

# GLOSSARY OF TERMS

## A

**A-WEIGHTED SOUND LEVEL:** The sound pressure level which has been filtered or weighted to reduce the influence of low and high frequency (dBA).

**AC:** Advisory Circular published by the Federal Aviation Administration.

**ADPM:** Average Day of the Peak Month

**AIP:** Airport Improvement Program of the FAA.

**AIR CARRIER:** The commercial system of air transportation, consisting of the certificated air carriers, air taxis (including commuters), supplemental air carriers, commercial operators of large aircraft, and air travel clubs.

**AIR NAVIGATIONAL FACILITY (NAVAID):** Any facility used for guiding or controlling flight in the air or during the landing or takeoff of an aircraft.

**AIR ROUTE SURVEILLANCE RADAR (ARSR):** Long-range radar which increases the capability of air traffic control for handling heavy enroute traffic. An ARSR site is usually located at some distance from the ARTCC it serves. Its range is approximately 200 nautical miles. Also called ATC Center Radar.

**AIR TAXI:** Aircraft operated by a company or individual that performs air transportation on a non-scheduled basis over unspecified routes usually with light aircraft.

**AIRCRAFT APPROACH CATEGORY (AAC):** A grouping of aircraft based on a reference landing speed ( $V_{REF}$ ) if specified, or if  $V_{REF}$  is not specified, 1.3 times stall speed ( $V_{SO}$ ) at the maximum certificated landing weight.

**AIRCRAFT LANDING GEAR:** The main landing gear consists on a single wheel under each wing. Single-wheel landing gear typically used on a single-engine aircraft that weighs less than 20,000 pounds.

**AIRCRAFT MIX:** The relative percentage of operations conducted at an airport by each of four classes of aircraft differentiated by gross takeoff weight and number of engines.

**AIRCRAFT OPERATION:** The airborne movement of aircraft in controlled or noncontrolled airport terminal areas and about a given en route fix or at other points where counts can be made. There are two types of operations - local and itinerant. An operation is counted for each landing and each departure, such that a touch-and-go flight is counted as two operations.

**AIRCRAFT TYPES:** An arbitrary classification system which identifies and groups aircraft having similar operational characteristics for the purpose of computing runway capacity.

**AIRPLANE DESIGN GROUP (ADG):** A classification of aircraft based on wingspan and tail height. When the aircraft wingspan and tail height fall in different groups, the higher group is used.

**AIRPORT:** An area of land or water that is used or intended to be used for the landing and taking off of aircraft, and includes its buildings and facilities, if any.

**AIRPORT AVAILABLE FOR PUBLIC USE:** An airport available for use by the public with or without a prior request.

**AIRPORT ELEVATION:** The highest point of an airport's usable runways, measured in feet above mean sea level.

**AIRPORT LAYOUT PLAN (ALP):** A scale drawing of existing and proposed airport facilities, their location on an airport, and the pertinent clearance and dimensional information required to demonstrate conformance with applicable standards.

**AIRPORT MASTER PLAN (AMP):** A long-range plan for development of an airport, including descriptions of the data and analyses on which the plan is based.

**AIRPORT REFERENCE CODE (ARC):** A coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at an airport.

**AIRPORT REFERENCE POINT (ARP):** The latitude and longitude of the approximate center of the airport.

**AIRPORT SURVEILLANCE RADAR (ASR):** Short-range radar used by local air traffic control for handling terminal area aircraft traffic.

**AIRPORT USE AGREEMENT:** Legal contract for the air carriers' use of the airport and leases for use of terminal facilities.

**AIR TAXI/AIR CHARTER OPERATION:** Includes operations which are not major air carrier operations, but which are performed in revenue service, on aircraft with fewer than 60 seats. This includes carriage of passengers in unscheduled, on-demand operations; and cargo operations. Also includes operations of some corporate aircraft carrying passengers in unscheduled, on-demand operations.

**ALSF-1:** Approach Light System with Sequence Flasher Lights

**ALS:** Approach Light System

**AMBIENT NOISE:** All encompassing noise associated with a given environment, being usually a composite of sounds from many sources near and far.

**AMBIENT NOISE LEVEL:** The level of noise that is all encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the receiver.

**ANCLUC:** Airport Noise and Compatible Land Use Control plan; an FAA sponsored land use compatibility planning program preceding Part 150 Airport Noise Compatibility Program.

**APPROACH CONTROL SERVICE:** Air traffic control service provided by a terminal area traffic control facility for arriving and departing IFR aircraft and, on occasion, VFR aircraft.

