

# GLOSSARY OF TERMS



**Common Terms, Abbreviations, Acronyms, and Initialisms .....2-1**



## CHAPTER THIRTEEN

# GLOSSARY

### 13.1. Common Terms, Abbreviations, Acronyms, and Initialisms

This glossary was compiled using a variety of sources such as the *Pilot/Controller Glossary*, the *Pilot's Handbook of Aeronautical Knowledge*, and several advisory circulars published by the FAA as well as relevant laws and regulations. It is intended to provide the public with a general understanding of these common aviation terms and is not meant to include the exact technical or legal definition.

## A

**AAC** see aircraft approach category

**AAGR** average annual growth rate

**AATF** Airport and Airway Trust Fund

**above ground level (AGL)** The elevation of a point or surface above the underlying surface.

**AC** see advisory circular

**access road** Small airport roads typically used for maintenance, delivery, rescue, and aircraft service vehicles.

**ACHP** Advisory Council on Historic Preservation

**ACIP** see Airports Capital Improvement Plan

**ACS** see American Community Survey

**active aircraft** An aircraft registered with the FAA that has been flown at least one hour during the year.

**ADAP** Airport Development Aid Program

**ADG** see airplane design group

**ADO** see airports district office

**ADS-B** see automatic dependent surveillance-broadcast

**advisory circular (AC)** Publications issued by the FAA to help explain regulations, best practices, or other information useful to the aviation community.

**AEDT** see Aviation Environmental Design Tool

**AGL** see above ground level

**AIP** see Airport Improvement Program

**air taxi** On-demand, unscheduled flights typically offered for sightseeing purposes or on a chartered basis as well as mail or cargo delivery. (see Part 135)

**air traffic control (ATC)** A service provided by ground-based personnel to help guide pilots and provide for the safe and orderly flow of aircraft in congested airspace.

**air transport pilot (ATP)** The type of certification required to fly chartered and commercial flights.

**aircraft** Any device intended to be used for flight such as an airplane, drone, glider, or helicopter.

**aircraft approach category (AAC)** A method of grouping aircraft based on the speed they travel when configured for landing. (Typically 1.3 times the stall speed.) The AAC of the critical aircraft is often used to determine design standards. In general, aircraft with slower approach speeds require smaller facilities and those with faster approach speeds require larger facilities.

**aircraft operation** A landing, takeoff, or touch-and-go procedure conducted on a runway.

**aircraft rescue and fire fighting (ARFF)** A special category of fire fighting that involves incident response, hazard mitigation, evacuation, and rescue of passengers and crew of an aircraft involved in aviation accidents and incidents.

**airfield** The portion of an airport that contains the facilities necessary for aircraft operations such as runways and taxiways.

**airplane design group (ADG)** A method of classifying aircraft based on wingspan and tail height.

**Airport and Airway Trust Fund (AATF)** A fund created by the Airport and Airway Revenue Act of 1970 to provide a dedicated source of funding for the U.S. aviation system that was independent of the General Fund.

**airport beacon** A lighted navigation aid indicating the location of the airport. (Also referred to as a rotating beacon.)

**airport elevation** The highest point of an airport's usable runways. Typically measured in feet above mean sea level (MSL).

**Airport Improvement Program (AIP)** The program used by the FAA to provide grants for the planning and development of public-use airports included in the National Plan of Integrated Airport Systems (NPIAS).

**airport layout plan (ALP)** A scaled drawing or set of drawings of both current and planned airport facilities.

**airport master plan** A comprehensive study of an airport that usually describes the short-term, medium-term, and long-term development plans for meeting future aviation demand.

**airport reference point (ARP)** The approximate center of all usable runways at an airport.

**airport sponsor** The entity that is legally and financially responsible for the management and operation of an airport. An airport sponsor is typically a public agency such as a city or county.

**airport traffic control tower (ATCT)** The facility used by air traffic control personnel to provide air traffic control services to aircraft operating in the vicinity of the airport and to aircraft operating within the airport's movement area.

**Airports Capital Improvement Plan (ACIP)** The primary planning tool used by the FAA for identifying and prioritizing critical airport development for the National Airspace System. It also serves as the basis for distributing grant funds under the Airport Improvement Program (AIP).

