radar located at an airport or in an air traffic control terminal area that receives a signal at an antenna and transmits the signal to air traffic control display equipment defining the location of aircraft in the air. The signal provides only the azimuth and range of aircraft from the location of the antenna.
Airport Traffic Control Tower (ATCT)	A central operations facility in the terminal air traffic control system (consisting of a tower, including an associated instrument flight rule [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.



A *(continued)*

Airside	The portion of an airport that contains the facilities necessary for the operation of aircraft.
Airspace	The volume of space above the surface of the ground that is provided for the operation of aircraft.
Alert Area	See Special-Use Airspace.
Altitude	The vertical distance measured in feet above mean sea level (MSL).
Annual Instrument Approach (AIA)	An approach to an airport with the intent to land by an aircraft in accordance with an IFR flight plan when visibility is less than three miles and/or when the ceiling is at or below the minimum initial approach altitude.
Annual Service Volume (ASV)	An estimate of the maximum number of annual aircraft operations an airport's runway system can accommodate while maintaining an acceptable level of average aircraft delay.
Approach Lighting System (ALS)	An airport lighting facility that provides visual guidance to landing aircraft by radiating light beams by which the pilot aligns the aircraft with the extended centerline of the runway on final approach and landing.
Approach Minimum	The altitude below which an aircraft may not descend while on an IFR approach unless the pilot has the runway in sight.
Approach Surface	An imaginary obstruction-limiting surface defined in FAR Part 77 that is longitudinally centered on an extended runway centerline and extends outward and upward from the primary surface at each end of a runway at a designated slope and distance based on the type of available or planned approach by aircraft to a runway.
Apron	A specified portion of the airfield used for passenger, cargo, or freight loading and unloading, as well as aircraft parking and the refueling, maintenance, and servicing of aircraft.
Area Navigation (RNAV)	A method of navigation that permits aircraft operation on any desired flight path within (1) the coverage of ground- or space-based navigation aids, (2) the limits of the capability of self-contained aids, or (3) a combination of these.
Automated Terminal Information Service (ATIS)	The continuous broadcast of recorded non-control information at towered airports. Information typically includes wind speed, direction, and runway in use.
Automated Surface Observation System (ASOS)	A reporting system that provides frequent airport ground surface weather observation data through digitized voice broadcasts and printed reports.
Automated Weather Observation System (AWOS)	Equipment that is used to automatically record weather conditions (e.g., cloud height, visibility, wind speed and direction, temperature, dew point, etc.).



A (continued)

Automatic Dependent Surveillance–Broadcast (ADS–B)	An advanced surveillance technology that combines an aircraft’s positioning source, aircraft avionics, and a ground infrastructure to create an accurate surveillance interface between aircraft and air traffic control.
Automatic Direction Finder (ADF)	An aircraft radio navigation system that senses and indicates the direction to a non-directional radio beacon (NDB) ground transmitter.
Avigation Easement	A contractual right or a property interest in land over which a right of unobstructed flight in the airspace is established.
Azimuth	Horizontal direction expressed as the angular distance between true north and the direction of a fixed point (as the observer’s heading).

B

Base Leg	A flight path at right angles to the landing runway off its approach end. The base leg normally extends from the downwind leg to the intersection of the extended runway centerline. (See Traffic Pattern.)
Based Aircraft	The general aviation aircraft that use a specific airport as a home base.
Bearing	The horizontal direction to or from any point, usually measured clockwise from true north or magnetic north.
Blast Fence	A barrier used to divert or dissipate jet blast or propeller wash.
Blast Pad	A prepared surface adjacent to the end of a runway for the purpose of eliminating the erosion of the ground surface by the wind forces produced by airplanes at the initiation of takeoff operations.
Building Restriction Line (BRL)	A line that identifies suitable building area locations on the airport.

C

Capital Improvement Plan (CIP)	The planning program used by the Federal Aviation Administration to identify, prioritize, and distribute Airport Improvement Program funds for airport development and the needs of the National Airspace System to meet specified national goals and objectives.
Cargo Service Airport	An airport served by aircraft providing air transportation of property only, including mail, with an annual aggregate landed weight of at least 100,000,000 pounds.
Ceiling	The height above the ground surface to the location of the lowest layer of clouds that is reported as either broken or overcast.
Circling Approach	A maneuver initiated by the pilot to align the aircraft with the runway for landing when flying a predetermined circling instrument approach under IFR.



