



## APPENDIX G, GLOSSARY

**Advisory Circular (AC). (FAA RGL Library)** Advisory Circulars (ACs) provide guidance such as methods, procedures, and practices for complying with regulations and grant requirements. ACs may also contain explanations of regulations, other guidance material, best practices, or information useful to the aviation community. They do not create or change a regulatory requirement.

**Acoustical. (Merriam-Webster Dictionary Online)** Relating to the deadening or absorbing of sound.

**Aeronautical Activities. (FAA AC 150/5190-6)** Any activity that involves, makes possible, or is required for the operation of aircraft, or that contributes to or is required for the safety of such operations. Activities within this definition, commonly conducted on airports, include, but are not limited to, the following: general and corporate aviation, air taxi and charter operations, scheduled and nonscheduled air carrier operations, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, aircraft sales and services, aircraft storage, sale of aviation petroleum products, repair and maintenance of aircraft, sale of aircraft parts, parachute or ultralight activities, and any other activities that, because of their direct relationship to the operation of aircraft, can appropriately be regarded as aeronautical activities. Activities, such as model aircraft and model rocket operations, are not aeronautical activities.

**Aeronautical Study. (FAA AC 70/7460-2K general definition)** A study performed pursuant to FAR Part 77 "Objects Affecting Navigable Airspace" concerning the effect of proposed construction or alternation on the use of air navigation facilities or navigable airspace by aircraft. The conclusion of each study is normally a determination as to whether the specific proposal studied would be a hazard to air navigation and/or a determination for marking and/or lighting.

**Air Cargo.** All commercial air express and air freight with the exception of airmail and parcel post.

**Air Carrier/Airline.** All regularly scheduled airline activity performed by airlines certificated in accordance with Federal Aviation Regulations (FAR Part 121).

**Air Taxi.** Operations of aircraft "for hire" for specific trips, commonly referred to as aircraft available for charter (FAR Part 135).

**Aircraft Approach Category.** A grouping of aircraft based on how fast they come in for landing. As a rule of thumb, slower approach speeds mean smaller airport dimensions and faster speeds mean larger dimensions from runway widths to the separation between runways and taxiways.

The aircraft approach categories are:

- 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

**Aircraft Operation. (FAA)** An aircraft arrival or departure from an airport with FAA airport traffic control service. There are two types of operations: local and itinerant.

**Air Carrier Airport. (FAA FAR Sec. 152.3)** An existing public airport regularly served by an air carrier, or a new public airport that the Administrator determines will be regularly served, by and air carrier, other than a charter



air carrier, certificated by the Civil Aeronautics Board under section 401 of the Federal Aviation Act of 1958; and a commuter service airport.

**Aircraft. (FAA FAR Sec. 1.1)** A device that is used or intended to be used for flight in the air.

**Aircraft Owners and Pilots Association (AOPA).** International aviation organization.

**Air Installation Compatible Use Zones (AICUZ) (FAA AC 150/5020-1).** A Department of Defense (DOD) program designed to encourage compatible uses of public and private lands in the vicinity of military airfields through the local communities' comprehensive planning process.

**Area Navigation. (FAA FAR Sec 1.1).** A method of navigation that permits aircraft operations on any desired flight path.

**Air Traffic. (FAA FAR Sec. 1.1)** Aircraft operating in the air or on an airport surface, exclusive of loading ramps and parking areas.

**Air Traffic Control (ATC). (FAA FAR Sec. 1.1)** A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

**Airport. (FAA FAR Sec. 152.3)** Any areas of land or water that is used, or intended for use, for the landing and takeoff of aircraft. Any appurtenant areas that are used, or intended for use, for airport buildings, other airport facilities, or rights-of-way; and all airport buildings and facilities located on the areas specified in this definition.

**Airport Elevation. (FAA AC 150/5190-4A)** The highest point on an airport's usable landing area measured in feet from sea level.

**Airport Environs.** The land use and people in the areas surrounding an airport which can be directly affected by the operation of the airport.

**Airport Hazard. (FAA FAR Sec. 152.3)** Any structure or object of natural growth located on or in the vicinity of a public airport, or any use of land near a public airport that- obstruct the airspace required for the flight of aircraft landing or taking off at the airport; or is otherwise hazardous to aircraft landing or taking off at the airport.

**Airport Impact Zones.** Defined areas on and off airport property that are zoned to ensure airport compatible land uses. Low-activity airports without significant aircraft noise exposure contours can benefit by identifying and implementing land use controls in Airport Impact Zones. The Impact Zones generally include the runway protection zone, the FAR Part 77 approach surface and the airport traffic pattern.

**Airport Improvement Program (AIP). (FAA Order 5050.4B)** Chapter 471 of Title 49 USC establishes the general requirements and conditions for federally financing the Airport Improvement Program (AIP) that ARP administers on FAA's behalf. AIP funding is used to develop a nationwide public-use airport system to meet the country's current and projected civil aviation needs. The airports comprising that system make up the National Plan of Integrated Airport Systems (NPIAS). The AIP also provides funding for noise compatibility programs (NCPs) and implementing FAA-reviewed and approved recommendations comprising an NCP. FAA Order 5100.38, *Airport Improvement Program Handbook*, provides details on administering the AIP.