**APPROACH FIX:** The point from or over which final approach (IFR) to an airport is executed.

**APPROACH PROTECTION EASEMENT:** A form of easement which both conveys all of the rights of an aviation easement and sets specified limitations on the type of land uses allowed to be developed on the property.

**APPROACH SPEED:** The recommended speed contained in aircraft manuals used by pilots when making an approach to landing. This speed will vary for different segments of an approach as well as for aircraft weight and configuration.

**APPROACH SLOPE:** Imaginary areas extending out and away from the approach ends of runways which are to be kept clear of obstructions.

**APPROACH SURFACE:** An element of the airport imaginary surfaces, longitudinally centered on the extended runway centerline, extending upward and outward from the end of the primary surface at a designated slope.

**APRON:** A defined area on an airport or heliport intended to accommodate aircraft for purposes of loading or unloading passengers or cargo, refueling, parking, or maintenance. With regard to seaplanes, a ramp is used for access to the apron from the water.

**AREA NAVIGATION (RNAV):** A method of navigation that permits aircraft operations on any desired course within the coverage or stationed-reference navigation systems or within the limits of self-contained system capability.

**ARFF:** Aircraft Rescue and Fire-Fighting

**ARTS-III:** Automated Radar Terminal Service - Phase III. A terminal facility in the air traffic control system using air ground communications and radar intelligence to detect and display pertinent data such as flight identification, altitude and position of aircraft operating in the terminal area.

**ASDA:** Accelerate Stop Distance Available

**ASOS:** Automated Surface Observing System

**ASV:** Annual Service Volume - a reasonable estimate of the airfield's annual capacity.

**ATCT:** Airport Traffic Control Tower

**ATC:** Air Traffic Control

## **B**

**BASED AIRCRAFT:** An aircraft permanently stationed at the airport, usually by some form of agreement between the aircraft owner and airport management.

**BEST MANAGEMENT PRACTICES OR BMP:** A term used commonly to define the physical or behavioral practices that ensure environmental protection)

**BLAST FENCE:** A barrier used to divert or dissipate jet blast or propeller wash.

**BUILDING RESTRICTION LINE (BRL):** A BRL is an imaginary line which identifies suitable locations for development on an airport.

**BUSINESS JET:** Any of a type of turbine powered aircraft carrying six or more passengers and weighing less than approximately 90,000 pounds gross takeoff weight.

## **C**

**CAT I:** Category I Instrument Landing System. An instrument approach or approach and landing with a Height Above Threshold (HATh) or minimum descent altitude not lower than 200 feet and with either a visibility not less than ½ statute mile, or a runway visual range not less than 1800 feet.

**CAT II:** Category II Instrument Landing System. An instrument approach or approach and landing with a Height Above Threshold (HATh) lower than 200 feet but not lower than 100 feet and a runway visual range not less than 1200 feet.

**CAT III:** Category III Instrument Landing System. An instrument approach or approach and landing with a Height Above Threshold (HATh) lower than 100 feet, or no HATh, or a runway visual range less than 1200 feet.

**CEILING:** Height above the earth's surface to the lowest layer of clouds or obscuring phenomena. (AIM)

**CENTER'S AREA:** The specified airspace within which an air route traffic control center provides air traffic control and advisory service.

**CHARTER OPERATION:** Defined by the FAA as being a type of Air Taxi operation typically above 60 seats non-scheduled to include vacation tour groups and non-scheduled air freight operations.

**CIRCLING APPROACH:** A maneuver initiated by a pilot to align an aircraft with a runway for landing when a straight-in instrument approach is not possible. This maneuver requires ATC clearance and that the pilot establishes visual reference to the airport.

**CL:** Centerline

**CLEARWAY:** A defined rectangular area beyond the end of a runway cleared or suitable for use in lieu of runway to satisfy takeoff distance requirements.

**COMM.:** Communications

**COMMERCIAL ACTIVITIES:** Airport related activities which may offer a facility, service or commodity for sale, hire or profit. Examples of commodities for sale are: food, lodging, entertainment, real estate, petroleum products, parts and equipment. Examples of services are: flight training, charter flights, maintenance, aircraft storage and tie down.

**COMMERCIAL OPERATOR:** 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.

**COMMERCIAL SERVICE AIRPORT:** A public airport which received scheduled passenger service and enplanes annually 2,500 or more passengers.

**COMMUTER AIRLINES:** A category of airline classified according to the type of aircraft used (maximum of 60 seats) and their operating frequency (at least five scheduled round trip flights per week between two or more points).

**CONICAL SURFACE:** An imaginary surface extending upward and outward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

**CONCESSION AGREEMENT:** An agreement between the airport and a concession regarding the conduct of business on airport property.