C *(continued)*

Class A Airspace	See Controlled Airspace.
Class B Airspace	See Controlled Airspace.
Class C Airspace	See Controlled Airspace.
Class D Airspace	See Controlled Airspace.
Class E Airspace	See Controlled Airspace.
Class G Airspace	See Controlled Airspace.
Clearway	A defined rectangular area beyond the end of a runway cleared or suitable for use in lieu of a runway to satisfy takeoff distance requirements.
Clear Zone	See Runway Protection Zone.
Commercial Service Airport	A public airport providing scheduled passenger service that enplanes at least 2,500 annual passengers.
Common Traffic Advisory Frequency (CTAF)	A radio frequency identified in the appropriate aeronautical chart that is designated for the purpose of transmitting airport advisory information and procedures while operating to or from an uncontrolled airport.
Compass Locator (LOM)	A low-power, low-/medium-frequency radio beacon installed in conjunction with the instrument landing system at one or two of the marker sites.
Conical Surface	An imaginary obstruction-limiting surface defined in FAR Part 77 that extends from the edge of the horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
Controlled Airport	An airport that has an operating airport traffic control tower.
Controlled Airspace	Airspace of defined dimensions within which air traffic control services are provided to instrument flight rules (IFR) and visual flight rules (VFR) flights in accordance with the airspace classification. Controlled airspace in the United States is designated as follows: • Class A: Generally, the airspace from 18,000 feet mean sea level (MSL) up to but not including flight level (FL) 600. All persons must operate their aircraft under IFR. • Class B: Generally, the airspace from the surface to 10,000 feet MSL surrounding the nation's busiest airports. The configuration of Class B airspace is unique to each airport but typically consists of two or more layers of air space and is designed to contain all published instrument approach procedures to the airport. An air traffic control clearance is required for all aircraft to operate in the area.

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C (continued)

Controlled Airspace (continued)

- **Class C:** Generally, the airspace from the surface to 4,000 feet above the airport elevation (charted as MSL) surrounding airports that have operational control towers and radar approach control and are served by a qualifying number of IFR operations or passenger enplanements. Although individually tailored for each airport, Class C airspace typically consists of a surface area with a radius of five nautical miles (nm) and an outer area with a radius of 10 nm that extends from 1,200 feet to 4,000 feet above the airport elevation. Two-way radio communication is required for all aircraft.
- **Class D:** Generally, the airspace from the surface to 2,500 feet above the airport elevation (charted as MSL) surrounding airports with operational control towers. Class D airspace is individually tailored and configured to encompass published instrument approach procedure. Unless otherwise authorized, all persons must establish two-way radio communication.

Class E: Generally, controlled airspace that is not classified as Class A, B, C, or D. Class E airspace extends upward from either the surface or a designated altitude to the overlying or adjacent controlled airspace. When designated as a surface area, the airspace will be configured to contain all instrument procedures. Class E airspace encompasses all Victor airways. Only aircraft following instrument flight rules are required to establish two-way radio communication with air traffic control.

- **Class G:** Generally, airspace not classified as Class A, B, C, D, or E. Class G airspace is uncontrolled for all aircraft. Class G airspace extends from the surface to the overlying Class E airspace.

Controlled Firing Area	See Special-Use Airspace.
Crosswind	A wind that is not parallel to a runway centerline or to the intended flight path of an aircraft.
Crosswind Component	The component of wind that is at a right angle to the runway centerline or the intended flight path of an aircraft.
Crosswind Leg	A flight path at right angles to the landing runway off its upwind end. (See Traffic Pattern.)

D

Decibel (dB)	A unit of noise representing a level relative to a reference of a sound pressure 20 micronewtons per square meter.
Decision Height/Decision Altitude (DA)	The height above the end of the runway surface at which a decision must be made by a pilot during the ILS or precision approach radar approach to either continue the approach or execute a missed approach.



D *(continued)*

Declared Distances	The distances declared available for the airplane's takeoff runway, takeoff distance, accelerate-stop distance, and landing distance requirements. The distances are as follows: • Takeoff Run Available (TORA): The runway length declared available and suitable for the ground run of an airplane taking off. • Takeoff Distance Available (TODA): The TORA plus the length of any remaining runway and/or clearway beyond the far end of the TORA. • Accelerate-Stop Distance Available (ASDA): The runway plus stopway length declared available for the acceleration and deceleration of an aircraft aborting a takeoff. • Landing Distance Available (LDA): The runway length declared available and suitable for landing.
Department of Transportation (DOT)	The cabinet-level federal government organization consisting of modal operating agencies, such as the FAA, that was established to promote the coordination of federal transportation programs and act as a focal point for research and development efforts in transportation.
Discretionary Funds	Federal grant funds that may be appropriated to an airport based on designation by the Secretary of Transportation or U.S. Congress to meet a specified national priority, such as enhancing capacity, safety, and security or mitigating noise.
Displaced Threshold	A threshold that is located at a point on the runway other than the designated beginning of the runway.
Distance Measuring Equipment (DME)	Equipment (airborne and ground) used to measure, in nautical miles, the slant range distance of an aircraft from the DME navigational aid.
DNL (Day-Night Average Sound Level)	The 24-hour average sound level, in decibels, obtained after the addition of 10 decibels to sound levels for the periods between 10:00 p.m. and 7:00 a.m. as averaged over a span of one year. The FAA standard metric for determining the cumulative exposure of individuals to noise.
Downwind Leg	A flight path parallel to the landing runway in the direction opposite to landing. The downwind leg normally extends between the crosswind leg and the base leg. (See Traffic Pattern.)