**Airport Layout Plan (ALP). (FAA FAR Sec. 152.3)** The plan of an airport showing the layout of existing and proposed airport facilities.

**Airport Manager.** Any person or authority having the operational control of an airport as defined in the ASNA Act.

**Airport Master Plan. (FAA AC 150/5050-4)** An airport master plan is a presentation of the phased development of a specific airport. It presents the research and logic from which the plan evolved and displays the plan in a graphic and written report. Master plans are applied to the modernization and expansion of existing airports and to site selection and planning for new airports, regardless of their size or functional role. It is desirable that airport master plans be developed within the framework of metropolitan or regional plans or state airport system plans.

**Airport Noise Abatement Policy. (FAA AC 2050-1)** Policy adopted jointly by the Secretary of Transportation and the FAA, on November 18, 1976, delineating the responsibilities of FAA, air carriers, airport operators and local communities in achieving reductions in airport noise.

**Airport Noise and Capacity Act of 1990. (FAA Website)** This act required the establishment of a National Noise Policy and a requirement to eliminate Stage 2 aircraft weighing 75,000 pounds or greater operating in the contiguous United States by the year 2000.

**Airport Operations. (FAA Website)** The total number of movements in landings (arrivals) plus take-offs (departures) from an airport.

**Airport Overlay Zone.** A zone intended to place additional land use conditions on land impacted by the airport while retaining the existing underlying zone.

**Airport Owner. (FAA Website)** Any person or authority having the operational control of an airport as defined in the ASNA Act.

**Airport Reference Code (ARC). (FAA Website)** The ARC is an FAA coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at the airport.

**Airport Reference Point (ARP). (FAA AC 150/5300-13)** The latitude and longitude of the approximate center of the airport.

**Airport Sponsor. (FAA AC 150/5190-6)** The airport sponsor is the entity that is legally, financially, and otherwise able to assume and carry out the certifications, representations, warranties, assurances, covenants and other obligations require of sponsors, which are contained in the AIP grant agreement and property conveyances.

**Airports District Office (ADO)** - The "local" office of the FAA that coordinates planning and construction projects. Staff in the ADO is typically assigned to a particular state, i.e., Oregon or Washington. The ADO for Oregon and Washington is located in Des Moines, Washington.

**Airside. (FAA Website)** That portion of the airport facility where aircraft movements take place, airline operations areas, and areas that directly serve the aircraft, such as taxiway, runway, maintenance and fueling areas.

**Airspace. (FAA Website)** The space lying above the earth or above a certain area of land or water that is necessary to conduct aviation operations.

**Ambient Noise. (FAA Website)** The total amount of noise in a given place and time, which is usually a composite of sounds from varying sources at varying distances.

**Approach and Runway Protection Zone Map.** The approach and Runway Protection Zone Map is compiled from the criteria in FAR Part 77, "*Objects Affecting Navigable Airspace*". It shows the area affected by the Airport Overlay Zoning Ordinance, and includes the layout of runways, airport boundaries, elevations, and area topography. Applicable height limitation areas are shown in detail.



**Approach Slopes. (FAR Part 77)** The ratios of horizontal to vertical distance indicating the degree of inclination of the Approach Surface. The various ratios include:

- **20:1.** For all utility and visual runways extended from the primary surface a distance of 5,000 feet.
- **34:1.** For all non-precision instrument runways extended from the primary surface for a distance of 10,000 feet.
- **50:1/40:1.** For all precision instrument runways extending from the primary surface for a distance of 10,000 feet at an approach slope of 50:1 and an additional 40,000 feet beyond this at a 40:1 Approach Slope.

**Approach Surface. (FAA AC 150/5190-4A)** A surface longitudinally centered on the extended runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height limitation slope set forth in this Ordinance. In plan the perimeter of the approach surface coincides with the perimeter of the approach zone.

**ARFF.** Aircraft Rescue and Fire Fighting, i.e., an on-airport response required for certificated commercial service airports (see FAR Part 139).

**ASNA Act. (FAA Website)** The Aviation Safety and Noise Abatement Act of 1979, as amended (49 USC 2101 et seq.).

**Attainment Area. (Planning and Urban Design Standards)** A geographic area whose air has been determined through monitoring and modeling to have criteria pollutant levels below the primary standard.

**Automated Surface Observation System (ASOS) and Automated Weather Observation System (AWOS) –** Automated observation systems providing continuous on-site weather data, designed to support aviation activities and weather forecasting.

**Average Day-Night Sound Level (DNL). (FAA AC 5020-1)** The 24-hour average sounds level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between midnight and 7 a.m. and between 10 p.m. and midnight, local time, as averaged over a spans of one year. It is the FAA standard metric for determining the cumulative exposure of individuals to noise.

**AVGAS.** Gasoline used in airplanes with piston engines.

**Avigation Easement. (FAA Website)** A grant of a property interest in land over which a right of unobstructed flight in the airspace is established.

**Back-Taxiing.** The practice of aircraft taxiing on a runway before takeoff or after landing, normally, in the opposite direction of the runway's traffic pattern. Back-taxiing is generally required on runways without taxiway access to both runway ends.

**Based Aircraft. (FAA Website)** An aircraft permanently stationed at an airport by agreement between the aircraft owner and the airport management.

