

Appendix 1 – Glossary of Terms

Term – Abbreviation Definition

AAC Aircraft Approach Category

Above Mean Sea Level (AMSL) Refers to the elevation (on the ground) or altitude (in the air) of any object, relative to the average sea level datum.

ADG Airplane Design Group

Advisory Circular (AC) Guidelines published by the FAA that provide information for the public and industry. In some cases they outline acceptable means of compliance with Federal Aviation Regulations (FARs). In other cases, they provide general information. Advisory Circulars are not enforceable as are rules. However, since users sometimes face the choice of complying with an AC or spending months to get approval of a different means of complying, an AC frequently becomes mandatory for all practical purposes.

AGL Above Ground Level

AIP Airport Improvement Program

Air Navigation Aid See Navigation Aid.

*Air Quality*ⁱ In 1998, FAA revised its policy on air quality modeling procedures and identified the Emissions and Dispersion Modeling System (EDMS) as the required model to perform air quality analyses for aviation sources. This revised policy ensures the consistency and quality of aviation analyses performed for the FAA.

Air Taxi An air taxi is a for-hire passenger or cargo aircraft which operates on an on-demand basis. In the United States, air taxi and air charter operations are governed by Part 135 of the Federal Aviation Regulations (FAR), unlike the larger scheduled air carriers which are governed by more stringent standards of FAR Part 121.

Air Traffic Air traffic means aircraft operating in the air or on an airport surface, exclusive of loading ramps and parking areas.

Air Transportation Air transportation means interstate, overseas, or foreign air transportation or the transportation of mail by aircraft.

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| <i>Aircraft</i> | Aircraft means a device that is used or intended to be used for flight in the air. |
| <i>Aircraft Approach Category (AAC)</i> | As specified in 14 CFR part 97 & 97.3, AAC is a grouping of aircraft based on a reference landing speed, 1.3 times stall speed at maximum certified weight. The categories are: <ul style="list-style-type: none">• Category A: Speed less than 91 knots• Category B: Speed 91 knots or more but less than 121 knots.• Category C: Speed 121 knots or more but less than 141 knots.• Category D: Speed 141 knots or more but less than 166 knots.• Category E: Speed 166 knots or more. |
| <i>Airplane</i> | Airplane means an engine-driven fixed-wing aircraft heavier than air that is supported in flight by the dynamic reaction of the air against its wings. |
| <i>Airplane Design Group (ADG)</i> | A grouping of airplanes based on wingspan or tail height. Where an airplane is in two categories, the most demanding category should be used. The groups are as follows: <ul style="list-style-type: none">• Group I: Up to but not including 49 feet wingspan or tail height up to but not including 20 feet• Group II: 49 feet up to but not including 79 feet wingspan• Group III: 79 feet up to but not including 118 feet wingspan or tail height from 30 up to but not including 45 feet• Group IV: 118 feet up to but not including 171 feet wingspan or tail height from 45 up to but not including 60 feet• Group V: 171 feet up to but not including 214 feet wingspan or tail height from 60 up to but not including 66 feet• Group VI: 214 feet up to but not including 262 feet wingspan |
| <i>Airport Elevation</i> | The highest point on an airport's usable runway expressed in feet above mean sea level (MSL). |

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| <i>Airport Improvement Program (AIP)</i> | The Airport Improvement Program is a United States federal grant program that provides funds to airports to help improve safety and efficiency. Improvement projects relate to runways, taxiways, ramps, lighting, signage, weather stations, NAVAIDS, land acquisition, and some areas of planning. The program was established under the Airport and Airway Improvement Act of 1982. |
| <i>Airport Layout Plan</i> | An airport layout plan is a scaled drawing of existing and proposed land and facilities necessary for the operation and development of an airport. All airport carried out at a Federally obligated airport must be done in accordance with an FAA-approved ALP. The FAA-approved ALP, to the extent practicable, should conform to the FAA airport design standards existing at the time of its approval. |
| <i>Airport Noise</i> | When evaluating proposed airport projects, airport noise is often the most controversial environmental impact FAA examines. Airport development actions that change airport runway configurations, aircraft operations and/or movements, aircraft types using the airport, or aircraft flight characteristics may affect existing and future noise levels. FAA's noise analysis primarily focuses on how proposed airport actions would change the cumulative noise exposure of individuals to aircraft noise in areas surrounding the airport. |
| <i>Airport Operations Count</i> | The statistic maintained by the control tower. Basically, it is the number of arrivals and departures from the airport. Specifically, one airport operation count is taken for each land and takeoff, while two airport operation counts; i.e., one landing and one takeoff, are taken for each low approach below traffic pattern altitude, stop and go, or touch and go operation. |
| <i>Airport Overlay District</i> | An airport overlay district is design to reduce exposure of residential and other sensitive land uses to aircraft operations and their potential impacts, including noise; to reduce risks to public safety from aircraft accidents; and to discourage traffic congestion and incompatible land uses proximate to, and within airport review areas. |