**airports district office (ADO)** The local office of the FAA that coordinates planning and construction projects.

**airside** Facilities and areas located at an airport that support aircraft activities (e.g., runways, hangars, NAVAIDS).

**ALP** see airport layout plan

**ALS** see approach light system

**American Community Survey (ACS)** An ongoing survey conducted by the U.S. Census Bureau that includes a variety of socioeconomic data.

**annual service volume (ASV)** The maximum number of annual operations an airport could reasonably accommodate with an acceptable level of delay.

**approach light system (ALS)** A type of visual navigation aid that help pilots locate the runway as they transition from instrument flight to visual flight. The sophistication and configuration of the approach light system varies based on the type of runway and approach available.

**approach surface** An imaginary three dimensional surface, which is longitudinally centered on the extended runway centerline, that begins 200 feet from the approach-end of the runway and extends outward and upward. The slope and size vary based on the type of runway and approach available. (see Part 77)

**approach with vertical guidance (APV)** An instrument approach based on a navigation system that provides course and glidepath deviation information but does not meet the standards necessary to be a precision approach.

**apron** An area at an airport intended to accommodate aircraft for purposes of loading or unloading passengers or cargo, refueling, parking, or maintenance. Also referred to as a ramp.

**APV** approach with vertical guidance

**area navigation (RNAV)** A method of navigation that permits aircraft operations on any flight path within the coverage area of ground-based or space-based navigation aids or within the limits of self-contained navigation aids.

**ARFF** see aircraft rescue and fire fighting

**ARP** see airport reference point

**ARPA** American Rescue Plan Act

**ASOS** see automated surface/weather observing system

**ASV** see annual service volume

**ATC** see air traffic control

**ATCT** airport traffic control tower

**ATP** see airline transport pilot

**automated surface/weather observing system (ASOS/AWOS)** Weather reporting system that provides surface weather observations every minute via digitized voice broadcasts and printed reports.

**automatic dependent surveillance–broadcast (ADS–B)** Equipment on an aircraft that determines its position via satellite navigation or other sensors and periodically broadcasts it so can be tracked by air traffic control.

**avgas** see aviation gasoline

**aviation gasoline (avgas)** The type of fuel used in small aircraft within the general aviation community. The two main types are avgas 100 and a low-lead version called avgas 100LL.

**AWOS** see automated surface/weather observing system

## B

**based aircraft** Operational and airworthy aircraft based at an airport for the majority of the year.

**BGEPA** Bald and Golden Eagle Protection Act

**blast pad** A surface adjacent to the end of a runway provided to reduce the erosive effect of jet blast and propeller wash.

**BLM** U.S. Bureau of Land Management

**BLS** U.S. Bureau of Labor Statistics

**BMP** best management practices

**building restriction line (BRL)** A line on the airport layout plan identifying suitable building area locations at airports.

## C

**C & D** construction and demolition

**CAA** Clean Air Act

**CAC** community advisory committee

**CAGR** see compound annual growth rate

**capital improvement plan (CIP)** A community planning and fiscal management tool used to coordinate the timing and financing of capital improvement projects for a multi-year period.

**CARES** Coronavirus Aid, Relief, and Economic Security Act

**categorical exclusion (CATEX)** Documentation when a proposed action can be categorically excluded from a detailed environmental analysis because it meets certain criteria that a federal agency has previously determined normally has no significant environmental impact. (see NEPA)

**CCIFC** Color Country Interagency Fire Center

**CDC** Cedar City Regional Airport

**CEQ** Council on Environmental Quality

**CERCLA** Comprehensive Environmental Response, Compensation, and Liability Act

**CFI** certified flight instructor

**CFR** Code of Federal Regulations

**CIP** see capital improvement plan

**cockpit to main gear (CMG)** The distance from the pilot's eye to the main gear turn center.

**commercial service airport** Publicly owned airports with scheduled passenger service that have at least 2,500 passenger enplanements per calendar year.

**common traffic advisory frequency (CTAF)**

The VHF radio frequency used for air-to-air communications at non-towered airports or at airports when the control tower is not operating.