**Building Codes. (The Practice of Local Government Planning)** Codes, either local or state, that control the functional and structural aspects of buildings and/or structures. Local ordinances typically require proposed buildings to comply with zoning requirements before building permits can be issued under the building codes.

**Building Restriction Line (BRL).** A line which identifies suitable building area locations on airports, typically associated with the transitional surfaces and a 35' height restriction.

**Charter.** Operations of aircraft "for hire" for specific trips, commonly referred to as an aircraft available for charter.

**Circle to Land or Circling Approach.** An instrument approach procedure that allows pilots to "circle" the airfield to land on any authorized runway once visual contact with the runway environment is established and maintained throughout the procedure.

**Civil Aircraft. (FAA FAR Sec. 1.1)** Any aircraft other than a public aircraft.

**Code of Federal Regulations (CFR). (FAA AIM Glossary)** The FAA publishes the Code of Federal Regulations (CFRs) to make readily available to the aviation community the regulatory requirements placed upon them. These regulations are sold as individual parts by the Superintendent of Documents.

**Commercial Service Airport. (FAA Website)** A public airport that has at least 2,500 passengers boarding each year and is receiving scheduled passenger aircraft service.

**Compatibility.** The degree to which land uses or types of development can coexist or integrate.

**Comprehensive Plan. (FAA Website)** Similar to a master plan, the comprehensive plan is a governmental entity's official statement of its plans and policies for long-term development. The plan includes maps, graphics and written proposals, which indicate the general location for streets, parks, schools, public buildings, airports and other physical development of the jurisdiction.

**Conditional Zoning. (FAA Website)** The imposition or exaction of conditions or promises upon the grant of zoning by the zoning authority.

**Conical Surface.** One of the "FAR Part 77 "Imaginary" Surfaces. The conical surface extends outward and upward from the edge of the horizontal surface at a slope of 20:1 to a horizontal distance of 4,000 feet.

**Crosswind.** When used concerning wind conditions, the word means a wind not parallel to the runway or the path of an aircraft. Sometimes used in reference to a runway as in "Runway 7/25 is the crosswind runway" meaning that it is not the runway normally used for the prevailing wind condition. As an aeronautical term, a direct crosswind is exactly 90-degrees opposite the direction of flight; more acute crosswind angles are known as quartering headwinds or tailwinds. From an airport planning perspective, crosswind runways are generally justified when a primary runway accommodates less than 95 percent of documented wind conditions (see wind rose).

**Crosswind Runway.** A secondary runway that is oriented to allow aircraft to safely take off or land when wind conditions do not favor the primary runway.

**Decibel (dB). (FAA Website)** Sound is measured by its pressure or energy in terms of decibels. The decibel scale is logarithmic; when the scale increases by ten, the perceived sound is two times as loud.

**Displaced Threshold.** A landing threshold that is located at a point other than the runway end. Usually provided to mitigate close-in obstructions to runway approaches for landing aircraft.

**Easement. (FAA AC 5020-1)** The legal right of one party to use a portion of the total rights in real estate owned by another party. This may include the right of passage over, on, or below property; certain air rights above the property, including view rights; and the rights to any specified form of development or activity, as well as any other legal rights in the property that may be specified in the easement document.

**Enplanement. (FAA Website)** A passenger boarding of a commercial flight.



**Environmental Assessment (EA). (FAA AC 150/5020-1)** Environmental assessments are prepared for many types of airport development projects and/or airport operational changes under the requirements of the National Environmental Policy Act (NEPA), Regulations of the Council on Environmental Quality (CEQ), Department of Transportation Order 5610.1C (Procedures for Considering Environmental Impacts), FAA Order 1050.1C (Policies and Procedures for Considering Environmental Impacts), and FAA Order 5050.4 (Airport Environmental Handbook). Many EA's contain analyses of airport noise, compatible land use, social impacts, and induced socioeconomic impacts. An Airport Noise Compatibility Program may supplement, but is not intended to replace an EA in meeting required environmental analyses. Similarly, an EA may contain information that, provided it is current, can be valuable inputs to developing airport noise exposure maps and airport noise compatibility programs. To the extent the information in EA is appropriate, such use of existing sources is encouraged.

**Environmental Impact Statement (EIS). (FAA Website)** A document that provides full and fair discussion of the significant environmental impacts that would occur as a result of a proposed project and informs decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts.

**Euclidean Zoning. (FAA Website)** A traditional legislative method or device for controlling land use by establishing districts with boundaries and providing for specific uniform regulations as to type of permitted land use, height, bulk and lot coverage of structure, setback and similar building restrictions. (Reference from 1929 US Supreme Court landmark decision upholding zoning as a means of land use control in "City of Euclid, Ohio v. Ambler Realty).

**Exclusive Right. (FAA AC 150/5190-6)** A power, privilege, or other right excluding or debaring another from enjoying or exercising a like power, privilege, or right. An exclusive right may be conferred either by express agreement, by imposition of unreasonable standards or requirements, or by any other means. Such a right conferred on one or more parties but excluding others from enjoying or exercising a similar right or rights would be an exclusive right.

**Farm. (Planning and Urban Design Standards)** The land, buildings, and machinery used in the commercial production of farm products. The USDA (United States Department of Agriculture) defines a farm as generating at least \$1,000 a year in the sale of crops or livestock.