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| <i>Airport Reference Code (ARC)</i> | The ARC is a coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at the airport. The airport reference code has two components relating to the airport design aircraft. The first component, depicted by a letter, is the aircraft approach category and relates to aircraft approach speed (operational characteristic). The second component depicted by a Roman numeral, is the airplane design group and relates to airplane wingspan or tail height (physical characteristics), whichever is the most restrictive. Generally, runways standards are related to aircraft approach speed, airplane wingspan, and designated or planned approach visibility minimums. Taxiway and taxilane standards are related to airplane design group. |
| <i>Airport Reference Point (ARP)</i> | The latitude and longitude of the approximate center of the airport. |
| <i>Airsides</i> | The aircraft operational side of an airport, including runways, taxiways, aircraft aprons, and their supporting infrastructure. |
| <i>AMPU</i> | Airport Master Plan Update |
| <i>AMSL</i> | Above Mean Sea Level |
| <i>AOD</i> | Airport Overlay District |
| <i>APAC</i> | Airport Planning Advisory Committee |

Approach Minimum Pilots may not operate an aircraft at any airport below the authorized MDA or continue an approach below the authorized DA/DH unless:

1. The aircraft is continuously in a position from which a descent to a landing on the intended runway can be made at a normal descent rate using normal maneuvers;
2. The flight visibility is not less than that prescribed for the approach procedure being used; and
3. At least one of the following visual references for the intended runway is visible and identifiable to the pilot:
 - Approach light system
 - Threshold
 - Threshold markings
 - Threshold lights
 - Runway end identifier lights (REIL)
 - Visual approach slope indicator (VASI)
 - Touchdown zone or touchdown zone markings
 - Touchdown zone lights
 - Runway or runway markings
 - Runway lights

Approach Procedure See Instrument Approach Procedure

Approach Visibility Minimums Lowest allowable visibility for a particular instrument approach procedure. For the purposes of RDC, visibility minimums are expressed by RVR values of 1200, 1600, 2400, and 4000 feet.

Apron The airport or apron or ramp is part of an [airport](#). It is usually the area where [aircraft](#) are parked, unloaded or loaded, refueled or boarded. Although the use of the apron is covered by regulations, such as lighting on vehicles, it is typically more accessible to users than the [runway](#) or [taxiway](#). However, the apron is not usually open to the general public and a license may be required to gain access.

ARP Airport Reference Point

ASOS Automatic Surface Observation System

ATC Air Traffic Control

- Automatic Surface Observation System (ASOS)* Automated weather reporting systems consisting of various sensors, a processor, a computer-generated voice subsystem, and a transmitter to broadcast weather data. Note: ASOS and AWOS are the same basic systems, just developed for different Federal agencies.
- Avigation Easement* An easement or right of overflight in the airspace above or in the vicinity of a particular property. It also includes the right to create such noise or other effects as may result from the lawful operation of aircraft in such airspace and the right to remove any obstructions to such overflight. Hence, avigation easement permits aircraft approaching an airport to fly at low elevations above private property. This in effect prevents the landowner's near airports from building above a set height or requires the trimming of trees. There is a real and important difference between a clearance easement and an avigation easement and that the prior existence of one does not as a matter of law preclude the possibility of inverse condemnation of the other.
- Based Aircraft* An aircraft located at an airport a majority of the time. Used for accounting purposes for federal, state and local reasons.
- Biotic Communities* For purposes of this Appendix, the term “biotic communities” means various types of flora (plants) and fauna (fish, birds, reptiles, amphibians, marine mammals, coral reefs, etc.) in a particular area. The term also means rivers, lakes, wetlands, forests, upland communities, and other habitat types supporting flora and aquatic and avian fauna.
- Building Restriction Line (BRL)* A line that identifies suitable building area locations on airports. The line represents an arbitrary elevation, selected by the planner. Thus, objects may be inside the line (closer to the runway) and still permitted, if they do not exceed.
- Category* As used with respect to the certification of aircraft, means a grouping of aircraft based upon intended use or operating limitations. Examples include: transport, normal, utility, acrobatic, limited, restricted, and provisional.
- CFR* Code of Federal Regulations
- Circling Approach* A maneuver initiated by the pilot to align the aircraft with a runway for landing when a straight in landing from an instrument approach is not possible or is not desirable.

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| <i>Civil Aircraft</i> | Civil aircraft means aircraft other than public aircraft. |
| <i>Class</i> | As used with respect to the certification of aircraft, means a broad grouping of aircraft having similar characteristics of propulsion, flight, or landing. Examples include: airplane, rotorcraft, glider, balloon, landplane, and seaplane. |
| <i>Coastal Barriers</i> | Barrier islands are geologically unstable formations and cannot support development. Yet, they protect the mainland by buffering storm or hurricane-driven winds or waves. As a result, these islands protect fish, wildlife, human life, and property along coasts and shorelines. |
| <i>Coastal Zone Management Program</i> | In accordance with Coastal Zone Management Act regulations, a letter of concurrence with federal consistency requirements (15 CFR Part 930) or a waiver is required for activities using federal funds in a municipality located within the coastal zone. |
| <i>Code of Federal Regulations (CFR)</i> | The Code of Federal Regulations (CFR) is the codification of the general and permanent rules and regulations (sometimes called administrative law) published in the Federal Register by the executive departments and agencies of the Federal Government of the United States . The CFR is published by the Office of the Federal Register , an agency of the National Archives and Records Administration . |
| <i>Commercial Operator (or operation)</i> | Commercial operator means a person who, for compensation or hire, engages in the carriage by aircraft in air commerce of persons or property, other than as an air carrier or foreign air carrier or under the authority of Part 375 of this title. Where it is doubtful that an operation is for “compensation or hire”, the test applied is whether the carriage by air is merely incidental to the person’s other business or is, in itself, a major enterprise for profit. |