**CONNECTION:** A passenger who boards an aircraft directly after deplaning from another flight. On-line single carrier connections involve flights of the same carrier, while interline or off-line connections involve flights of two different carriers. This term can also be applied to freight shipments.

**CONTROLLED AREA:** Airspace within which some or all aircraft may be subject to air traffic control.

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

**CONTROLLED AIRSPACE:** An airspace of defined dimensions within which air traffic control service is provided to IFR flights and to VFR flights in accordance with the airspace classification, Class A, Class B, etc. **CROSSWIND RUNWAY** - A runway aligned at an angle to the prevailing wind which allows use of an airport when crosswind conditions on the primary runway would otherwise restrict use.

## D

**DAY-NIGHT AVERAGE SOUND LEVEL (DNL):** The noise metric adopted by the U.S. Environmental Protection Agency for measurement of environmental noise. It represents the average daytime noise level during a 24-hour day, measured in decibels and adjusted to account for the lower tolerance of people to noise during nighttime periods.

**DECIBEL (dB):** A unit measuring the magnitude of a sound, equal to the logarithm of the ratio of the intensity of the sound to the intensity of an arbitrarily chosen standard sound, specifically a sound just barely audible to an unimpaired human ear. For environmental noise from aircraft and other transportation sources, an A-weighted sound level (sometimes abbreviated dBA) is normally used. The A-weighting scale adjusts the values of different sound frequencies to approximate the auditory sensitivity of the human ear.

**DECISION HEIGHT (DH):** With respect to the operation of aircraft, this means the height at which a decision must be made, using an ILS or PAR instrument approach, to either 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 aircraft taking off;
- *Takeoff distance available (TODA):* The TORA plus the length of any remaining runway or clearway beyond the far end of the TORA; the full length of TODA may need to be reduced because of obstacles in the departure area;
- *Accelerate-stop distance available (ASDA):* The runway plus stopway 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.

**DEED NOTICE:** A formal statement added to the legal description of a deed to a property and on any subdivision map. As used in airport land use planning, a deed notice would state that the property is subject to aircraft over flights. Deed notices are used as a form of buyer notification to ensure that those who are particularly sensitive to aircraft over flights can avoid moving to the affected areas.

**DEMAND:** The actual number of persons, aircraft or vehicles currently using a facility if that facility is operating at or below capacity or the number of persons, aircraft or vehicles who want to use the facility when the facility is operating above capacity.

**DENSITY OF USE:** As used in airport land use planning, the term refers to the number of dwelling units per gross acre for residential land uses or the number of people per acre with regard to other land uses.

**DEPLANEMENT:** Any passenger getting off an arriving aircraft at an airport. Can be both a terminating and connecting passenger. Also applies to freight shipments.

**DESIGNATED BODY:** A local government entity, such as a regional planning agency or a county planning commission, chosen by the county board of supervisors and the selection committee of city mayors to act in the capacity of an airport land use commission.

**DISPLACED THRESHOLD:** A landing threshold that is located at a point on the runway other than the designated beginning of the runway (see Threshold).

**DISTANCE MEASURING EQUIPMENT (DME):** An electronic installation established with either a VOR or ILS to provide distance information from the facility to pilots by reception of electronic signals. It measures, in nautical miles, the distance of an aircraft from a NAVAID.

**DUAL-TANDEM:** The main landing gear consists of four wheels under each wing. Dual-Tandem landing gear is typically used on multi-engine aircraft weighing over 200,000 pounds.

**DUAL-WHEEL:** The main landing gear consists of two wheels under each wing. Dual-wheel landing gear is typically used on multi-engine aircraft weighing between 20,000 pounds up to 200,000 pounds.

## E

**EASEMENT:** A less than fee title transfer of real property rights from the property owner to the holder of the easement.

**ENROUTE:** The route of flight from point of departure to point of destination, including intermediate stops (excludes local operations).

**ENROUTE AIRSPACE:** Controlled airspace above and/or adjacent to terminal airspace.

**EQUIVALENT SOUND LEVEL (LEQ):** The level of constant sound which, in the given situation and time period, has the same average sound energy as does a time varying sound.

**EXPERIMENTAL AIRCRAFT ASSOCIATION:** A not-for-profit organization operated exclusively for educational, recreational, and charitable purposes drawing upon the surrounding community for its membership and activities which include youth programs and public services.

## F

**F&E:** Facilities and Equipment Programming – FAA

**FAR PART 36:** A regulation establishing noise certification standards for aircraft.

**FAR PART 77:** A regulation establishing standards for determining obstructions to navigable airspace.

**FAR PART 77 SURFACES:** Imaginary airspace surfaces established with relation to each runway of an airport. There are five types of surfaces: (1) primary; (2) approach; (3) transitional; (4) horizontal; and (5) conical.