**Farm Land. (Planning and Urban Design Standards)** The area containing the farmhouse, barns, and other outbuildings.

**Farm Operation.** A condition or activity which occurs on a farm in connection with the production of farm products and includes but is not limited to the raising, harvesting, drying, or storage of crops; the care of feeding livestock; the handling or transportation of crops or livestock; the treatment or disposal of wastes resulting from livestock; the marketing of products at roadside stands or farm markets; the creation of noise, odor, dust, or fumes; the operation of machinery and irrigation pumps; ground and aerial seeding and spraying; the application of chemical fertilizers, conditioners, insecticides, pesticides, and herbicides; and employment and use of labor.

**Farm Products.** Those plants and animals and their products which are useful to people and includes but is not limited to forages and sod crops, grains and feed crops, dairy and dairy products, poultry and poultry products, livestock, fruits, vegetables, flowers, seeds, grasses, trees, fish, honey, and other similar products, or any other plant, animal, or plant or animal product which supplies people with food, feed, fiber, or fur.

**Federal Aviation Administration (FAA). (FAA Website)** A federal agency charged with regulating air commerce to promote its safety and development; encourage and develop civil aviation, air traffic control, and air navigation; and promoting the development of a national system of airports.

**Federal Aviation Regulations (FAR).** (FAA FAR Regulations established and administered by the FAA that govern civil aviation and aviation-related activities.

**FAR Part 36. (FAA FAR Sec. 36.1)** Regulation establishing noise standards for the civil aviation fleet.

**FAR Part 91. (FAA FAR Sec. 91.1)** Regulation pertaining to air traffic and general operating rules, including operating noise limits.

**FAR Part 150. (FAA FAR Sec. 150.1)** Regulation pertaining to airport noise compatibility planning.

**FAR Part 161. (FAA FAR Sec. 161.1)** Regulation pertaining to notice and approval of airport noise and access restrictions.

**FAR Part 77. (FAA FAR Sec. 77.1)***Objects Affecting Navigable Airspace* - Part 77 (a) establishes standards for determining obstructions in navigable airspace; (b) defines the requirements for notice to the FAA Administrator of certain proposed construction or alteration; (c) provides for aeronautical studies of obstructions to air navigation to determine their effect on the safe and efficient use of airspace; (d) provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and (e) provides for establishing antenna farm areas.

**Federal Grant Assurance. (FAA AC 150/5190-6)** A Federal grant assurance is a provision with a Federal grant agreement to which the recipient of Federal airport development assistance has agreed to comply in consideration of the assistance provided.

**Fixed Base Operator (FBO).** An individual or company located at an airport providing aviation services. Sometimes further defined as a "full service" FBO or a limited service. Full service FBOs typically provide a broad range of services (flight instruction, aircraft rental, charter, fueling, repair, etc.) where a limited service FBO provides only one or two services (such as fueling, flight instruction or repair).

**Fixed Wing.** A plane with one or more "fixed wings," as opposed to a helicopter that utilizes a rotary wing.

**Glide Slope (GS).** For precision instrument approaches, such as an instrument landing system (ILS), the component that provides electronic vertical guidance to aircraft. Visual guidance indicators (VGI) define a glide slope (glide path) through a series of colored lights that are visible to pilots when approaching a runway end for landing.

**General Aviation (GA). (FAA Website)** Refers to all civil aircraft and operations that are not classified as air carrier, commuter or regional. The types of aircraft used in general aviation activities cover a wide spectrum from corporate multi-engine jet aircraft piloted by professional crews to amateur-built single engine piston acrobatic planes, balloons and dirigibles.

**General Aviation Airport.** Any airport that is not an air carrier airport, or a military facility.

**Global Positioning System (GPS).** GPS is a system of navigating which uses satellites (SATNAV) to establish the location and altitude of an aircraft. GPS supports both enroute flight and instrument approach procedures.

**Grant Assurance. (FAA AC 150/5100-16A)** The Grant Assurances, including Assurances 1, are required to be submitted as part of the application by sponsors requesting funds under the provisions of the Airport and Airway Improvement Act of 1982 and the Aviation Safety and Noise Abatement Act of 1979. Upon acceptance of the grant offer by the sponsor, the Grant Assurances, including Assurance 1, are incorporated in and become a part of the grant agreement.



**Growth Policy. (Planning and Urban Design Standards)** A local or regional governmental policy intended to influence the rate, amount, type, location and/or quality of future development within the jurisdiction.

**Helicopter Landing Pad (Helipad).** A designated landing area for rotor wing aircraft. Requires protected FAR Part 77 imaginary surfaces, as defined for heliports (FAR Part 77.29).

**Helicopter Parking Area.** A designated area for rotor wing aircraft parking that is typically accessed via hover-taxi or ground taxiing from a designated landing area (e.g., helipad or runway-taxiway system). If not used as a designated landing area, helicopter parking pads do not require dedicated FAR Part 77 imaginary surfaces.

**Heliport.** A designated helicopter landing facility (as defined by FAR Part 77).

**High Intensity Runway Lights (HIRL).** High intensity (i.e., very bright) lights are used on instrument runways where landings are made in foggy weather. The bright runway lights help pilots to see the runway when visibility is poor.

**Hold Harmless Agreement.** An agreement which holds airport sponsors or jurisdictions harmless for alleged damages resulting from airport operations. Such agreements are recorded in deeds or permits as a condition of approval of a regulatory land use decision.