**commuter operations** Typically shorter flights provided by small, boutique airlines offered on a limited schedule basis. Commuter airlines operate according to published flight schedules with at least five round trips per week.

**compound annual growth rate (CAGR)** The average rate of annual growth for a given period.

**conical surface** An imaginary three dimensional surface that encircles the horizontal surface and extends outward for 4,000 feet and upward at a slope of 20 to 1. (see Part 77)

**controlled airspace** The area in which some or all aircraft may be subject to air traffic control to promote safe and expeditious flow of air traffic.

**critical aircraft** The most demanding type of aircraft (or group of aircraft with similar characteristics) that make regular use of the airport. Regular use is defined as 500 annual operations.

**crosswind** Wind that is not parallel to a runway centerline or to an aircraft's intended flight path.

**crosswind component** A wind component that is at a right angle to the longitudinal axis of the runway or the flight path of the aircraft.

**crosswind runway** An additional runway built parallel to the direction of the prevailing crosswinds to make it safer for small aircraft to land when strong crosswinds made landing on the primary runway difficult.

**CRRSAA** Coronavirus Response and Relief Supplemental Appropriation Act

**CTAF** see common traffic advisory frequency

**CWA** Clean Water Act

## D

**DA** decision altitude (see minimum descent altitude)

### **day-night average sound level (DNL)**

The standard metric used to reflect a person's cumulative exposure to sound for an average 24-hour period based on an airport's annual aircraft operations. To account for a higher sensitivity to noise exposure at night, DNL calculations add a penalty of ten decibels for flights occurring between 10 p.m. and 7 a.m.

**DBE** disadvantaged business enterprise

**decibel (dB)** Sound is measured in units called decibels. The higher the decibel level, the louder the noise.

**DEQ** Department of Environmental Quality

**distance measuring equipment (DME)** An electronic navigation system that indicates the number of nautical miles between an aircraft and a ground station or waypoint.

**DNL** day-night equivalent sound level

**DOT** Department of Transportation

**DW** dual wheel landing gear (see landing gear)

## E

**EAS** see Essential Air Service

**effective runway gradient** The difference between the highest and lowest elevations of the runway centerline divided by the runway length.

**elevation** see airport elevation

**environmental assessment (EA)** Determines whether or not a federal action has the potential to cause significant environmental effects. (see NEPA)

### **environmental impact statement (EIS)**

Determines if a major federal action will significantly affect the quality of the human environment. The regulatory requirements for an EIS are more detailed and rigorous than the requirements for an EA. (see NEPA)

**EPA** Environmental Protection Agency

**ESA** Endangered Species Act

**Essential Air Service (EAS)** A program overseen by the U.S. Department of Transportation (USDOT) that provides subsidies to airlines that serve small communities that otherwise would not receive scheduled air service.

## F

**FAA** see Federal Aviation Administration

**FAAP** Federal-Aid Airport Program

**FAR** Federal Aviation Regulation

**FBO** see fixed base operator

**FCT** federal contract tower

**Federal Aviation Administration (FAA)** The branch of the U.S. Department of Transportation responsible for the development of airports and the National Airspace System.

**FEMA** Federal Emergency Management Agency

**Finding of No Significant Impact (FONSI)** A public decision document that briefly describes why the project will not have any significant environmental effect and will not require the preparation of an environmental impact statement. (see NEPA)

**FIRM** flood insurance rate map

**fixed base operator (FBO)** A business that operates at an airport and provides a wide range of services. These services are typically aimed at general aviation customers and can include aircraft fueling, parking, servicing, charter flights, aircraft rentals, maintenance, hangar rentals, flight instruction, pilot lounge, conference room facilities, car rental arrangements, and more.

**fleet mix** The types of aircraft that frequent an airport and that need to be considered when planning airport facilities.

**flight plan** Information relating to the intended flight of an aircraft that is filed electronically, orally, or in writing with air traffic control.