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| <i>Common Traffic Advisory Frequency (CTAF)</i> | Common Traffic Advisory Frequency (CTAF) is the name given to the VHF radio frequency used for air-to-air communication at U.S. non-towered airports . Many towered airports close their towers overnight, but keeping the airport during periods when activity is very low. Pilots use the common frequency to coordinate their arrivals and departures safely, giving position reports and acknowledging other aircraft in the airfield traffic pattern . In many locations, smaller airports use pilot-controlled lighting systems when it is uneconomical or inconvenient to have automated systems or staff to turn on the taxiway and runway lights. Two common CTAF allocations are UNICOM , a licensed non-government base station that provides air-to-ground communications (and vice versa) and may also serve as a CTAF when in operation, and MULTICOM , a frequency allocation (without a physical base station) that is reserved as a CTAF for airports without other facilities. |
| <i>Compatible Land Use</i> | The compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of potential aircraft-noise impacts from the airport, as well as safety concerns with the land under airport imaginary surfaces. Most land uses occurring adjacent to and within the bounds of airport property involve aviation and commercial activities and are considered compatible with airport operations. Rural residential, agricultural and industrial (landfill) development comprise the principal land uses adjacent to airport property. Rural residential and agricultural land uses are typically regarded as compatible with standard general aviation operations. |
| <i>Construction Impacts</i> | Airport construction may cause various environmental effects primarily due to dust, aircraft and heavy equipment emissions, storm water runoff containing sediment and/or spilled or leaking petroleum products and noise. In most cases, these effects are subject to Federal, State, or local ordinances or regulations. While the long-term impacts of the proposed action are usually greater than construction impacts, sometimes construction may also cause significant short-term impacts. Descriptions of the many construction impacts associated with airport actions are often covered in the descriptions of other environmental impact categories. |
| <i>Critical Design Airplane</i> | The airplane (or family grouping of airplanes) with the longest wingspan and fastest approach speed that conducts at least 500 or more annual itinerant operations at the airport. |

CTAF Common Traffic Advisory Frequency

DA Decision Altitude

Decision Altitude (DA) A specified altitude in the precision approach, charted in feet MSL, at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

Decision Height (DH) A specified altitude in the precision approach, charted in height above threshold elevation, at which a decision must be made either to continue the approach or to execute a missed approach.

Declared Distances The distances the airport owner declares available for the airplane's takeoff run, takeoff distance, accelerate-stop distance, and landing distance requirements. The distances are:

- 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 or clearway (CWY) beyond the far end of the TORA;
- Accelerate-stop distance available (ASDA). The runway plus stopway (SWY) length declared available and suitable for the acceleration and deceleration of an airplane aborting a takeoff; and
- Landing distance available (LDA). The runway length declared available and suitable for a landing airplane.

Departure Procedure Preplanned IFR ATC departure, published for pilot use, in textual and graphic format.

Design Aircraft/Airplane See Critical Design Airplane

Displaced Threshold A threshold that is located at a point on the runway other than the designated beginning of the runway.

FAF Final Approach Fix

FAR Federal Aviation Regulation

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| <i>FAR Part 77</i> | Part 77, Objects Affecting Navigable Airspace. This part: Establishes standards for determining obstructions in navigable airspace; Sets forth the requirements for notice to the Administrator of certain proposed construction or alteration; Provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of airspace; Provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and Provides for establishing antenna farm areas. |
| <i>FAR Part 91</i> | FAR Part 91, General Operating and Flight Rules. Among other applications, this part prescribes rules governing the operation of aircraft (other than moored balloons, kites, unmanned rockets, and unmanned free balloons. |
| <i>Farmland</i> | Important farmlands include all pasturelands, croplands, and forests (even if zoned for development) considered to be prime, unique, or statewide or locally important lands. |
| <i>FBO</i> | Fixed Base Operator or Operation |
| <i>Federal Aviation Regulation (FAR)</i> | The FAR are published in Chapter 1 of Title 14 of the CFR. |
| <i>Fee Simple</i> | The absolute title to land, free of any other claims against the title, which one can sell or pass to another by will or inheritance. |
| <i>Final Approach</i> | Part of an instrument approach procedure in which alignment and descent for landing are accomplished. |
| <i>Final Approach Fix (FAF)</i> | The fix from which the IFR final approach to an airport is executed, and which identifies the beginning of the final approach segment. An FAF is designated on government charts by a Maltese cross symbol for non-precision approaches, and a lightning bolt symbol for precision approaches. |