**Housing Codes. (FAA Website)** The codes that usually apply to both existing and future living units. The codes include minimum standards of occupancy, and usually govern spatial, ventilation, wiring, plumbing, structural and heating requirements.

**Imaginary Surfaces. (FAA FAR Part 77.25)** Those areas established in relation to the airport and to each runway consistent with FAR Part 77 in which any object extending above these imaginary surfaces, by definition, is an obstruction.

**Transitional surface** extends outward and upward at right angles to the runway centerline and extend at a slope of seven feet horizontally for each one foot vertically (7:1) from the sides of the primary and approach surfaces. The transitional surfaces extend to the point at which they intercept the horizontal surface at a height of 150 feet above the established airport elevation.

**Horizontal surface** is a horizontal plane located 150 feet above the established airport elevation and encompasses an area from the transitional surface to the conical surface. The perimeter is constructed by generating arcs from the center of each end of the primary surface and connecting the adjacent arcs by lines tangent to those arcs.

**Conical surface** extends upward and outward from the periphery of the horizontal surface at a slope of 20 feet horizontally for every one foot vertically (20:1) for a horizontal distance of 4,000 feet.

**Approach surface** is longitudinally centered on the extended runway centerline and extends outward and upward from the end of the runway primary surface. The approach slope of a runway is a ratio of 20:1, 34:1, or 50:1, depending on the approach type. The length of the approach surface varies from 5,000 to 50,000 feet and also depends upon the approach type.

**Incompatible Land Use. (FAA FAR Sec. 150.7)** The use of land which is normally incompatible with the aircraft and airport operations (such as, but not limited to, homes, schools, nursing homes, hospitals, and libraries).

**Infrastructure. (FAA Website)** A community's built elements that establish the community's foundation for maintaining existing populations, activities, future growth and development. Infrastructure elements include



airports, roads, highways, bridges, water and sewer systems, waste disposal facilities, utilities, telecommunications systems, schools, and governmental and community facilities.

**Instrument Approach Procedure. (FAA Pilot/Controller Glossary)** 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.

**Instrument Flight Rules (IFR) (FAA Pilot/Controller Glossary)** Rules governing the procedure for conducting instrument flight. In addition, it is a term used by pilots and controllers to indicate a type of flight plan.

**Instrument Landing System (ILS). (FAA Pilot/Controller Glossary)** A precision instrument approach system which normally consists of the following electronic components and visual aids: localizer, glideslope, outer marker, middle marker, and approach lights.

**Integrated Noise Model (INM).** FAA's computer model used by the civilian aviation community for evaluating aircraft noise impacts near airports. The INM uses a standard database of aircraft characteristics and applies them to an airport's average operational day to produce noise contours.

**Itinerant Operation. (FAA AC 150/5325-4B)** Takeoff or landing operations of airplanes going from one airport to another airport that involves a trip of at least 20 miles. Local operations are excluded.

**Jet Fuel (Jet A).** Highly refined grade of kerosene used by turbine engine aircraft. Jet-A is currently the common commercial grade of jet fuel.

**Land Banking.** The purchase of property by a government (state or local) to be held for future use and development either by the government or for resale for the development of compatible uses.

**Land Use Compatibility. (FAA Website)** The coexistence of land uses surrounding the airport with airport-related activities.

**Land Use Controls. (FAA Website)** Measures established by state or local government that are designed to carry out land use planning. The controls include: zoning, subdivision regulations, planned acquisition, easements, covenants or conditions in building codes and capital improvement programs, such as the establishment of sewer, water, utilities or their service facilities.

**Land Use Management Measures. (FAA Website)** Land use management techniques that consist of both remedial and preventive measures. Remedial, or corrective, measures typically include sound insulation or land acquisition. Preventive measures typically involve land use controls that amend or update the local zoning ordinance, comprehensive plan, subdivision regulations, and building code.

**Landing Area. (FAA Pilot/Controller Glossary)** Any locality, either of land or water, including airports/heliports and intermediate landing fields, which is used, or intended to be used, for the landing and takeoff of aircraft whether or not facilities are provided for the shelter, servicing, or for receiving or discharging passengers or cargo.

**Landside. (FAA Website)** That part of an airport used for activities other than the movement of aircraft, such as vehicular access roads and parking.

**Lighting and Marking of Hazards to Air Navigation.** Installation of appropriate lighting fixtures, painted markings or other devices to such objects or structures that constitute hazards to air navigation.



**Limited Avigation Easement. (FAA AC 150/5100-17)** Action and resulting legal document which grants the purchaser the right of flight at any altitude above acquired surfaces. It also often prevents the erection or growth of all objects above the acquired surfaces. The right of entry to remove, mark, or light any structures or growth above acquired surfaces is also granted.

**Local Operation. (FAA Website)** Any operation performed by an aircraft that (a) operates in the local traffic pattern or within sight of the tower or airport, or (b) is known to be departing for, or arriving from, flight in local practice areas located within a 20-mile radius of the control tower or airport, or (c) executes a simulated instrument approach or low pass at the airport.

**Localizer.** For precision instrument approaches, such as an instrument landing system (ILS), the component that provides electronic lateral (course) guidance to aircraft.