**flight service stations (FSS)** Air traffic facilities that provide pilots with weather and aeronautical information.

**FONSI** see Finding of No Significant Impact

**FPPA** Farmland Protection Policy Act

**FSS** see flight service station

**FY** fiscal year

## G

**GA** see general aviation

**GAMA** General Aviation Manufacturers Association

**GDP** gross domestic product

**general aviation (GA)** The segment of aviation that encompasses all aspects of civil aviation except certified air carriers and other commercial operators such as airfreight carriers.

**general aviation airport** A public airport that has less than 2,500 passenger enplanements per calendar year. These airports typically support personal and business aircraft, medical flights, aerial fire fighting, law enforcement, disaster relief, provide access to remote communities, and more.

**geographic information system (GIS)** A computer system for developing maps connected to all types of data and are used to manage, analyze, and visualize that data in relation to its location. At airports, these types of smart maps are often used to help manage airport infrastructure such as runway pavements, signage, or utilities.

**GHG** greenhouse gas

**GIS** see geographic information system

**glideslope (GS)** Part of the instrument landing system that provides vertical guidance to aircraft by projecting a radio beam upward at an angle of approximately three degrees from the approach end of a runway.

**global positioning system (GPS)** A navigation system that uses satellites rather than ground-based transmitters to determine location information.

**ground support equipment (GSE)** Vehicles and equipment used to service aircraft between flights. This can include services such as refueling, loading luggage and freight, transporting passengers, refreshing lavatories, and deicing.

**GS** see glideslope

**GSE** see ground support equipment

## H

**hangar** A building used to store aircraft.



**HIRL** high-intensity runway lights (see runway edge lighting system)

**horizontal surface** An imaginary surface located 150 feet above the established airport elevation that encircles the primary surface. The size of the horizontal surface is based on the type of runway and approach available. (see Part 77)

## I

**IA-OFA** inner-approach object free area (see object free area)

**IAP** see instrument approach procedure

**IFR** see instrument flight rules

**IFR conditions** When weather conditions have significantly reduced visibility making it unsafe to pilot an aircraft under flight visual flight rules.

**IJA** Infrastructure Investment and Jobs Act (Also known as the bipartisan infrastructure law or BIL.)

**ILS** see instrument landing system

**IMC** see instrument meteorological conditions

**Information for Planning and Consultation (IPaC)** A digital project planning tool that provides information to help determine whether a project will affect federally-listed species, habitat that has been designated as critical, or other sensitive resources managed by the U.S. Fish and Wildlife Service.

**instrument approach procedure (IAP)** A series of predetermined maneuvers pilots use to align their aircraft with the runway when flying under IFR in low visibility conditions.

**instrument flight rules (IFR)** Rules and regulations established by the Federal Aviation Administration to govern flight using electronic navigation during conditions in which flight by visual reference is not safe.

**instrument landing system (ILS)** An electronic system used by pilots when conducting a precision instrument approach procedure that provides both horizontal and vertical guidance to a specific runway. The system is often comprised of multiple components with guidance information provided by a localizer or glideslope, distance information provided by a marker beacon or distance measuring equipment, and visual information provided by approach lights, touchdown and centerline lights, or runway lights.

**instrument meteorological conditions (IMC)** Weather conditions that require pilots to fly under instrument flight rules rather than visual flight rules.

**IPaC** see Information for Planning and Consultation

**itinerant operations** Flights that originate or terminate at different airports.

**IT-OFZ** inner-transitional obstacle free zone (see obstacle free zone)

## K

**KIAS** knots of indicated airspeed

**knot** A unit of speed equal to one nautical mile per hour.

## L

**landing gear** Any part of an aircraft used for landing. Typical landing gear configurations include single wheel (SW), dual wheel (DW), triple wheel (TW), and quadruple wheel (QW) configurations which can also be repeated in tandem.

**large aircraft** Any aircraft with a maximum takeoff weight (MTOW) of more than 12,500 pounds.

**LAT** large air tanker

**lateral navigation (LNAV)** Azimuth (i.e., directional) navigation without vertical navigation.

**light sport aircraft (LSA)** A small, lightweight aircraft that is relatively simple to fly with a maximum gross takeoff weight of 1,320 pounds and a maximum of two seats.