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| <i>Fixed Base Operator (FBO)</i> | In the aviation industry, a fixed base operator (also known as fixed base of operation), or FBO, is a service center at an airport that may be a private enterprise or may be a department of the municipality that the airport serves. At a minimum, most FBOs offer aircraft fuel, oil, and parking, along with access to washrooms and telephones. Some FBOs offer additional aircraft services such as hangar (indoor) storage, maintenance, aircraft charter or rental, flight training, deicing, and ground services such as towing and baggage handling. FBOs may also offer services not directly related to the aircraft, such as rental cars, lounges, and hotel reservations. |
| <i>Fixed by Function Navigation Aid</i> | An air navigation aid (NAVAID) that must be positioned in a particular location in order to provide an essential benefit for civil aviation is fixed by function. An example is a runway light, which must by its nature be located along the edge of the runway. |
| <i>Fixed Wing Aircraft</i> | A fixed-wing aircraft is a heavier-than-air craft whose lift is generated not by wing motion relative to the aircraft, but by forward motion through the air. The term is used to distinguish from rotary-wing aircraft (rotorcraft), where the movement of the wing surfaces relative to the aircraft generates lift. |
| <i>Fleet Mix</i> | Breakout of aircraft categories (single engine, multiengine, etc.). |
| <i>Flight Path</i> | The line, course, or track along which an aircraft is flying or is intended to be flown. |
| <i>Floodplains</i> | To meet Executive Order 11988, Floodplains, and the U.S. Department of Transportation (DOT) Order 5650.2, Floodplain Management and Protection, all airport development actions must avoid the floodplain, if a practicable alternative exists. If no practicable alternative exists, actions in a floodplain must be designed to minimize adverse impact to the floodplain's natural and beneficial values. The design must also minimize the potential risks for flood-related property loss and impacts on human safety, health, and welfare. |
| <i>FONSI</i> | Finding of no Significant Impact |

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| <i>Frangible Navigation Aid</i> | A navigational aid (NAVAID) which 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. The term NAVAID includes electrical and visual air navigational aids, lights, signs, and associated supporting equipment. |
| <i>GA</i> | General Aviation |
| <i>General Aviation</i> | General aviation refers to all flights other than military and scheduled airline flights, both private and commercial. General aviation flights range from gliders and powered parachutes to large, non-scheduled cargo jet flights. As a result, the majority of the world's air traffic falls into this category, and most of the world's airports serve general aviation exclusively. |
| <i>General Aviation Airport</i> | Communities that do not receive scheduled commercial service or that do not meet the criteria for classification as a commercial service airport may be included in the NPIAS as sites for general aviation airports if they account for enough activity (usually at least 10 locally based aircraft) and are at least 20 miles from the nearest NPIAS airport. The activity criterion may be relaxed for remote locations or in other mitigating circumstances. The 2,574 general aviation airports in the NPIAS tend to be distributed on a one-per-county basis in rural areas and are often located near the county seat. These airports, with an average of 33 based aircraft, account for 40 percent of the nation's general aviation fleet. They are the most convenient source of air transportation for about 19 percent of the population and are particularly important to rural areas. |
| <i>Global Positioning System</i> | A space-based radio-navigation system consisting of a constellation of satellites and a network of ground stations used for monitoring and control. A minimum of 24 GPS satellites orbit the Earth at an altitude of approximately 11,000 miles providing users with accurate information on position, velocity, and time anywhere in the world and in all weather conditions. |
| <i>GPA</i> | Glidepath Angle |
| <i>GPS</i> | Glidepath Qualification Surface |
| <i>GPS</i> | Global Positioning System |

HATH Height Above Threshold

Hazard to Air Navigation An object which, as a result of an aeronautical study under 14 CFR part 77, the FAA determines will have a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft, operation of air navigation facilities, or existing or potential airport capacity.

Helicopter See Rotorcraft

HIRL High Intensity Runway Lights. See Runway Edge Lights.

Holding A predetermined maneuver that keeps aircraft within a specified airspace while awaiting further clearance from ATC.

IAP Instrument Approach Procedure

IFR Instrument Flight Rules

IMC Instrument Meteorological Conditions

Induced Socioeconomic Impacts Induced socio-economic impacts are those typically associated with large airport developments that cause secondary impacts to surrounding communities. Such impacts include shifts in patterns of population movement and growth, increases in public-service demands, and changes in business and economic activity to the extent influenced by airport development and operation.

Initial Approach Fix (IAF) The fix depicted on IAP charts where the instrument approach procedure (IAP) begins unless otherwise authorized by ATC.

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| <i>Instrument Approach</i> | A set of regulations and procedures for flying aircraft whereby navigation and obstacle clearance is maintained with reference to aircraft instruments only, while separation from other aircraft is provided by Air Traffic Control. In layman's terms, a pilot who is rated for IFR can keep a plane in controlled flight solely on the data provided by his instruments, even if that pilot cannot see anything out the cockpit windows; one of the benefits of these regulations is the ability to fly through clouds, which is otherwise not allowed. IFR is an alternative to visual flight rules (VFR), where the pilot is ultimately responsible for navigation, obstacle clearance and traffic separation using the see-and-avoid concept. The vast majority of commercial traffic (any flight for hire) and all scheduled air carriers operate exclusively under IFR (even on clear days). Commercial aircraft providing sightseeing flights, aerial photography, or lift services for parachute jumping usually operate under VFR. |
| <i>Instrument Approach Procedure (IAP)</i> | A series of predetermined maneuvers for the orderly transfer of an aircraft under IFR from the beginning of the initial approach to a landing or to a point from which a landing may be made visually. |
| <i>Instrument Flight Rules (IFR)</i> | Rules and regulations established by the Federal Aviation Administration to govern flight under conditions in which flight by outside visual reference is not safe. IFR flight depends upon flying by reference to instruments in the flight deck, and navigation is accomplished by reference to electronic signals. |
| <i>Instrument Meteorological Conditions (IMC)</i> | Meteorological conditions expressed in terms of visibility, distance from clouds, and ceiling less than the minimums specified for visual meteorological conditions, requiring operations to be conducted under IFR. |
| <i>Instrument Takeoff</i> | Using the instruments rather than outside visual cues to maintain runway heading and execute a safe takeoff. |
| <i>Itinerant Operation</i> | Operations not classified as "local" operations. See local operation. |
| <i>Jet Aircraft</i> | An aircraft propelled by jet engines. |
| <i>KIAS</i> | Knots indicated airspeed |
| <i>KIWI</i> | International identifier for Wiscasset Municipal Airport. The identifier IWI is the domestic, FAA identifier. |