E

Easement	The legal right of one party to use a portion of the total rights in real estate owned by another party. May include the right of passage over, on, or below the property; certain air rights above the property, including view rights; and the rights to any specified form of development or activity, as well as any other legal rights in the property that may be specified in the easement document.
Elevation	The vertical distance measured in feet above mean sea level (MSL).



E *(continued)*

Enplaned Passengers	The total number of revenue passengers boarding aircraft, including originating, stopover, and transfer passengers, in scheduled and nonscheduled services.
Enplanement	The boarding of a passenger, cargo, freight, or mail on an aircraft at an airport.
Entitlement	Federal funds for which a commercial service airport may be eligible based on its annual passenger enplanements.
Environmental Assessment (EA)	An environmental analysis performed pursuant to the <i>National Environmental Policy Act</i> to determine whether an action would significantly affect the environment and thus require a more detailed environmental impact statement.
Environmental Audit	An assessment of the current status of a party's compliance with applicable environmental requirements of the party's environmental compliance policies, practices, and controls.
Environmental Impact Statement (EIS)	A document required of federal agencies by the <i>National Environmental Policy Act</i> for major projects or legislative proposals affecting the environment. A tool for decision-making that describes the positive and negative effects of a proposed action and cites alternative actions.
Essential Air Service (EAS)	A federal program that guarantees air carrier service to selected small cities by providing subsidies as needed to prevent these cities from losing such service.

F

Federal Aviation Regulations (FAR)	The general and permanent rules established by the executive departments and agencies of the federal government for aviation, which are published in the <i>Federal Register</i> . The aviation subset of the Code of Federal Regulations.
Federal Inspection Services	The provision of customs and immigration services, including passport inspection, inspection of baggage, the collection of duties on certain imported items, and inspections for agricultural products, illegal drugs, or other restricted items.
Final Approach	A flight path in the direction of landing along the extended runway centerline. Normally extends from the base leg to the runway. (See Traffic Pattern.)
Final Approach and Takeoff Area (FATO)	A defined area over which the final phase of the helicopter approach to a hover or a landing is completed and from which the takeoff is initiated.
Final Approach Fix	The designated point at which the final approach segment for an aircraft landing on a runway begins for a non-precision approach.
Finding of No Significant Impact (FONSI)	A public document prepared by a federal agency that presents the rationale for why a proposed action will not have a significant effect on the environment, and for which an environmental impact statement will not be prepared.



F *(continued)*

Fixed Base Operator (FBO)	A provider of services to users of an airport. Such services include (but are not limited to) hangaring, fueling, flight training, repair, and maintenance.
Flight Level (FL)	A measure of altitude used by aircraft flying above 18,000 feet. Flight levels are indicated by three digits representing the pressure altitude in hundreds of feet. For example, an airplane flying at flight level 360 is flying at a pressure altitude of 36,000 feet; this is expressed as FL 360.
Flight Service Station (FSS)	An operations facility in the national flight advisory system that utilizes data interchange facilities for the collection and dissemination of Notices to Airmen, weather data, and administrative data and provides preflight and in-flight advisory services to pilots through air- and ground-based communication facilities.
Frangible NAVAID	A navigational aid that retains its structural integrity and stiffness up to a designated maximum load, but on impact from a greater load, breaks, distorts, or yields in such a manner as to present the minimum hazard to aircraft.

G

General Aviation (GA)	The portion of civil aviation that encompasses all facets of aviation, except (1) air carriers holding a certificate of convenience and necessity and (2) large aircraft commercial operators.
General Aviation Airport	An airport that provides air service to only general aviation.
Glideslope (GS)	Provides vertical guidance for aircraft during approach and landing. The glideslope consists of the following: • Electronic components emitting signals that provide vertical guidance by reference to airborne instruments during instrument approaches (such as ILS); or • Visual ground aids (such as PAPI) that provide vertical guidance for VFR approach or for the visual portion of an instrument approach and landing.
Global Positioning System (GPS)	A system of satellites used as reference points to enable navigators equipped with GPS receivers to determine their latitude, longitude, and altitude.
Ground Access	The transportation system on and around an airport that provides access to and from the airport by ground transportation vehicles for passengers, employees, cargo, freight, and airport services.
Ground Based Augmentation System (GBAS)	A program that augments the existing GPS system by providing corrections to aircraft in the vicinity of an airport to improve the accuracy of the GPS navigational positions of these aircraft.