**Localizer Performance with Vertical Guidance (LPV).** Satellite navigation (SATNAV) based GPS approaches providing “near category I” precisions approach capabilities with course and vertical guidance LPV approaches are expected to eventually replace traditional step- down, VOR and NDB procedures by providing a constant, ILS glideslope-like descent path. LPV approaches use high accuracy WAAS signals, which allows narrower glideslope and approach centerline obstacle clearance areas, safely providing decision altitudes as low as 250 feet, compared with 200 feet for ILS.

**Magnetic Declination.** Also called magnetic variation, is the angle between magnetic north and true north. Declination is considered positive east of true north and negative when west. Magnetic declination changes over time and with location. Runway end numbers, which reflect the magnetic heading/alignment (within 5 degrees +/-) occasionally require change due to declination.

**MALSR.** Medium-intensity Approach Lighting System with Runway alignment indicator lights. An airport lighting facility which provides visual guidance to landing aircraft.

**Medevac.** Fixed wing or rotor-wing aircraft used to transport critical medical patients. These aircraft are equipped to provide life support during transport.

**Medium Intensity Runway Lights (MIRL).** Runway lights which are not as intense as HIRLs (high intensity runway lights). Typical at medium and smaller airports which do not have sophisticated instrument landing systems.

**Mediation. (FAA Website).** The use of a mediator or co-mediators to facilitate open discussion between disputants and assist them to negotiate a mutually agreeable resolution. Mediation is a method of alternative dispute resolution that provides an initial forum to informally settle disputes prior to regulatory intervention on the part of the FAA.

**Mitigation. (FAA Website)** The avoidance, minimization, reduction, elimination or compensation for adverse environmental effects of a proposed action.

**Mitigation Measure. (FAA Website)** An action taken to alleviate adverse impacts.

**National Environmental Policy Act of 1969 (NEPA). (FAA AC 150/5020.1)** FAA compliance with the NEPA is controlled by FAA Order 1050.1C, Policies and Procedures for Considering Environmental Impacts. The FAA has determined that approval or disapproval of airport noise compatibility programs are “categorical exclusions” to the requirements for environmental assessment under Order 1050.1C. The ASNA Act requires an airport noise compatibility program to be either approved or disapproved within 180 days of receipt or it will be automatically approved. Development of a noise exposure map or noise compatibility program does not replace an environment assessment but can be used in the preparation of such an assessment. Environmental

assessment leading to a finding of no significant impact or to any environmental impact statement must still be conducted, where required by applicable procedures, prior to taking any Federal implementing action such as grant approvals or covered air traffic actions. Although the 180 day time constraint does not permit the normal federal Environmental Impact Assessment process, consideration of the potential impacts remain an integral part of the planning process. Airport operators should fully consider environmental as well as noise and land use consequences in developing an airport noise compatibility program.

**National Plan of Integrated Airport Systems (NPIAS). (FAA NPIAS Report)** The Secretary of Transportation transmitted the 2007-2011 National Plan of Integrated Airport Systems (NPIAS) to Congress on September 29, 2006. The AIP-eligible development needs identified in this report were compiled as of December 2005 with selected updates through July 2006.

**Nautical Mile. (FAA Website)** A measure of distance equal to one minute of arc on the earth's surface, which is approximately 6,076 feet.

**Navigation Aids (NAVAID). (FAA Website)** Any facility used by an aircraft for guiding or controlling flight in the air or the landing or take-off of an aircraft.

**Navigable Airspace.** The airspace above minimum altitude for safe flight, and includes the airspace needed to ensure safety in take-off and landing of aircraft.

**Noise. (Planning and Urban Design Standards)** Unwanted sound.

**Noise Abatement Procedures. (FAA Website)** Changes in runway usage, flight approach and departure routes and procedures, and vehicle movement, such as ground maneuvers or other air traffic procedures that shift aviation impacts away from noise sensitive areas.

**Noise Compatibility Program (NCP). (FAA AC 150/5020.1)** The purpose of such a program is to seek optimal accommodation of both airport operations and community activities within acceptable safety, economic and environmental parameters. That may be accomplished by reducing existing noncompatible land uses in the vicinity of the airport and preventing the introduction of new noncompatible land uses in the future. To that end, the airport proprietor and other responsible officials should consider a wide range of feasible alternatives of noise control actions and land use patterns.

**Noise Exposure Contours. (FAA Website)** Lines drawn around a noise source indicating constant energy levels of noise exposure. DNL is the measure used to describe community exposure to noise.

**Noise Exposure Map (NEM). (FAA AC 150/5020.1)** A scaled, geographic, depiction of an airport, its noise contours, and surrounding area developed in accordance with Section A150.101 of Appendix A of FAR Part 150, including the accompanying documentation setting forth the required descriptions of projected aircraft operations at the airport during 1985 and if submitted after 1982, during the fifth calendar year beginning after submission of the map, together with the ways, if any those operations for each of those years will affect the map.

**Noise Impact.** A condition that exists when the noise levels that occur in an area exceed a level identified as appropriate for the activities in that area.

**Noise Sensitive Area. (FAA AC 91-36D)** Defined as an area where noise interferes with normal activities associated with the area's use. Examples of noise-sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites where a quiet setting is a generally recognized feature or attribute.



**Non-Aeronautical Activities.** The following are examples of non-aeronautical activities: ground transportation (taxis, car rentals, limousines); restaurants; barber shops; auto parking lots. See Aeronautical Activities.