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| <i>Landside</i> | The part of the airport exclusive of aircraft operating areas (runways, taxiways, aircraft aprons/ramps). Landside includes the terminal building, hangars, other buildings and structures not on the airport's airside, automobile parking areas, access roads, etc. |
| <i>Large Aircraft</i> | Large aircraft means aircraft of more than 12,500 pounds, maximum certificated takeoff weight. |
| <i>Light Emissions</i> | Airport-related lighting facilities and activities could visually affect surrounding residents and other nearby light-sensitive areas such as homes, parks or recreational areas. |
| <i>LNAV</i> | Localizer Performance with Vertical |
| <i>Local Operation</i> | Aircraft operations remaining in the local traffic pattern, simulated instrument approaches at the airport, including military and civil operations, and operations to or from the airport and a practice area within a 20-mile radius of the tower. |
| <i>Long-Term</i> | The eleventh through twentieth year of an airport planning period |
| <i>LP</i> | Localizer Performance |
| <i>LPV</i> | Localizer Performance with Vertical Navigation |
| <i>MaineDEP</i> | Maine Department of Environmental Protection |
| <i>MaineDOT</i> | Maine Department of Transportation |
| <i>MASP</i> | Maine Aviation Systems Plan |
| <i>Mean Sea Level (MSL)</i> | The height of the sea surface midway between its average high and low water positions |
| <i>MGTOW</i> | Maximum Gross Takeoff Weight |
| <i>MHz</i> | Megahertz |
| <i>Minimum Altitude</i> | An altitude depicted on an instrument approach chart with the altitude value underscored. Aircraft are required to maintain altitude at or above the depicted value. |

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| <i>Minimum descent altitude (MDA)</i> | The lowest altitude (in feet MSL) to which descent is authorized on final approach, or during circle-to-land maneuvering in execution of a non-precision approach. |
| <i>MIRL</i> | Medium Intensity Runway Lights. See Runway Edge Lights. |
| <i>Missed Approach Point (MAP)</i> | A point prescribed in each instrument approach at which a missed approach procedure shall be executed if the required visual reference has not been established. |
| <i>Modification to Standards</i> | Means any change to FAA design standards other than dimensional standards for runway safety areas. Unique local conditions may require modification to airport design standards for a specific airport. A modification to an airport design standard related to new construction, reconstruction, expansion, or upgrade on an airport that received Federal aid requires FAA approval. |
| <i>MSL</i> | Mean Sea Level |
| <i>National Airspace System (NAS)</i> | The common network of United States airspace—air navigation facilities, equipment and services, airports or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information; and manpower and material. |
| <i>Natural Resources and Energy Supply</i> | Airport development actions have the potential to change energy requirements or use consumable natural resources. To comply with the Council on Environmental Quality (CEQ) regulations mentioned in Section 2 of this chapter, Federal Aviation Administration (FAA) environmental documents must evaluate potential impacts on supplies of energy and natural resources needed to build and maintain airports. |
| <i>NAVAID</i> | Navigation Aid |
| <i>Navigation Aid (NAVAID)</i> | A navigational aid (also known as aid to navigation or navaid) is any sort of marker which aids the traveler in navigation; the term is most commonly used to refer to nautical or aviation travel. Includes electrical and visual air navigational aids, lights, signs, and associated supporting equipment. |
| <i>Night</i> | Night means the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time. |

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| <i>Night Operation</i> | For the purposes of noise analysis, a night operation occurs during the period between 10 pm and 7 am. See also Airport Operation. |
| <i>NM</i> | Nautical Mile |
| <i>Nonprecision Approach</i> | Nonprecision approach procedure means a standard instrument approach procedure in which no electronic glide slope is provided. |
| <i>NPIAS</i> | National Plan of Integrated Airport Systems |
| <i>Object</i> | Includes, but is not limited to above ground structures, NAVAIDs, people, equipment, vehicles, natural growth, terrain, and parked aircraft. |
| <i>Object Free Area (OFA)</i> | 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 for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes. |
| <i>Obstacle Clearance Surface (OCS)</i> | An inclined obstacle evaluation surface associated with a glidepath (glideslope). |
| <i>Obstacle Free Zone (OFZ)</i> | The OFZ is the airspace below 150 feet above the established airport elevation and along the runway and extended runway centerline that is required to be clear of all objects, except for frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance protection for aircraft landing or taking off from the runway, and for missed approaches. The OFZ is sub-divided as follows: Runway OFZ. The airspace above a surface centered on the runway centerline. Inner-approach OFZ. The airspace above a surface centered on the extended runway centerline. It applies to runways with an approach lighting system. Inner-transitional OFZ. The airspace above the surfaces located on the outer edges of the runway OFZ and the inner-approach OFZ. It applies to runways with approach visibility minimums lower than 3/4-statute mile. |
| <i>Obstruction to Air Navigation</i> | An object of greater height than any of the heights or surfaces presented in Subpart C of Code of Federal Regulation (14 CFR), Part 77. (Obstructions to air navigation are presumed to be hazards to air navigation until an FAA study has determined otherwise.) |
| <i>OCS</i> | Obstacle Clearance Surface |
| <i>OIS</i> | Obstacle Identification Surface |