H

Helipad	A designated area for the takeoff, landing, and parking of helicopters.
High Intensity Runway Lights (HIRL)	The highest classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.
High-Speed Exit Taxiway	An acute-angled exit taxiway forming a 30 degree angle with the runway centerline, designed to allow an aircraft to exit a runway without having to decelerate to typical taxi speed.
Horizontal Surface	An imaginary obstruction-limiting surface defined in FAR Part 77 that is specified as a portion of a horizontal plane surrounding a runway located 150 feet above the established airport elevation. The specific horizontal dimensions of this surface are a function of the types of approaches that exist or are planned for the runway.
Hot Spot	A location on an airport movement area with a history of potential risk of collision or runway incursion, and where heightened attention by pilots and drivers is necessary.

I

Initial Approach Fix	The designated point at which the initial approach segment begins for an instrument approach to a runway.
Instrument Approach Procedure	A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually.
Instrument Flight Rules (IFR)	Procedures for the conduct of flight in weather conditions below visual flight rules (VFR) weather minimums. The term "IFR" is often also used to define weather conditions and the type of flight plan under which an aircraft is operating.
Instrument Landing System (ILS)	A precision instrument approach system that normally consists of the following electronic components and visual aids: localizer, glideslope, outer marker, middle marker, and approach lights.
Instrument Meteorological Conditions (IMC)	Meteorological conditions expressed in terms of specific visibility and ceiling conditions that are less than the minimums specified for visual meteorological conditions.
Itinerant Operations	Operations by aircraft that are arriving from outside the traffic pattern or departing the airport traffic pattern.

K

Knots	A unit of speed length used in navigation that is equivalent to the number of nautical miles traveled in one hour.
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L

Landside	The portion of an airport that provides the facilities necessary for the processing of passengers, cargo, freight, and ground transportation vehicles.
Landing Distance Available (LDA)	See Declared Distances.
Large Airplane	An airplane that has a maximum certified takeoff weight in excess of 12,500 pounds.
Local Operations	Aircraft operations performed by aircraft that operate in the local traffic pattern or within sight of the airport that are known to be departing for or arriving from flights in local practice areas within a prescribed distance from the airport, or that execute simulated instrument approaches at the airport. Typically includes touch-and-go training operations.
Localizer (LOC)	The component of an ILS that provides course guidance to the runway.
Localizer Type Directional Aid (LDA)	A facility of comparable utility and accuracy to a localizer but that is not part of a complete ILS and is not aligned with the runway.
Low Intensity Runway Lights (LIRL)	The lowest classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.

M

Medium Intensity Runway Lights (MIRL)	The middle classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.
Military Operations	Aircraft operations that are performed in military aircraft.
Military Operations Area (MOA)	See Special-Use Airspace.
Military Training Route (MTR)	An air route depicted on aeronautical charts for the conduct of military flight training at speeds above 250 knots.
Missed Approach Course (MAC)	The flight route to be followed if, after an instrument approach, a landing is not affected, and occurring normally: • When the aircraft has descended to the decision height and has not established visual contact; or • When directed by air traffic control to pull up or go around again.
Movement Area	The runways, taxiways, and other areas of an airport that are utilized for taxiing/hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and parking areas. At an airport with a tower, air traffic control clearance is required for entry onto the movement area.



N

National Airspace System (NAS)	The network of air traffic control facilities, air traffic control areas, and navigational facilities throughout the United States.
National Plan Of Integrated Airport Systems (NPIAS)	The national airport system plan developed by the U.S. Secretary of Transportation on a biannual basis for the development of public-use airports to meet national air transportation needs.
National Transportation Safety Board	A federal government organization established to investigate and determine the probable cause of transportation accidents, recommend equipment and procedures to enhance transportation safety, and review on appeal the suspension or revocation of any certificates or licenses issued by the U.S. Secretary of Transportation.
Nautical Mile (nm)	A unit of length used in navigation that is equivalent to the distance spanned by one minute of arc in latitude (1,852 meters or 6,076 feet). Equivalent to approximately 1.15 statute miles.
NAVAID	A term used to describe any electrical or visual air navigational aids, lights, signs, and associated supporting equipment (e.g., PAPI, VASI, ILS, etc.).
Navigational Aid	A facility used as, available for use as, or designed for use as an aid to air navigation.
Noise Contour	A continuous line on a map of the airport vicinity connecting all points of the same noise exposure level.
Non-Directional Beacon (NDB)	A beacon transmitting non-directional signals whereby the pilot of an aircraft equipped with direction-finding equipment can determine their bearing to and from the radio beacon and home on, or track to, the station. When the radio beacon is installed in conjunction with the instrument landing system marker, it is normally called a compass locator.
Non-Precision Approach Procedure	A standard instrument approach procedure in which no electronic glideslope is provided, such as VOR, TACAN, NDB, or LOC.
Notice to Airmen/Notice to Air Missions (NOTAM)	A notice containing information concerning the establishment, condition, or change in any component of or hazard in the NAS, the timely knowledge of which is considered essential to personnel concerned with flight operations.