**Non-Attainment Area. (FAA Website)** Areas that exceeded the national ambient air quality standards for any of six pollutants (ozone or smog, carbon monoxide, lead, particulate matter, PM-10 or nitrogen dioxide).

**Non-Conforming Use. (FAA Website)** Any pre-existing structure, tree, or use of land that is inconsistent with the provisions of the local land use or airport master plans.

**Non-Precision Instrument Runway. (FAA AC 150/5190-4A)** A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned.

**Obligated Airport. (FAA PPM 5190.10)** A public use airport that is developed or improved with federal assistance under the various Federal grant programs, surplus property transfers, and other federal government deeds of conveyance.

**Object. (FAA AC 150/5300-13)** Includes, but is not limited to above ground structures, NAVAIDs, people, equipment, vehicles, natural growth, terrain, and parked aircraft.

**Obstacle Free Zone (OFZ). (FAA 150/5300-13)** The OFZ is the airspace below 150 feet (45 m) above the established airport elevation and along the runway and extended runway centerline that is required to be clear of all objects, except for the frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance protection for the aircraft landing or taking off from the runway, and for missed approaches.

**Obstruction. (FAA AC 150/5190-4A)** Any structure, growth, or other object, including a mobile object, which exceeds a limiting height, specific to its geographic location relative to the runway/airport.

**Off Airport Property. (FAA Website)** Property that is beyond the boundary of land owned by the airport sponsor.

**Official Map. (FAA Website)** A legally adopted map that conclusively shows the locations and width of proposed streets, public facilities, public areas, and drainage rights-of-way.

**On-Airport Property. (FAA Website)** Property that is within the boundary of land owned by the airport sponsor.

**Overlay Zone. (FAA Website)** A mapped zone that imposes a set of requirements in addition to those of the underlying zoning district.

**Parallel Taxiway.** A taxiway that is aligned parallel to a runway, with connecting taxiways to allow efficient movement of aircraft between the runway and taxiway. The parallel taxiway effectively separates taxiing aircraft from arriving and departing aircraft located on the runway. Used to increase runway capacity and improve safety.

**Passenger Facility Charge (PFC).** A user fee charged by public agencies controlling a commercial service airport can charge enplaning passengers a fee facility charge. Public agencies must apply to the FAA and meet certain requirements in order to impose a PFC.

**Precision Approach Path Indicator (PAPI).** A system of lights located by the approach end of a runway that provides visual approach slope guidance to aircraft during approach to landing. The lights typically show green if a pilot is on the correct flight path, and turn red if a pilot is too low.

**Part 77. (FAA FAR Sec. 77.31)** 14 CFR Part 77, *Objects Affecting Navigable Airspace*, establishes standards for determining obstructions in navigable airspace; defines the requirements for notice to the FAA 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.

**Part 150 Study. (FAA Website)** Part 150 is the abbreviated name for the airport noise compatibility planning process outlined in Part 150 of the Federal Aviation Regulation (FAR) that allows airport owners to voluntarily submit noise exposure maps and noise compatibility programs to the FAA for review and approval. See "Noise Compatibility Plan."

**Passenger Facility Charge (PFC) Program. (FAA Website)** Program allows the collection of fees up to a set dollar amount, approved by the FAA for every enplaned passenger at commercial airports controlled by public agencies. Airports use these fees to fund FAA-approved projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition.

**Performance Standards. (FAA Website and Planning and Urban Design Standards)** Minimum acceptable levels of performance, imposed by zoning that must be met by each land use. These standards set limits on externalities such as noise, odor, smoke, dust, noxious gases, vibration, heat and glare. They may be used to control physical, traffic, and fiscal impacts of development.

**Precision Instrument Runway. (FAA AC 150/5190-4A)** A runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS) or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated on an approved airport layout plan or any other planning document.

**Primary Surface. (FAA AC 150/5190-4A)** A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; for military runways or when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The width of the primary surface is set forth in FAR Part 77. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.

**Primary Runway. (FAA AC 150/5325-4B General Definition)** The runway used for the majority of airport operations. Large, high-activity airports may operate two or more parallel primary runways.

**Proponent.** Any person who proposes to erect or construct any object or structure that exceeds certain minimum altitudes that may be a potential hazard to air navigation and who may be responsible for lighting and marking such object or structure.

**Public Aircraft.** An aircraft used exclusively in the service of any government or of any political subdivision thereof, including the government of any state, territory, or possession of the United States, or the District of Columbia, but not including any government-owned aircraft engaged in carrying persons or property for commercial purposes.

**Public Use Airport. (FAA AC 150/5190-6)** Means either a publicly owned airport or a privately owned airport open for public use.

**Reliever Airport. (FAA FAR Sec. 152.3)** A general aviation airport designated by the Administrator as having the primary function of relieving congestion at an air carrier airport by diverting from that airport general aviation traffic.



**Resiliency.** The ability to recover readily from natural disaster, adversity, or the like.

**Rotorcraft.** A helicopter.

**Runway.** A defined area intended to accommodate aircraft takeoff and landing. Runways may be paved (asphalt or concrete) or unpaved (gravel, turf, dirt, etc.), depending on use. Water runways are defined takeoff and landing areas for use by seaplanes.