**LIRL** low-intensity runway lights (see runway edge lighting system)

**LNAV** see lateral navigation

**LOC** see localizer

**local operations** Flights taking place within the local traffic pattern, the airport line of sight, the local practice area, or those that execute simulated instrument approaches or low passes at the airport.

**localizer (LOC)** A navigational aid that is one component of instrument landing systems. It transmits signals that aircraft interpret and display on the cockpit indicator to guide the pilot until the runway is in sight.

**localizer performance with vertical guidance (LPV)** A type of approach that takes advantage of the refined accuracy of wide area augmentation system (WAAS) lateral and vertical guidance.

**LSA** see light sport aircraft

## M

**main gear width (MGW)** The distance from outer edge to outer edge of the widest set of main gear tires.

**MALSR** medium-intensity approach lighting system with runway alignment indicator lights

**markings** Paint applied to runways, taxiways, holding positions, and other airport surfaces to help pilots and operators of ground support equipment while maneuvering within the movement area.

**master plan** see airport master plan

**maximum takeoff weight (MTOW)** The maximum weight for an aircraft at which the pilot is allowed to attempt to take off due to structural or other limits.

**MBTA** Migratory Bird Treaty Act

**MDA** see minimum descent altitude

**mean sea level (MSL)** The average height of the surface of the sea for all stages of tide.

**MGW** see main gear width

**minimum descent altitude (MDA)** The minimum altitude a pilot is authorized to descend to on a non-precision approach.

**MIRL** medium-intensity runway lights (see runway edge lighting system)

**MITL** medium-intensity taxiway lights

**movement area** The runways, taxiways, and other areas of an airport used by aircraft for taxiing, takeoff, and landing that are under the control of an air traffic control tower. It does not include non-movement areas such as those used for loading, refueling, parking, or maintenance.

**MRO** maintenance, repair, overhaul

**MSA** metropolitan statistical area

**MSL** see mean sea level

**MSW** municipal solid waste

**MTOW** see maximum takeoff weight

## N

**NAAQS** national ambient air quality standards

**National Airspace System (NAS)** The common network of U.S. airspace. It consists of air navigation facilities, equipment and services, airports or landing areas; aeronautical charts and technical information; and rules, regulations, and procedures.

**National Environmental Policy Act (NEPA)** Federal legislation requiring federal agencies to assess and document the environmental effects of their proposed actions prior to making decisions. Depending on the severity of the impact, these documents are referred to as a categorical exclusion, an environmental assessment, or an environmental impact statement.

**National Plan of Integrated Airport Systems (NPIAS)** An inventory of all existing and proposed commercial service airports, reliever airports, and selected public-owned general aviation airports. In addition to discussing the roles these airports currently serve, the NPIAS is used by the FAA in administering the Airport Improvement Program (AIP). It is updated by the FAA every two years.

**nautical mile (NM)** The most common measurement used for distance in aviation. A nautical mile is slightly longer than a land-measured mile (i.e., statute mile) and is equal to approximately 1.151 statute miles or 6,076 feet.

**nautical mile per hour** The most common measurement for aircraft speed. One knot is approximately 1.151 miles per hour.

**NAVAID** see navigational aid

**navigable airspace** The airspace at or above minimum altitudes of flight that includes the airspace needed to ensure safety in the takeoff and landing of aircraft.

**navigational aid (NAVAID)** Any facility used for the purpose of guiding or controlling flight such as lighting systems; signaling, radio direction-finding, or other electronic communication devices; or any other facility with a similar purpose.

**NEPA** see National Environmental Policy Act

**NHPA** National Historic Preservation Act

**NOAA** National Oceanic and Atmospheric Administration

**noise contour** A map showing how noise exposure can vary over extended areas. They are useful for identifying areas exposed to significant aircraft noise surrounding an airport.

**nonprecision approach** A standard instrument approach procedure in which only horizontal guidance is provided.

**notice to air missions (NOTAM)** A notice containing information essential to pilots or other personnel concerned with flight operations that is not known far enough in advance to be publicized by other means.