O

Object Free Area (OFA)	An area on the ground centered on a runway, taxiway, or taxilane centerline provided to enhance the safety of aircraft operations by having the area free of objects, except objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.
Obstacle Free Zone (OFZ)	The airspace below 150 feet above the established airport elevation and along the runway and extended runway centerline that is required to be kept clear of all objects, except frangible visual NAVAIDs that need to be located in the OFZ because of their function, to provide clearance for aircraft landing on or taking off from the runway, and for missed approaches.



O (continued)

Operation	The takeoff, landing, or touch-and-go procedure by an aircraft on a runway at an airport.
Outer Marker (OM)	An ILS navigation facility in the terminal area navigation system located four to seven miles from the runway edge on the extended centerline, indicating to a pilot that they are passing over the facility and can begin final approach.

P

Pilot-Controlled Lighting (PCL)	Runway lighting systems at an airport that are controlled by activating the microphone of a pilot on a specified radio frequency.
Poor Visibility Conditions (PVC)	Used in determining annual service volume. PVC exist when the cloud ceiling is less than 500 feet and visibility is less than one mile.
Precision Approach	A standard instrument approach procedure that provides runway alignment and glideslope (descent) information. Categorized as follows: • Category I (CAT I): A precision approach that provides for approaches with a decision height of not less than 200 feet and visibility not less than ½ mile or runway visual range (RVR) 2400 (RVR 1800) with operative touchdown zone and runway centerline lights. • Category II (CAT II): A precision approach that provides for approaches with a decision height of not less than 100 feet and visibility not less than 1,200 feet RVR. • Category III (CAT III): A precision approach that provides for approaches with minimums less than Category II.
Precision Approach Path Indicator (PAPI)	A lighting system that provides visual approach slope guidance to aircraft during a landing approach. A PAPI normally consists of four light units but an abbreviated system of two lights is acceptable for some categories of 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 the direction, range, and elevation of an aircraft on the final approach to a runway.
Precision Object Free Zone (POFZ)	An area centered on the extended runway centerline, beginning at the runway threshold and extending behind the runway threshold, that is 200 feet long by 800 feet wide. A clearing standard that requires the POFZ to be kept clear of aboveground objects protruding above the runway safety area edge elevation (except for frangible NAVAIDs). The POFZ is only in effect when the approach includes vertical guidance, the reported ceiling is below 250 feet, and an aircraft is on final approach within two miles of the runway threshold.



P *(continued)*

Primary Airport	A commercial service airport that enplanes at least 10,000 annual passengers.
Primary Surface	An imaginary obstruction-limiting surface defined in FAR Part 77 that is specified as a rectangular surface longitudinally centered about a runway. The specific dimensions of this surface are a function of the types of approaches that exist or are planned for the runway.
Prohibited Area	See Special-Use Airspace.

R

Radial	A navigational signal generated by a very high frequency omnidirectional range or VORTAC station that is measured as an azimuth from the station.
Regression Analysis	A statistical technique that seeks to identify and quantify the relationships between factors associated with a forecast.
Remote Communications Outlet (RCO)	An unstaffed transmitter receiver/facility remotely controlled by air traffic personnel. RCOs serve flight service stations (FSSs). RCOs were established to provide ground-to-ground communications between air traffic control specialists and pilots at satellite airports for delivering en-route clearances, issuing departure authorizations, and acknowledging IFR cancellations or departure/landing times.
Remote Transmitter/Receiver (RTR)	See Remote Communications Outlet. RTRs serve ARTCCs.
Remotely Piloted Unmanned Aircraft System (RPAS)	A set of configurable elements consisting of a remotely piloted aircraft, its associated remote pilot station(s), the required command and control links, and any other system elements that may be required at any point during flight operation.
Reliever Airport	An airport to serve general aviation aircraft that might otherwise use a congested air carrier-served airport.
Restricted Area	See Special-Use Airspace.
RNAV	See Area Navigation (RNAV).
Runway	A defined rectangular area on an airport prepared for aircraft landing and takeoff. Runways are normally numbered in relation to their magnetic direction, rounded off to the nearest 10 degrees. For example, a runway with a magnetic heading of 180 would be designated Runway 18. The runway heading on the opposite end of the runway is 180 degrees from that runway end. For example, the opposite runway heading for Runway 18 would be Runway 36 (magnetic heading of 360). Aircraft can take off from or land on either end of a runway, depending on wind direction.
Runway Alignment Indicator Light (RAIL)	A series of high-intensity sequentially flashing lights installed on the extended centerline of the runway, usually in conjunction with an approach lighting system.