**FAR PART 91-GENERAL OPERATING AND FLIGHT RULES:** This Federal Aviation Regulation (FAR) prescribes rules governing the operation of aircraft with the US.

**FAR PART 139-CERTIFICATION AND OPERATIONS:** Land airports serving certain air carriers. The regulation governs the certification and operation of land airports which serve any scheduled or unscheduled passenger operation of an air carrier that conducted with an aircraft having and seating a capacity of more than 30 passengers.

**FAR PART 150:** The Aviation Safety and Noise Abatement Act of 1979 require the FAA to establish regulations that set forth national standards for identifying airport noise and land-use incompatibilities and to develop programs to eliminate them.

**FEDERAL AIRWAYS:** See Low Altitude Airways.

**FEDERAL AVIATION ADMINISTRATION (FAA):** The U.S. government agency which is responsible for ensuring the safe and efficient use of the nation's airports and airspace.

**FEDERAL AVIATION REGULATIONS (FAR):** Regulations formally issued by the FAA to regulate air commerce.

**FINAL APPROACH:** The flight path of an aircraft which is inbound to an airport on a final instrument approach course, beginning at the final approach fix or point and extending to the airport or the point where a circle-to-land maneuver or a missed approach is executed.

**FINDINGS:** Legally relevant sub conclusions which expose a government agency's mode of analysis of facts, regulations, and policies, and which bridge the analytical gap between raw data and ultimate decision.

**FIXED BASE OPERATOR (FBO):** A business which operates at an airport and provides aircraft services to the general public, including but not limited to sale of fuel and oil; aircraft sales, rental, maintenance, and repair; parking and tie-down or storage of aircraft; flight training; air taxi/charter operations; and specialty services, such as instrument and avionics maintenance, painting, overhaul, aerial application, aerial photography, aerial hoists, or pipeline patrol.

**FLEET MIX:** The proportion of aircraft types or models expected to operate at an airport.

**FLIGHT SERVICE STATION (FSS):** A facility operated by the FAA to provide flight assistance service.

**FRACTIONAL AIRCRAFT OWNERSHIP:** An aircraft ownership system that is based on a user paying an annual fee to an aircraft leasing company for access to a varied selection of corporate aircraft types. Aircraft operating fees are also paid for the specific type of aircraft and the number of hours flown.



**FRANGIBLE NAVAID:** 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.

**FUEL FLOWAGE FEES:** Fees levied by the airport operator per gallon of aviation gasoline and jet fuel sold at the airport.

**FY:** Fiscal Year

## G

**GENERAL AVIATION:** That portion of civil aviation which encompasses all facets of aviation except air carriers.

**GLIDE SLOPE (GS):** An electronic signal radiated by a component of an ILS to provide vertical guidance for aircraft during approach and landing.

**GLOBAL POSITIONING SYSTEM (GPS):** A satellite based radio positioning, navigation, and time transfer system developed and used by the U.S. Department of Defense. This technology may eventually become the principal system for air navigation throughout the world.

## H

**HANGAR:** In this report hangars are classified as individual or conventional. Individual hangars are designed to accommodate a single aircraft and may be portable, "T", or rectangular hangars. These are assumed to accommodate smaller, personal use aircraft. Individual hangars may be constructed in groups that results in a larger structure, however, the individual hangar spaces are counted separately. Conventional hangars are larger structures designed to accommodate several aircraft in an open bay(s) and for the purposes of this report are assumed to house turboprop and business jet aircraft. Conventional hangars are often occupied by an FBO.

**HELIPAD:** A small, designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp, or movement area used for takeoff, landing, or parking of helicopters.

**HELIPORT:** A site used for the landing and taking off of helicopters which consists of a takeoff and landing area, helipad/helideck, approach departure paths, heliport imaginary surfaces, a functioning wind cone, and sufficient lighting.

**HIGH ALTITUDE AIRWAYS:** See Jet Routes.

**HIRL:** High Intensity Runway Lights.

**HITL:** High Intensity Taxiway Lighting

**HOLDING:** A predetermined maneuver which keeps an aircraft within a specified airspace while awaiting further clearance.

**HORIZONTAL SURFACE:** An imaginary surface constituting a horizontal plane 150 feet above the airport elevation.

**I**

**IMAGINARY SURFACE:** An area established in relation to the airport and to each runway consistent with FAR Part 77 in which any object extending above these imaginary surfaces is, by definition, an obstruction.

**INFILL:** Development which takes place on vacant property largely surrounded by existing development, especially development which is similar in character.