**NPDES** National Pollutant Discharge Elimination System

**NPIAS** see National Plan of Integrated Airport Systems

**NPS** National Park Service

**NRCS** Natural Resources Conservation Service

**NRHP** National Register of Historic Places

**NTSB** National Transportation Safety Board

**NWI** national wetlands inventory

**NWS** National Weather Service

## O

**O & M** operations and maintenance

**object free area (OFA)** An area centered on a runway, taxiway, or taxilane centerline that is free of objects except those required for air navigation or aircraft ground maneuvering purposes.

**obstacle free zone (OFZ)** The airspace below 150 feet located along the runway and extended runway centerline that is required to be clear of all objects except those required for air navigation or aircraft ground maneuvering purposes.

**obstruction** An object that penetrates any imaginary surface described in Federal Aviation Regulation Part 77. Obstructions are presumed to be hazards to air navigation until an FAA study has determined otherwise. (see Part 77)

**OFA** see object free area

**OFZ** see obstacle free zone

**OPBA** operations per based aircraft

**operation** see aircraft operation

**Operations Network (OPSNET)** The official FAA source for air traffic operations and delay data.

**orientation** see runway orientation

## P

**PAPI** see precision approach path indicator

**parallel taxiway** A taxiway that runs parallel to a runway.

**Part 135** The FAA grants the authority to operate on-demand, unscheduled air service in the form of Part 135 certificates. Air carriers authorized to operate with a 135 certificate provide a critical service to passengers and often provide a lifeline to remote populations. Part 135 is the term most people use when referring to Title 14 of the Code of Federal Regulations (CFR), Part 135, *Operating Requirements: Commuter and On Demand Operations and Rules Governing Persons On Board Such Aircraft*.

**Part 139** Airports that meet certain requirements must have an airport operating certificate issued by the FAA. It is commonly associated with commercial service airports. Part 139 is the term most people use when referring to Title 14 of the Code of Federal Regulations (CFR), Part 139, *Certification of Airports*.

**Part 77** Establishes standards and requirements for objects affecting navigable airspace. Objects are considered to be obstructions when they exceed certain heights or penetrate the imaginary surfaces described within Part 77 including the approach surface, conical surface, horizontal surface, primary surface, and the transitional surface. Part 77 is the term most people use when referring to Title 14 of the Code of Federal Regulations (CFR), Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*.

**pavement classification rating (PCR)** A number that expresses the carrying capacity of a pavement for unrestricted operations.

**PCI** pavement condition index

**PCI** per capita income

**PCN** pavement classification number

**PCR** see pavement classification rating

**peak hour** The busiest hour in a day. It is also known as the design hour because this information is used to determine if airport facilities are capable of accommodate existing and forecasted demand.

**PMP** pavement management program

**POFZ** precision obstacle free zone (see obstacle free zone)

**precision approach** A standard instrument approach procedure in which both vertical and horizontal guidance is provided.

**precision approach path indicator (PAPI)**

A row of lights normally installed on the left side of a runway that provides visual guidance during an approach to the runway. A pilot on the correct glideslope path will see two white and two red lights.

**primary surface** An imaginary surface longitudinally centered on a runway. The specific dimensions of the primary surface is dependent on the type of runway. (see Part 77)

# R

**ramp** see apron

**RCRA** Resource Conservation Recovery Act

**RDC** see runway design code

**regional jet** A commercial aircraft that typically carries fewer than 100 passengers.

**REIL** see runway end identifier lights

**RNAV** see area navigation

**ROFA** runway object free area (see object free area)

**ROFZ** runway obstacle free zone (see obstacle free zone)

**rotating beacon** see airport beacon

**RPZ** see runway protection zone

**RSA** see runway safety area

**runway** A defined rectangular area at an airport designated for landing and takeoff.

**runway design code (RDC)** The design standards that apply to a particular runway based on the type of aircraft that will be using the runway.

**runway edge lighting system** A visual navigation aid used to outline the edges of a runway during periods of darkness or reduced visibility. These systems are classified according to the intensity or brightness they are capable of producing which include high-intensity runway lights (HIRL), medium-intensity runway lights (MIRL), and the low-intensity runway lights (LIRL). HIRL and MIRL systems typically have variable intensity controls while LIRL systems normally have only one intensity setting.