R *(continued)*

Runway Design Code (RDC)	A code that signifies the FAA design standards to which a runway should be built.
Runway End Identification Lighting (REIL)	Two synchronized flashing lights (one on each side of the runway threshold) that which provide rapid and positive identification of the approach end of a particular runway.
Runway Gradient	The average slope, measured in percent, between the two ends of a runway.
Runway Protection Zone (RPZ)	An area off the runway end to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape and its dimensions are determined by the aircraft approach speed and runway approach type and minimums.
Runway Reference Code	A code that signifies the current operational capabilities of a runway and taxiway.
Runway Safety Area (RSA)	A defined surface surrounding the runway that is prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.
Runway Visibility Zone (RVZ)	An area on the airport to be kept clear of permanent objects so there is an unobstructed line of sight from any point five feet above the runway centerline to any point five feet above an intersecting runway centerline.
Runway Visual Range (RVR)	An instrumentally derived value, in feet, that represents the horizontal distance a pilot can see down the runway from the runway end.

S

Scope	The document that identifies and defines the tasks, emphasis, and level of effort associated with a project or study.
Segmented Circle	A system of visual indicators designed to provide traffic pattern information at airports without operating control towers. Often co-located with a wind cone.
Shoulder	An area adjacent to the edge of a paved runway, taxiway, or apron that provides a transition between the pavement and the adjacent surface, support for aircraft running off the pavement, enhanced drainage, and blast protection. Does not necessarily need to be paved.
Slant-Range Distance	The straight-line distance between an aircraft and a point on the ground.
Small Aircraft	An aircraft that has a maximum certified takeoff weight of up to 12,500 pounds.
Special-Use Airspace	Airspace of defined dimensions identified by a surface area wherein activities must be confined because of their nature and/or wherein limitations may be imposed on aircraft operations that are not part of those activities.

(continues on next page)



S *(continued)*

Special-Use Airspace (continued)

Special-use airspace classifications include the following:

- **Alert Area:** Airspace that may contain a high volume of pilot training activities or an unusual type of aerial activity, neither of which is hazardous to aircraft.
- **Controlled Firing Area:** Airspace wherein activities are conducted under conditions controlled so as to eliminate hazards to nonparticipating aircraft and ensure the safety of persons or property on the ground.
- **Military Operations Area (MOA):** Designated airspace with defined vertical and lateral dimensions established outside Class A airspace to separate/segregate certain military activities from IFR traffic and identify for VFR traffic where these activities are conducted.
- **Prohibited Area:** Designated airspace within which the flight of aircraft is prohibited.
- **Restricted Area:** Airspace designated under FAR 73 within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Most restricted areas are designated joint use. When not in use by the using agency, IFR/VFR operations can be authorized by the controlling air traffic control facility.
- **Warning Area:** Airspace that may contain hazards to nonparticipating aircraft.

Standard Instrument Departure (SID)

A preplanned coded air traffic control IFR departure routing, preprinted for pilot use in graphic and textual form only.

Standard Instrument Departure Procedure

A published standard flight procedure to be utilized following takeoff to provide a transition between the airport and the terminal area or en-route airspace.

Standard Terminal Arrival Route (STAR)

A preplanned coded air traffic control IFR arrival routing, preprinted for pilot use in graphic and textual or textual form only.

Stop-and-Go

A procedure wherein an aircraft will land, make a complete stop on the runway, and then commence a takeoff from that point. Recorded as two operations: one operation for the landing and one for the takeoff.

Stopway

An area beyond the end of a takeoff runway that is designed to support an aircraft during an aborted takeoff without causing structural damage to the aircraft. Not to be used for takeoff, landing, or taxiing by aircraft.

Straight-In Landing/Approach

A landing made on a runway aligned within 30 degrees of the final approach course following completion of an instrument approach.