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| <i>Operation</i> | A takeoff or landing of an aircraft. |
| <i>PAPI</i> | Precision Approach Path Indicator |
| <i>PCL</i> | Pilot Controlled Lighting |
| <i>PFAF</i> | Precision Final Approach Fix |
| <i>Pilot Controlled Lighting (PCL)</i> | Pilot Controlled Lighting (PCL), also known as Aircraft Radio Control of Aerodrome Lighting (ARCAL) or Pilot Activated Lighting (PAL), is a system which allows aircraft pilots to control the lighting of an airport or airfield's approach lights, runway edge lights, and taxiways via radio. PCL systems are most common at non-towered or little-used airfields where it is neither economical to light the runways all night, nor to provide staff to turn the runway lighting on and off. PCL enables pilots to control the lighting only when required, saving electricity and reducing light pollution. |
| <i>Piston Aircraft</i> | An aircraft powered by one or more piston engines (regardless of fuel type). |
| <i>Plan View</i> | The overhead view of an approach procedure on an instrument approach chart. The plan view depicts the routes that guide the pilot from the en route segments to the IAF. |
| <i>Precision Approach</i> | Approaches are classified as either precision or nonprecision, depending on the accuracy and capabilities of the navigational aids (navaids) used. Precision approaches utilize both lateral (localizer) and vertical (glideslope) information. Nonprecision approaches provide lateral course information only. |

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| <i>Precision Approach Path Indicator (PAPI)</i> | The precision approach path indicator (PAPI) uses light units similar to the VASI but is installed in a single row of either two or four light units. These systems have an effective visual range of about 5 miles during the day and up to 20 miles at night. The row of light units is normally installed on the left side of the runway and the glide path indications are as depicted. Each box of lights is equipped with an optical apparatus that splits light output into two segments, red and white. Depending on the angle of approach, the lights will appear either red or white to the pilot. Ideally the total of lights will change from white to half red, moving in succession from right to left side. The pilot will have reached the normal glidepath (usually 3 degrees) when there is an even split in red and white lights. If an aircraft is beneath the glidepath, red lights will outnumber white; if an aircraft is above the glidepath, more white lights are visible. |
| <i>Precision Approach Procedure</i> | Precision approach procedure means a standard instrument approach procedure in which an electronic glide slope is provided, such as ILS and PAR. |
| <i>Profile View</i> | Side view of an IAP chart illustrating the vertical approach path altitudes, headings, distances, and fixes. |
| <i>Ramp</i> | See Apron |
| <i>RDC</i> | Runway Design Code |
| <i>Record of Decision</i> | FAA issues a Record of Decision (ROD) prior to an action to explain why they approved or did not approve a proposed action. The ROD explains what the airport sponsor proposes to do and why, identifies actions the FAA and other Federal agencies must take, explains the alternatives analyzed and which one is environmentally preferred, and identifies required mitigation measures. |
| <i>REIL</i> | Runway End Identifier Lights |
| <i>Remote Communications Outlet (RCO)</i> | Remote Communications Outlets (RCO) are remote aviation band radio transceivers, established to extend communication capabilities of Flight Service Stations (FSS). |
| <i>RNAV</i> | Area Navigation |
| <i>ROC</i> | Required Obstacle Clearance |

ROD Record of Decision

ROFA Runway Object Free Area

Rotating Beacon A rotating beacon is a light system used to assist pilots in finding an airport, particularly those flying in IMC or VFR at night. Additionally, the rotating beacon provides information about the type of airport through the use of a particular set of color filters. Beacons for civil land airports emit a white and green light that appears as a flash.

Rotorcraft A rotorcraft is a heavier-than-air flying machine that uses lift generated by wings that revolve around a mast called rotor blades. Several rotor blades mounted to a single mast is referred to as a rotor. Rotorcraft may also include the use of static lifting surfaces, but the primary distinguishing feature being lift provided by one or more rotors. Rotorcraft includes helicopters, auto gyros, gyro dynes and tilt rotors.

RPZ Runway Protection Zone

RSA Runway Safety Area

Runway A runway is a strip of land on an airport, on which aircraft can take off and land. Runways may be a man-made surface (often asphalt, concrete, or a mixture of both) or a natural surface (grass, dirt, or gravel).

Runway Blast Pad A surface adjacent to the ends of runways provided to reduce the erosive effect of jet blast and propeller wash.