**runway end identifier lights (REIL)** A pair of synchronized flashing lights located on each side of the runway threshold to aid pilots in identifying the approach end of a runway.

**runway incursion** Any occurrence at an airport involving the incorrect presence of an aircraft, vehicle, or person on the runway.

**runway orientation** The magnetic bearing of the runway centerline.

**runway protection zone (RPZ)** A trapezoidal area located at the end of a runway that is centered on the extended runway centerline. It should be kept clear of incompatible uses and activities to enhance the protection of people and property. The dimensions of the runway protection zone varies based on the type of runway and approach available.

**runway safety area (RSA)** A defined surface surrounding the runway that is typically 500 feet wide and extending 1,000 feet beyond each runway end that should be kept cleared, graded, free of potential hazards or objects except those required to be located within the runway safety area.

**runway threshold** The designated beginning of a runway. The term threshold always refers to landing rather than takeoff.

**runway visual range (RVR)** A value that represents the horizontal visual range a pilot sees down the runway from the approach end.

## S

**SEAT** single engine air tanker

**segmented circle** A system of markers used by pilots to identify the aerial traffic pattern when flying under visual flight rules (VFR).

**SHPO** state historical preservation office

**SIDA** security identification display area

**small aircraft** Any aircraft with a maximum takeoff weight (MTOW) of 12,500 pounds or less.

**socioeconomic** Information relating to the interaction of social and economic factors.

**SRE** snow removal equipment

**statute mile** The formal or legal name given to the land-measured mile to distinguish it from a nautical mile. A statute mile is equal to 5,280 feet.

**SUU** Southern Utah University

**SW** single wheel landing gear (see landing gear)

## T

**T-hangar** An aircraft hangar in which aircraft are parked tail to tail in the T-shaped space left by the other aircraft.

**TAC** technical advisory committee

**TAF** see terminal area forecast

**taxilane** Areas intended for low speed and precise movement of aircraft that allow aircraft to safely access taxiways and taxiway connectors from non-movement areas.

**taxiway design group (TDG)** A method of classifying aircraft based on the dimensions of the main gear width (MGW) and cockpit to main gear distance (CMG).

**taxiway edge safety margin (TESM)** The distance between the outer edge of an airplane's landing gear and the edge of the taxiway pavement when its nose gear is on the taxiway centerline.

**taxiway or taxilane safety area (TSA)** A defined surface located alongside the taxiway prepared and suitable for reducing the risk of damage to an aircraft unintentionally departing the taxiway.

**taxiway or taxiway connector** Defined paths that allow aircraft to safely and efficiently get to and from the runway without interfering with takeoffs or landings.

**TDG** see taxiway design group

**Terminal Area Forecast (TAF)** The official FAA forecast of aviation activity for all U.S. airports included in the National Plan of Integrated Airport Systems (NPIAS).

**TESM** see taxiway edge safety margin

**TFMSC** see traffic flow management system counts

**THPO** tribal historical preservation office

**threshold lights** A series of lights located at a runway threshold that emit green light outward from the runway and emit red light toward the runway to mark the ends of the runway.

**tiedowns** Aircraft parking positions with fixed anchor points for securing aircraft.

**TODA** takeoff distance available

**TOFA** taxiway / taxilane object free area (see object free area)

**TORA** takeoff run available

**touch-and-go** A maneuver in which a pilot lands the aircraft and then departs without coming to a complete stop or exiting the runway. These are typically performed to build piloting skills and expertise.

**touchdown** The point at which an aircraft first makes contact with the landing surface.

**touchdown zone** The first 3,000 feet of a runway intended to be where a landing aircraft first makes contact with the landing surface.

**Traffic Flow Management System Counts (TFMSC)** An FAA database that provides information on traffic counts for flights operated under instrument flight rules (IFR) and flights detected by the National Airspace System.