T

Tactical Air Navigation (TACAN)	An ultra-high-frequency electronic air navigation system that provides suitably equipped aircraft a continuous indication of bearing and distance to the TACAN station.
Takeoff Run Available (TORA)	See Declared Distances.
Takeoff Distance Available (TODA)	See Declared Distances.
Taxilane	A taxiway designed for low-speed and precise taxiing. Usually (but not always) located outside the movement area. Taxilanes provide access to/from taxiways to aircraft parking positions and other terminal areas.
Taxiway	A defined path established for the taxiing of aircraft from one part of an airport to another.
Taxiway Design Group (TDG)	A classification of airplanes based on outer-to-outer main gear width (MGW) and cockpit-to-main gear (CMG) distance.
Taxiway Safety Area (TSA)	A defined surface alongside the taxiway that is prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway.
Terminal Instrument Procedures	Published flight procedures for conducting instrument approaches to runways under instrument meteorological conditions.
Terminal Radar Approach Control	An element of the air traffic control system responsible for monitoring the en-route and terminal segment of air traffic in the airspace surrounding airports with moderate to high levels of air traffic.
Tetrahedron	A device used as a landing direction indicator. The small end of the tetrahedron points in the direction of landing.
Threshold	The beginning of the portion of a runway available for landing. In some instances, the threshold may be displaced.
Touch-and-Go	An operation by an aircraft that lands on and departs from a runway without stopping or exiting the runway. A touch-and-go is recorded as two operations: one operation for the landing and one for the takeoff.
Touchdown	The point at which a landing aircraft makes contact with the runway surface.
Touchdown and Liftoff Area (TLOF)	A load-bearing, generally paved area, normally centered in the FATO, on which a helicopter lands or takes off.
Touchdown Zone (TDZ)	The first 3,000 feet of the runway beginning at the threshold.
Touchdown Zone Elevation (TDZE)	The highest elevation in the touchdown zone.
Touchdown Zone Lighting	Two rows of transverse light bars located symmetrically about the runway centerline, normally at 100-foot intervals. The basic system extends 3,000 feet along the runway.
Traffic Pattern	The traffic flow that is prescribed for aircraft landing at or taking off from an airport. The components of a typical traffic pattern are the upwind leg, crosswind leg, downwind leg, base leg, and final approach.



U

Uncontrolled Airport	An airport without an airport traffic control tower at which the 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 communication facility that may provide airport information at certain airports. Locations and frequencies of UNICOMs are shown on aeronautical charts and publications.
Unmanned Aircraft System (UAS)	An unmanned aircraft and the equipment necessary for the safe and efficient operation of that aircraft. An unmanned aircraft is a component of a UAS. Defined by statute as an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft (Public Law 112-95, Section 331(8)).
Upwind Leg	A flight path parallel to the landing runway in the direction of landing. (See Traffic Pattern.)

V

Vector	A heading issued to an aircraft to provide navigational guidance by radar.
Very High Frequency Omnidirectional Range (VOR)	A ground-based electronic navigation aid transmitting very-high-frequency navigation signals, 360 degrees in azimuth, oriented from magnetic north. Used as the basis for navigation in the NAS. The VOR periodically identifies itself by Morse code and may have an additional voice identification feature.
Very High Frequency Omnidirectional Range/Tactical Air Navigation (VORTAC)	A navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance-measuring equipment (DME) at one site.
Victor Airways	A system of established routes that run along specified VOR radials from one VOR station to another.
Visual Approach	An approach wherein an aircraft on an IFR flight plan, operating in VFR conditions under the control of an air traffic control facility with an air traffic control authorization, may proceed to the airport of destination in VFR conditions.
Visual Approach Slope Indicator (VASI)	An airport lighting facility that provides vertical visual approach slope guidance to aircraft during approach to landing. Now obsolete and being replaced with the PAPI.
Visual Flight Rules (VFR)	Rules that govern the procedures for conducting flight under visual conditions. The term VFR is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. Also used by pilots and controllers to indicate type of flight plan.
Visual Meteorological Conditions (VMC)	Meteorological conditions expressed in terms of specific visibility and ceiling conditions that are equal to or greater than the threshold values for instrument meteorological conditions.



V *(continued)*

Visual Runway	A runway without an existing or planned instrument approach.
VOR	See Very High Frequency Omnidirectional Range (VOR).
VORTAC	See Very High Frequency Omnidirectional Range/Tactical Air Navigation (VORTAC).

W

Warning Area	See Special-Use Airspace.
Wide Area Augmentation System (WAAS)	An enhancement of the GPS that includes integrity broadcasts, differential corrections, and additional ranging signals for the purpose of providing the accuracy, integrity, availability, and continuity required to support all phases of flight.
Windsock/Wind Cone	A visual aid that indicates the prevailing wind direction and intensity at a particular location.