**INTEGRATED NOISE MODEL (INM):** A computer-based airport noise exposure modeling program.

**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. It is prescribed and approved for a specific airport by competent authority (refer to Nonprecision Approach Procedure and Precision Approach Procedures).

**INSTRUMENT FLIGHT RULES (IFR):** Rules governing the procedures for conducting instrument flight. Generally, IFR applies when meteorological conditions with a ceiling below 1,000 feet or visibility of less than 3 miles prevail.

**INSTRUMENT LANDING SYSTEM (ILS):** A precision instrument approach system which normally consists of the following electronic components and visual aids: (1) localizer; (2) Glide Slope; (3) Outer Marker; (4) Middle Marker; (5) Approach Lights.

**INSTRUMENT OPERATION:** An aircraft operation in accordance with an IFR flight plan or an operation where IFR separation between aircraft is provided by a terminal control facility.

**INSTRUMENT RUNWAY:** A runway equipped with electronic and visual navigation aids for which a precision or nonprecision approach procedure having straight in landing minimums has been approved.

**INTERNATIONAL OPERATIONS:** Aircraft operations performed by air carriers engaged in scheduled international service.

**ITINERANT OPERATIONS:** All aircraft arrivals and departures other than local operations.

## J

**JET ROUTES:** A route designed to serve aircraft operating from 18,000 feet MSL up to and including flight level 450.

## L

**LARGE AIRPLANE:** An airplane of more than 12,500 pounds maximum certificated takeoff weight.

**LAT:** Latitude

**LDA:** Localizer Type Directional Aid; Landing Distance Available

**LDN:** Day-Night Average Sound Level. The 24-hour average sound level, in decibels, from midnight to midnight, obtained after the addition of ten decibels to sound levels for periods between 10 p.m. and 7 a.m.

**LENGTH OF HAUL:** The non-stop airline route distance from a particular airport.

**LEVEL OF SERVICE:** An arbitrary but standardized index of the relative service provided by a transportation facility.

**LIMITED PART 139-OPERATING CERTIFICATE:** A certificate issued under the FAR Part 139 for the operation of an airport serving unscheduled air carrier operations.

**LIRL:** Low Intensity Runway Lighting

**LITL:** Low Intensity Taxiway Lighting

**LOAD FACTOR:** Ratio of the number of passenger miles to the available seat miles flown by an airline representing the proportion of aircraft seating capacity that is actually sold and utilized. Load factors are also referred to in air cargo and can be determined by weight or volume.

**LOCALIZER (LOC):** The component of an ILS which provides course guidance to the runway.

**LOCAL OPERATION:** Operations performed by aircraft which: (a) operate in the local traffic pattern or within the sight of the tower; (b) are known to be departing for, or arriving from, flight in local practice areas located within a 20-mile radius of the control tower, or (c) execute simulated instrument approaches or low passes at the airport.

**LOM:** Compass locator at an outer marker (part of an ILS). Also called COMLO.

**LONG:** Longitude

**LOW ALTITUDE AIRWAYS:** Air routes below 18,000 feet MSL. They are referred to as Federal Airways.

**LRR:** Long-Range Radar

## M

**MALS:** Medium Intensity Approach Light System

**MALSF:** Medium Intensity Approach Light System with sequence flashing lights.

**MALSRL:** MALS with Runway Alignment Indicator Lights (RAIL)

**MAJOR AIRLINES:** Major airlines are airlines with gross operating revenues during any calendar year of more than \$1 billion; national airlines gross between \$100 million and \$1 billion; and regional airlines gross under \$100 million.

**MARKER BEACON:** An electronic navigation facility which transmits a fan or cone shaped radiation pattern. When received by compatible airborne equipment they indicate to the pilot that he is passing over the facility. Two to three beacons are used to advise pilots of their position during an ILS approach.  
MGW - Maximum Gross Weight

**MILITARY OPERATION:** An aircraft operation conducted by either a fixed-wing or rotor-wing military aircraft.

**MINIMUM DESCENT ALTITUDE (MDA):** The lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circling-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glide slope is provided.

**MIRL:** Medium Intensity Runway Lighting

**MISSED APPROACH:** A prescribed procedure to be followed by aircraft that cannot complete an attempted landing at an airport.