Runway Design Code A code signifying the design standards to which a runway is to be built. The AAC, ADG, and approach visibility minimums are combined to form the RDC of a particular runway. The RDC provides the information needed to determine certain design standards that apply.

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| <i>Runway Edge Lights</i> | Runway Edge Lights are used to outline the edges of runways during periods of darkness or restricted visibility conditions. These light systems are classified according to the intensity they are capable of producing: High Intensity Runway Lights (HIRL) Medium Intensity Runway Lights (MIRL) Low Intensity Runway Lights (LIRL) The HIRL and MIRL systems have variable intensity controls, whereas the LIRLs normally have one intensity setting. Runway Edge Lights are white, except on instrument runways where yellow replaces white on the last 2,000 feet or half the runway length, whichever is less, to form a caution zone for landings. The lights marking the ends of the runway emit red light toward the runway to indicate the end of runway to a departing aircraft and emit green outward from the runway end to indicate the threshold to landing aircraft. |
| <i>Runway End Identifier Lights (REIL)</i> | A pair of synchronized flashing lights, located laterally on each side of the runway threshold, providing rapid and positive identification of the approach end of a runway. |
| <i>Runway Protection Zone (RPZ)</i> | Runway protection zones are a trapezoidal area “off the end of the runway end that serves to enhance the protection of people and property on the ground” in the event an aircraft lands or crashes beyond the runway end. Runway Protection Zones underlie a portion of the approach closest to the airport. Many people have confused the RPZ with the need for Object Free Areas (OFA), Obstacle Free Zones (OFZ), Object clearing criteria, and Part 77 requirements. Each of these serves distinct purposes and are not all coincident. While the RPZ also has limitations on obstructions (because it lies below the approach surface and because it includes safety areas and obstacle free areas), the primary purpose of the RPZ is the protection of people and property on the ground. |
| <i>Runway Safety Area (RSA)</i> | A runway safety area (RSA) or runway end safety area (RESA) is defined as “the surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.” |
| <i>Secondary and Cumulative Impacts</i> | Impacts the proposed action would have on a particular resource when added to impacts on that resource due to past, present, and reasonably foreseeable actions within a defined time and geographical area. |
| <i>Short-Term</i> | The first five years of an airport planning period |
| <i>SHPO</i> | State Historic Preservation Commission |

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| <i>Small Aircraft</i> | Small aircraft means aircraft of 12,500 pounds or less, maximum certificated takeoff weight. |
| <i>Social Impacts</i> | Social impacts are those associated with the relocation of any business or residence, alter surface-transportation patterns, divide or disrupt established communities, disrupt orderly planned development, or create an appreciable change in employment. |
| <i>Solid Waste</i> | Construction, renovation, or demolition of most airside projects produces debris (e.g., dirt, concrete, asphalt) that must be properly disposed. In addition, new or renovated terminal, cargo, or maintenance facilities may involve construction, renovation, or demolition that produces other types of solid waste (bricks, steel, wood, gypsum, glass). Therefore, airport sponsors should follow Federal, state, or local regulations that address solid waste. Doing so reduces the environmental effects of airport-related construction or operation. |
| <i>SRE</i> | Snow Removal Equipment |
| <i>State System Plans</i> | Each state has an aviation system plan that determines the development needed to establish a viable system of airports. The effort involves examining the interaction of the airports with the aviation service requirements, economy, population, and surface transportation of a state's geographic area. State plans are cost-effective and define an airport system that is consistent with established state goals and objectives regarding economic development, transportation, land use, and environmental matters. State plans contain about 5,000 airports, about 33 percent more than the NPIAS. Airports included in the state plans, but not in the NPIAS, are usually smaller airports that have state or regional significance, but are not considered to be of national interest. |
| <i>Stopway</i> | A defined rectangular surface beyond the end of a runway prepared or suitable for use in lieu of runway to support an airplane, without causing structural damage to the airplane, during an aborted takeoff. |
| <i>TAF</i> | Terminal Area Forecasts. For the purposes of this study, TAF refers to the forecasts prepared by the FAA for airport planning purposes and not the aviation weather report by the same term. |
| <i>Taxilane</i> | The portion of the aircraft parking area used for access between taxiways and aircraft parking positions. |

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| <i>Taxiway</i> | A taxiway is a path on an airport connecting runways with ramps, hangars, terminals and other facilities. They mostly have hard surface such as asphalt or concrete, although smaller airports sometimes use gravel or grass. |
| <i>Taxiway Safety Area</i> | A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway. |
| <i>TCH</i> | Threshold Crossing Height |
| <i>Terminal Area</i> | Depicts airspace around major airports; normally associated with Class B and Class C airspace. |
| <i>Terminal Area Forecasts (TAF)</i> | The official forecast of aviation activity at FAA facilities. These forecasts are prepared to meet the budget and planning needs of FAA and provide information for use by state and local authorities, the aviation industry, and the public. |
| <i>Terminal Procedures</i> | See Instrument Approach Procedure |
| <i>TERPS</i> | Terminal Procedures developed using FAA Order 8260.3B by specialists. TERPS defines airspace corridors used in the development of instrument arrival and departure procedures. |
| <i>Threatened and Endangered Species</i> | To satisfy the Endangered Species Act of 1973, the Federal Aviation Administration (FAA) must determine if a proposed action under its purview would affect a Federally-listed species or habitat critical to that species (critical habitat). |
| <i>Threshold</i> | The beginning of that portion of the runway available for landing. In some instances, the landing threshold may be displaced. See also Displaced Threshold. |
| <i>Threshold Lights</i> | Threshold lights mark the ends of the runway emit red light toward the runway to indicate the end of runway to a departing aircraft and emit green outward from the runway end to indicate the threshold to landing aircraft. |
| <i>Title 14 of the Code of Federal Regulations (14 CFR)</i> | The federal aviation regulations governing the operation of aircraft, airways, and airmen. |