Abbreviations

AAM	advanced air mobility
AC	advisory circular
ACIP	airport capital improvement program
ADF	automatic direction finder
ADG	airplane design group
ADS-B	automatic dependent surveillance–broadcast
AFSS	automated flight service station
AGL	above ground level
AIA	annual instrument approach
AIP	Airport Improvement Program
AIR-21	<i>Wendell H. Ford Aviation Investment and Reform Act for the 21st Century</i>
ALS	approach lighting system
ALSF-1	standard 2,400-foot high intensity approach lighting system with sequenced flashers (CAT I configuration)
ALSF-2	standard 2,400-foot high intensity approach lighting system with sequenced flashers (CAT II configuration)
AOA	Aircraft Operations Area
APRC	approach reference code
APV	instrument approach procedure with vertical guidance
ARC	airport reference code
ARFF	aircraft rescue and firefighting
ARP	airport reference point
ARTCC	air route traffic control center
ASDA	accelerate-stop distance available
ASR	airport surveillance radar
ASOS	automated surface observation station
ASV	annual service volume
ATC	air traffic control
ATCT	airport traffic control tower
ATIS	automated terminal information service
AVGAS	aviation gasoline; typically 100 low lead (100LL)
AWOS	automated weather observation station
BRL	building restriction line
CFR	Code of Federal Regulations
CIP	capital improvement plan/program
DME	distance measuring equipment
DNL	day-night average sound level
DPRC	departure reference code
DWL	runway weight-bearing capacity of aircraft with dual-wheel type landing gear
DTWL	runway weight-bearing capacity of aircraft with dual-tandem type landing gear
eVTOL	electric vertical takeoff and landing aircraft
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FBO	fixed base operator
FY	fiscal year
GA	general aviation
GPS	global positioning system
GS	glideslope
HIRL	high intensity runway edge lighting
IFR	instrument flight rules (FAR Part 91)
ILS	instrument landing system
IM	inner marker



LDA	localizer type directional aid
LDA	landing distance available
LIRL	low intensity runway edge lighting
LMM	compass locator at middle marker
LNAV	lateral navigation
LOC	localizer
LOM	compass locator at outer marker
LP	localizer performance
LPV	localizer performance with vertical guidance
MALS	medium intensity approach lighting system
MALSR	MALS with runway alignment indicator lights
MALSF	MALS with sequenced flashers
MIRL	medium intensity runway edge lighting
MITL	medium intensity taxiway edge lighting
MLS	microwave landing system
MM	middle marker
MOA	military operations area
MSL	mean sea level
MTOW	maximum takeoff weight
NAVAID	navigational aid
NDB	non-directional radio beacon
NEPA	<i>National Environmental Policy Act</i>
nm	nautical mile (6,076.1 feet)
NPDES	National Pollutant Discharge Elimination System
NPIAS	<i>National Plan of Integrated Airport Systems</i>
NPRM	notice of proposed rulemaking
ODALS	omnidirectional approach lighting system
OFA	object free area
OFZ	obstacle free zone
OM	outer marker
PAC	planning advisory committee
PAPI	precision approach path indicator
PFC	passenger facility charge
PFC	porous friction course
PCI	pavement condition index
PCL	pilot-controlled lighting
PIW	public information workshop
POFZ	precision object free zone
PVC	poor visibility conditions
RCO	remote communications outlet
RDC	runway design code
REIL	runway end identification lighting
RNAV	area navigation
RPAS	remotely piloted aircraft system
RPZ	runway protection zone
RSA	runway safety area
RTR	remote transmitter/receiver
RVR	runway visual range
RVZ	runway visibility zone
SALS	short approach lighting system
SASP	state aviation system plan
SEL	sound exposure level



SID	standard instrument departure
SM	statute mile (5,280 feet)
SRE	snow removal equipment
SSALF	simplified short approach lighting system with runway alignment indicator lights
STAR	standard terminal arrival route
SWL	runway weight-bearing capacity for aircraft with single-wheel tandem type landing gear
TAC	technical advisory committee
TACAN	tactical air navigation
TAF	FAA <i>Terminal Area Forecast</i>
TDG	taxiway design group
TFMSC	FAA <i>Traffic Flow Management System Counts</i>
TLOF	touchdown and liftoff
TDZ	touchdown zone
TDZE	touchdown zone elevation
TODA	takeoff distance available
TORA	takeoff run available
TRACON	terminal radar approach control
UAS	unmanned aircraft system
VASI	visual approach slope indicator
VFR	visual flight rules (FAR Part 91)
VHF	very high frequency
VOR	very high frequency omnidirectional range
VORTAC	very high frequency omnidirectional range/tactical air navigation
WAAS	wide area augmentation system