**MITL:** Medium Intensity Taxiway Lighting

**MLS:** Microwave Landing System

**MM:** Middle Marker (part of an ILS)

**MOA:** Military Operations Area

**MODAL SPLIT:** The distribution of trips among competing travel modes, such as walk, auto, bus, etc.

**MODE:** A particular form or method of travel such as walk, auto, carpool, bus, rapid transit, etc.

**MOVEMENT:** Synonymous with the term operation, i.e., a takeoff or a landing.

**MSL:** Mean Sea Level

## N

**NA:** Not applicable

**NAS:** NATIONAL AIRSPACE SYSTEM - The common system of air navigation and air traffic encompassing communications facilities, air navigation facilities, airways, controlled airspace, special use airspace and flight procedures authorized by Federal Aviation Regulations for domestic and international aviation.

**NATIONAL TRANSPORTATION SAFETY BOARD (NTSB):** The U.S. government agency responsible for investigating transportation accidents and incidents.

**NAVIGATIONAL AID (NAVAID):** Any visual or electronic device airborne or on the surface which provides point to point guidance information or position data to aircraft in flight.

**NDB: NON-DIRECTIONAL BEACON:** An electronic ground station transmitting in all directions in the L/MF frequency spectrum; provides azimuth guidance to aircraft equipped with direction finder receivers. These facilities are often established with ILS outer markers to provide transition guidance to the ILS system.

**NEPA:** National Environmental Policy Act

**NM:** Nautical Mile

**NOISE ABATEMENT:** A procedure for the operation of aircraft at an airport which minimizes the impact of noise on the environs of the airport.

**NOISE CONTOURS:** Continuous lines of equal noise level usually drawn around a noise source, such as an airport or highway. The lines are generally drawn in 5-decibel increments so that they resemble elevation contours in topographic maps.

**NOISE EXPOSURE MAP:** A scaled, geographic depiction of an airport, its noise contours and surrounding area.

**NOISE LEVEL REDUCTION (NLR):** The amount of noise level reduction achieved through incorporation of noise attenuation (between outdoor and indoor levels) in the design and construction of a structure.

**NONCONFORMING USE:** An existing land use which does not conform to subsequently adopted or amended zoning or other land use development standards.

**NONPRECISION APPROACH PROCEDURE:** A standard instrument approach procedure in which no electronic glide slope is provided.

**NONPRECISION INSTRUMENT RUNWAY:** A runway with an approved or planned straight in instrument approach procedure which has no existing or planned precision instrument approach procedure.

**NPI:** Non-Precision Instrument Runway

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

## O

**OBSTRUCTION:** Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, the height of which exceeds the standard established in Subpart C of Federal Aviation Regulations Part 77, Objects Affecting Navigable Airspace.

**OFZ:** Obstacle free zone

**OM:** Outer Marker (part of an ILS)

**OPERATION:** An aircraft arrival at or departure from an airport.

**OUTER FIX:** A point in the destination terminal area from which aircraft are cleared to the approach fix or final approach course.

**OVER FLIGHT:** Any distinctly visible and audible passage of an aircraft in flight, not necessarily directly overhead.

**OVER FLIGHT EASEMENT:** An easement which describes the right to overfly the property above a specified surface and includes the right to subject the property to noise, vibrations, fumes and emissions. An over flight easement is used primarily as a form of buyer notification.

**OVER FLIGHT ZONE:** The area(s) where aircraft maneuver to enter or leave the traffic pattern, typically defined by the FAR Part 77 horizontal surface.

## P

**PAPI:** Precision Approach Path Indicator

**PAR:** Precision Approach Radar

**PEAK HOUR FACTOR:** The ratio of the average flow rate during the peak hour to the highest short-term (say 15 minutes) rate within the peak hour.

**PEAK HOUR PERCENTAGE:** The percentage of total daily trips or traffic occurring in the highest or "peak" hour. Frequently confused with Peak Hour Factor.

**PEAKING OPERATION:** Peak hour aircraft operational projections are required to determine the peak period capacity of a runway system, as well as for determining the size of the various functional areas of a passenger terminal.

**PI:** Precision Instrument Runway marking.

**POSITIVE CONTROL:** The separation of all air traffic within designated airspace by air traffic control.

**PRECISION APPROACH:** A standard instrument approach procedure in which an electronic glide slope/glide path is provided; e.g., ILS/MLS and PAR.

**PRECISION INSTRUMENT RUNWAY:** A runway with an existing or planned precision instrument approach procedure.

**PRIMARY RUNWAY:** The runway on which the majority of operations take place. On large, busy airports, there may be two or more parallel primary runways.

**PRIMARY SURFACE:** An area longitudinally centered on a runway with a width ranging from 250 to 1000 feet and extending 200 feet beyond the end of a paved runway.

**PROHIBITED AREA:** Airspace of defined dimensions identified by an area on the surface of the earth within flight is prohibited.

**PU:** Publicly owned airport. An airport that is open to the general public with or without a prior request to use the airport.