**transient operations** Flights performed by aircraft not based at the airport.

**transitional surface** An imaginary surface that extends outward and upward from the primary and approach surfaces at right angles to each of the runway centerlines at a slope of seven feet horizontally for each foot vertically. The transitional surface ends where it meets the horizontal surface at an elevation of 883 feet. (see Part 77)

**TSA** see taxiway or taxilane safety area

**TSA** Transportation Security Administration

## U

**UDOT** Utah Department of Transportation

**USACE** U.S. Army Corps of Engineers

**USC** United States Code

**USDA** U.S. Department of Agriculture

**USFS** U.S. Forest Service

**USFWS** U.S. Fish and Wildlife Service

**USGS** U.S. Geological Survey

## V

**VASI** see visual approach slope indicator

**very high frequency omnidirectional range (VOR)** A ground-based NAVAID aligned with magnetic north that transmits azimuth information for high and low altitude routes and airport approaches.

**VFR** see visual flight rules

**VHF** very high frequency

**visual approach** An air traffic control authorization for an aircraft on an IFR flight plan to proceed to the airport and make an approach using visual references rather than an instrument approach.

**visual approach slope indicator (VASI)** A type of approach light system normally installed on the left side of a runway that provides visual guidance during an approach to the runway. A pilot on the correct glideslope path will see a set of red lights over a set of white lights.

**visual flight rules (VFR)** Rules and regulations established by the Federal Aviation Administration to govern flight using visual reference.

**visual meteorological conditions (VMC)** Weather conditions expressed in terms of visibility, distance from clouds, and ceiling equal to or better than specified minimum during which flight under visual flight rules (VFR) is permitted.

**visual runway** A runway without an instrument approach or departure procedure. For the purpose of this AC, consider runways with circling-only approaches as visual runways.

**VLAT** very large air tanker

**VMC** see visual meteorological conditions

**VNAV** vertical navigation

**VOR** see very high frequency omnidirectional range

**VOR-DME** When the very high frequency omnidirectional range (VOR) is located alongside distance measuring equipment (DME), it is referred to as a VOR-DME. Together, they transmit both azimuth and distance information to aircraft.

**VSR** vehicle service road

## W

**wide area augmentation system (WAAS)** An extremely accurate navigation system developed for civil aviation.

**wind cone or windsock** A fabric cone tube resembling a giant sock that is used as a basic indicator of wind direction and strength.

**wind rose** A diagram showing wind direction, strength, and frequency for a particular location.



# Endnotes

- 1 U.S. Department of Commerce. U.S. Census Bureau. "About the American Community Survey." January 6, 2022. <https://www.census.gov/programs-surveys/acs/about.html>.
- 2 U.S. Department of Transportation. Federal Aviation Administration. Airman Testing Standards Branch. "FAA-H-8083-25B, Pilot's Handbook of Aeronautical Knowledge, Glossary." Oklahoma City, Oklahoma. 2016. [https://www.faa.gov/regulations\\_policies/handbooks\\_manuals/aviation/phak](https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak).
- 3 U.S. Department of Transportation. Federal Aviation Administration. "Advisory Circular No: 150/5300-13B, Airport Design." March 22, 2022. [https://www.faa.gov/documentLibrary/media/Advisory\\_Circular/150-5300-13B-Airport-Design.pdf](https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5300-13B-Airport-Design.pdf).
- 4 U.S. Department of Transportation. Federal Aviation Administration. "FAA Aerospace Forecast Fiscal Years 2021-2041." Accessed April 28, 2022. [https://www.faa.gov/sites/faa.gov/files/data\\_research/aviation/aerospace\\_forecasts/FY2021-41\\_FAA\\_Aerospace\\_Forecast.pdf](https://www.faa.gov/sites/faa.gov/files/data_research/aviation/aerospace_forecasts/FY2021-41_FAA_Aerospace_Forecast.pdf).
- 5 U.S. Department of Transportation. Federal Aviation Administration. "Pilot/Controller Glossary." May 19, 2022. [https://www.faa.gov/air\\_traffic/publications/media/pgc\\_basic\\_with\\_chg\\_1\\_2\\_dtd\\_5-19-22.pdf](https://www.faa.gov/air_traffic/publications/media/pgc_basic_with_chg_1_2_dtd_5-19-22.pdf).
- 6 U.S. Environmental Protection Agency. "National Environmental Policy Act Review Process." October 25, 2021. <https://www.epa.gov/nepa/national-environmental-policy-act-review-process>.

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