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| <i>Traffic Pattern</i> | Traffic pattern means the traffic flow that is prescribed for aircraft landing at, taxiing on, or taking off from, an airport. |
| <i>TSA</i> | Taxiway Safety Area or Transportation Security Administration. |
| <i>Turbofan</i> | A turbofan is a type of jet engine, similar to a turbojet. It essentially consists of a ducted fan with a smaller diameter turbojet engine mounted behind it that powers the fan. Part of the airstream from the ducted fan passes through the turbojet, where it is burnt to power the fan. But part, usually the majority, of the flow bypasses it, and doing this produces thrust more efficiently. |
| <i>Turbojet</i> | A turbofan is a type of jet engine, similar to a turbojet. It essentially consists of a ducted fan with a smaller diameter turbojet engine mounted behind it that powers the fan. Part of the airstream from the ducted fan passes through the turbojet, where it is burnt to power the fan. But part, usually the majority, of the flow bypasses it, and doing this produces thrust more efficiently. |
| <i>USDOT § 4(f)</i> | Section 4(f) of the Department of Transportation Act requires the Secretary of Transportation investigate all alternatives before impacting any publicly owned lands designated as public parks, recreation areas, wildlife or waterfowl refuges of national, state, or local significance, or land having national, state, or local historical significance. |
| <i>USGS</i> | United States Geological Service |
| <i>VAGL</i> | Visual Approach Guidance Lights |
| <i>VASI</i> | Visual Approach Slope Indicator |
| <i>Very High Frequency (VHF)</i> | A band of radio frequencies falling between 30 and 300 MHz |
| <i>Very Light Jet (VLJ)</i> | A very light jet (VLJ), previously known as a micro jet, is, by convention, a small jet aircraft approved for single-pilot operation, seating 4-8 people, with a maximum take-off weight of under 10,000 pounds (4,540 kg). They are lighter than what is commonly termed business jets and are frequently used as air taxis. |
| <i>VFR</i> | Visual Flight Rules |

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| <i>VGSI</i> | Visual Glideslope Indicators (VGSI) is a system of lights so arranged to provide visual descent guidance information during the approach to a runway. There are several VGSI systems; the most common are VASI and its replacement PAPI. |
| <i>VHF</i> | Very High Frequency |
| <i>VIS</i> | Visibility |
| <i>Visual Approach</i> | An approach based on the pilot's perception of the correct alignment with the runway centerline and glideslope with no reference to navigational equipment. |
| <i>Visual Descent Point (VDP)</i> | A defined point on the final approach course of a non-precision straight-in approach procedure, from which normal descent from the MDA to the runway touchdown point may be commenced, provided the runway environment is clearly visible to the pilot. |
| <i>Visual Flight Rules (VFR)</i> | Flight rules adopted by the FAA governing aircraft flight using visual references. VFR operations specify the amount of ceiling and the visibility the pilot must have in order to operate according to these rules. When the weather conditions are such that the pilot cannot operate according to VFR, he or she must use instrument flight rules (IFR). |
| <i>Visual Meteorological Conditions (VMC)</i> | Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling meeting or exceeding the minimums specified for VFR. |
| <i>Visual Runway</i> | A runway without an existing or planned straight-in instrument approach procedure. |
| <i>VMC</i> | Visual Meteorological Conditions |
| <i>VNAV</i> | Vertical Navigation |
| <i>WAAS</i> | Wide Area Augmentation System |

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| <i>Water Quality</i> | Construction often causes sediment-laden runoff to enter waterways. Biological and chemical breakdown of deicing chemicals in airport runoff can cause severe dissolved oxygen demands on receiving waters. Operations or maintenance are other activities that may affect water quality. Airport-related water quality impacts can occur from both point and non-point sources at airports. If not properly controlled, the resultant water quality impacts may adversely affect animal, plant, or human populations. |
| <i>Wetlands</i> | Executive Order 11990, Protection of Wetlands, sets the standard for a Federal agency action involving any wetland. The U.S. Department of Transportation (DOT) developed and issued DOT Order 5660.1A, Preservation of the Nation's Wetlands to provide more guidance to DOT agencies regarding their actions in wetlands. The DOT Order governs the Federal Aviation Administration's (FAA's) actions. |
| <i>Wide Area Augmentation System (WAAS)</i> | A differential global positioning system (DGPS) that improves the accuracy of the system by determining position error from the GPS satellites, then transmitting the error, or corrective factors, to the airborne GPS receiver. |
| <i>Wild & Scenic Rivers</i> | Those rivers having remarkable scenic, recreational, geologic, fish, wildlife, historic, or cultural values. Federal land management agencies in the Departments of the Interior and Agriculture manage the Wild and Scenic Rivers Act (Act). |