**PUBLIC-USE AIRPORT:** An airport that is open to the general public and typically included in FAA NPIAS. Airport can be owned publicly or privately.

**PRIVATE-USE AIRPORT:** An airport that is used by private users only and not open to the general public. Airport is typically privately owned and is not eligible for federal funding.

**PVC:** Poor visibility and ceiling.

**PVT:** Privately owned airport.

## Q

**QUEUE:** A line of pedestrians or vehicles waiting to be served.

## R

**RADAR SEPARATION:** Radar spacing of aircraft in accordance with established minima.

**RAIL:** Runway Alignment Indicator Lights

**RCAG:** Remote Center Air/Ground Communications

**REIL:** Runway End Identification Lights

**RELIEVER AIRPORT:** An airport designated as having the function of relieving congestion at a commercial service airport and providing more general aviation access to the overall community.

**RESTRICTED AREAS:** Airspace of defined dimensions identified by an area on the surface of the earth within which the flight of aircraft, while not wholly prohibited, is subject to restrictions.

**REVENUE BONDS:** Bonds which are payable solely from the revenues derived from the operation of a facility which was constructed or acquired with the proceeds of the bonds.

**RNAV:** See Area Navigation.

**ROFA:** Runway Object Free Area

**ROTATING BEACON:** A visual NAVAID displaying flashes of white and/or colored light used to indicate location of an airport.

**ROTORCRAFT:** A heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors.

**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 the runway is to be built.

**RUNWAY END IDENTIFIER LIGHTS (REIL):** Two synchronized flashing lights, one on each side of the runway threshold, which provide rapid and positive identification of the approach end of a particular runway.

**RUNWAY PROTECTION ZONE (RPZ):** An area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground

**RUNWAY SAFETY AREA (RSA):** A defined 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.

**RVR:** Runway Visual Range

**RVV:** Runway Visibility Value

**RW:** Runway

## S

**SAFETY ZONE:** For the purpose of airport land use planning, an area near an airport in which land use restrictions are established to protect the safety of the public from potential aircraft accidents.

**SALS:** Short Approach Light System

**SDF:** Simplified Directional Facility landing aid providing final approach course.

**SEGMENTED CIRCLE:** An airport aid identifying the traffic pattern direction.

**SEPARATION MINIMA:** The minimum longitudinal, lateral, or vertical distances by which aircraft are spaced through the application of air traffic control procedures.



**SHOULDER:** An area adjacent to the edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface; support for aircraft running off the pavement; enhanced drainage; and blast protection.

**SINGLE-EVENT NOISE:** As used herein, the noise from an individual aircraft operation or over flight.

**SMALL AIRPLANE:** An airplane of 12,500 pounds or less maximum certificated takeoff weight. (Airport Design AC)

**SOCIOECONOMIC:** Data pertaining to the population and economic characteristics of a region.

**SOUND EXPOSURE LEVEL (SEL):** A time integrated metric (i.e., continuously summed over a time period) which quantifies the total energy in the A-weighted sound level measured during a transient noise event. The time period for this measurement is generally taken to be that between the moments when the A-weighted sound level is 10 dB below the maximum.

**SSALF:** Simplified Short Approach Light System with Sequence Flashing lights.

**SSALS:** Simplified Short Approach Light System.

**SSALR:** Simplified Short Approach Light System with Runway Alignment Indicator Lights (RAIL)

**STRAIGHT-IN INSTRUMENT APPROACH:** An instrument approach wherein a final approach is begun without first having executed a procedure turn; it is not necessarily completed with a straight-in landing or made to straight-in landing weather minimums. (AIM)

**STANDARD LAND USE CODING MANUAL (SLUCM):** A standard system for identifying and coding land use activities published by the U.S. Department of Housing and Urban Development and the Federal Highway Administration.

**STRAIGHT-IN APPROACH:** A descent in an approved procedure in which the final approach course alignment and descent gradient permits authorization of straight-in landing minimums.

**STOL:** Short Takeoff and Landing

**STOVL:** Short Takeoff Vertical Landing

**SYSTEM PLAN:** A representative of the aviation facilities required to meet the immediate and future air transportation needs and to achieve the overall goals.

## T

**TAF- TERMINAL AREA FORECAST:** An annual FAA forecast of aviation activity throughout the US used in the FAA's planning and decision making. The TAF is a subset of approximately 900 airports in the National Plan of Integrated Airport Systems (NPIAS) database the contains over 4000 airports.

**TAKING:** Government appropriation of private land for which compensation must be paid as required by the First Amendment of the U.S. Constitution. It is not essential that there be physical seizure or appropriation for a taking to occur, only that the government action directly interferes with or substantially disturbs the owner's right to use and enjoyment of the property.

**TAXILANE (TL):** The portion of the aircraft parking area used for access between taxiways and aircraft parking positions.

**TAXIWAY (TW):** A defined path established for the taxiing of aircraft from one part of an airport to another.

**TAXIWAY SAFETY AREA (TSA):** A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway.

**TDZ:** Touchdown Zone

**TERMINAL AIRSPACE:** The controlled airspace normally associated with aircraft departure and arrival patterns to/from airports within a terminal system and between adjacent terminal systems in which tower enroute air traffic control service is provided.

**TERMINAL CONTROL AREA (TCA):** This consists of controlled airspace extending upward from the surface or higher to specified altitudes within which all aircraft are subject to positive air traffic control procedures.

**TERMINAL INSTRUMENT PROCEDURES (TERPS):** Procedures for instrument approach and departure of aircraft to and from civil and military airports. There are four types of terminal instrument procedures: precision approach, nonprecision approach, circling, and departure.

**T-HANGAR:** A T-shaped aircraft hangar that provides shelter for a single airplane.

**THRESHOLD (TH):** The beginning of that portion of the runway usable for landing. In some instances the landing threshold may be displaced. (see Displaced Threshold)

**THRESHOLD LIGHTS:** Fixed green lights arranged symmetrically left and right of the runway centerline, identifying the runway end.

**TODA:** Takeoff Distance Available

**TORA:** Takeoff Run Available

**TOUCH-AND-GO OPERATION:** An operation in which the aircraft lands and begins takeoff roll without stopping.

**TRAFFIC PATTERN:** The traffic flow that is prescribed for aircraft landing at, taxiing on, and taking off from an airport. The usual components of a traffic pattern are upwind leg, crosswind leg, downwind leg and final approach.

**TRANSIENT OPERATIONS:** See Itinerant Operations.

**TRANSITIONAL SURFACE:** An element of the imaginary surfaces extending outward at right angles to the runway centerline and from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces.

## U

**UHF:** Ultra High Frequency

**UNICOM:** Radio communications station which provides pilots with pertinent airport information (winds, weather, etc.) at specific airports.

**UTILITY RUNWAY:** A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight or less.

## V

**VASI:** Visual Approach Slope Indicator providing visual glide path.

**VASI-2:** Two Box Visual Approach Slope Indicator

**VASI-4:** Four Box Visual Approach Slope Indicator

**VECTOR:** A heading issued to an aircraft to provide navigational guidance by radar.

**VERTICAL FLIGHT:** Aircraft flight operations by vertical lift aircraft. Typically, vertical lift aircraft include helicopters, tilt rotors, ducted-fan vehicles, and directed-thrust type propulsion systems.

**VISUAL APPROACH:** An approach where the pilot must use visual reference to the runway for landing under VFR conditions.

**VISUAL FLIGHT RULES (VFR):** Rules that govern the procedures for conducting flight under visual conditions. VFR applies when meteorological conditions are equal to or greater than the specified minimum, generally, a 1,000-foot ceiling and 3-mile visibility.

**VISUAL RUNWAY:** A runway intended solely for the operation of aircraft using visual approach procedures, with no straight in instrument approach procedure and no instrument designation indicated on a FAA approved airport layout plan or by any planning document submitted to the FAA by competent authority.

**VFR AIRCRAFT:** An aircraft conducting flight in accordance with Visual Flight Rules.

**VHF:** Very High Frequency

**VOR** - Very High Frequency Omni-directional Range: A ground-based radio (electronic) navigation aid transmitting radials in all directions in the VHF frequency spectrum; provides azimuth guidance to pilots by reception of electronic signals.

**VORTAC:** Co-located VOR and TACAN.

**V/STOL:** Vertical/Short Takeoff and Landing

**VTOL:** Vertical Takeoff and Landing (includes, but is not limited to, helicopters).

## **W**

**WARNING AREA:** Airspace which may contain hazards to non-participating aircraft in international airspace.

**WIND CONE (WINDSOCK):** Conical wind directional indicator.

**WIND TEE:** A visual device used to advise pilots about wind direction at an airport.

## **Y**

**YEARLY DAY-NIGHT AVERAGE SOUND LEVEL (LDN):** The 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between 10 p.m. and 7 a.m. the following day, and averaged over a span of one year.

## **Z**

**ZONING:** A police power measure, enacted primarily by units of local government, in which the community is divided into districts or zones within which permitted and special uses are established, as are regulations governing lot size, building bulk, placement, and other development standards. Requirements vary from district to district, but they must be uniform within districts. A zoning ordinance consists of two parts: the text and a map.