**Runway End Identifier Lights (REILs).** These are distinctive flashing lights that help a pilot identify the runway.

**Runway Object Free Area (OFA).** A defined area surrounding a runway that should be free of any obstructions that could interfere with aircraft operations. The dimensions for the OFA increase for runways accommodating larger or faster aircraft.

**Runway Protection Zone (RPZ). (FAA AC 150/5300-13)** An area off the runway end designed to enhance the protection of people and property on the ground.

**Runway Safety Area. (FAA AC 150/5300-13).** A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an overshoot, or excursion from the runway.

**Segmented Circle.** A system of visual indicators designed to show a pilot in the air the direction of the traffic pattern at that airport.

**Small Aircraft.** An aircraft that weighs less than 12,500 lbs.

**Sound Attenuation. (FAA FAR Part 150)** Acoustical phenomenon whereby a reduction of sound energy is experienced between the noise source and the receiver. This energy loss can be attributed to atmospheric conditions, terrain, vegetation, constructed features (e.g., sound insulation) and natural features.

**Sound Exposure Level (SEL). (FAA FAR Sec. 150.7)** The level, in decibels, of the time integral of squared A-weighted sounds pressure during a specified period or event, with reference to the square of the standard reference sound pressure of 20 micropascals and a duration of one second.

**Special Exceptions. (FAA Website)** Land uses that are not specifically permitted as a matter of right, but can be permitted in accordance with performance standards and other local criteria. Also known as "conditional uses."

**Stage 2 Aircraft. (FAA Website)** Aircraft that meet the noise levels prescribed by FAR Part 36 and are less stringent than noise levels established for the quieter designation Stage 3 aircraft. The Airport Noise and Capacity Act requires the phase-out of all Stage 2 aircraft by December 31, 1999, with case-by-case exceptions through the year 2003.

**Stage 3 Aircraft. (FAA Website)** Aircraft that meet the most stringent noise levels set forth in FAR Part 36.

**Statute Mile. (FAA Website)** A measure of distance equal to 5,280 feet.

**Structure.** Any object constructed or installed by humans, including, but without limitation, buildings, towers, smokestacks, and overhead transmission lines, including the poles or other structures supporting the same.

**T-Hangar.** A rectangular aircraft storage hangar with several interlocking "T" units that minimizes building per storage unit. Usually two-sided with either bi-fold or sliding doors.

**Taxiway Safety Area (TSA). (FAA AC 150/5300-13)** A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway.

**Terminal Area. (FAA Website)** A general term used to describe airspace in which airport traffic control or approach control service is provided.

**Transfer of Development Rights (TDR). (FAA Website)** This involves separate ownership and use of the various "rights" associated with a parcel of real estate. Under this concept, some of the property's development rights are transferred to a remote location where they may be used to intensify allowable development.

**Transitional Surface. (FAA AC 150/5190-4A)** These surfaces extend outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the aides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces, which project through and beyond the limits of the conical Surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at 90 degree angles to the extended runway centerline.

**Tree. (FAA AC 150/5190-4A and Merriam-Webster Dictionary Online)** Any object of natural growth. A woody perennial plant having a single usually elongate main stem generally with few or no branches on its lower part.

**Turbojet Aircraft. (FAA AC 20-147 General Definition)** Aircraft operated by jet engines incorporating a turbine-driven air compressor to take in and compress the air for the combustion of fuel, the gases of combustion (or the heated air) are used both to rotate the turbine and to create a thrust-producing jet.

**Turboprop Aircraft. (FAA Website)** Aircraft in which the main propulsive force is supplied by a gas turbine driven conventional propeller. Additional propulsive force may be supplied from the discharged turbine exhaust gas.

**Unmanned aerial vehicle (UAV).** Commonly known as a drone, is an aircraft without a human pilot aboard. UAVs are a component of an unmanned aircraft system (UAS); which include a UAV, a ground-based controller, and a system of communications between the two.

**Unmanned aircraft system (UAS).** Unmanned Aerial System (UAS) has three components: An autonomous or human-operated control system which is usually on the ground or a ship but may be on another airborne platform; An Unmanned Aerial Vehicle (UAV); A command and control (C2) system - sometimes referred to as a communication, command and control (C3) system - to link the two. The acronym was adopted by the United States Department of Defense (DoD) and the United States Federal Aviation Administration in 2005.

**Utility Runway.** A utility runway constructed for and intended to be used by propeller driven aircraft of 12,500 pounds gross weight or less.

**Variance. (FAA Website)** An authorization for the construction or maintenance of a building or structure, or for the establishment or maintenance of a use of land that is prohibited by a zoning ordinance. A lawful exception from specific zoning ordinance standards and regulations predicated on the practical difficulties and/or unnecessary hardships on the petitioner being required to comply with those regulations and standards from which an exemption or exception is sought.

**Vertical Navigation (VNAV).** Vertical navigation descent data or descent path, typically associated with published GPS instrument approaches. The use of any VNAV approach technique requires operator approval, certified VNAV capable avionics, and flight crew training.



**Visual Approach Slope Indicator (VASI).** A system of lights located by the approach end of a runway which provides visual approach slope guidance to aircraft during approach to landing lights typically show some combination of green and white if a pilot is on the correct flight path and turn red if a pilot is too low.

**Visual Approach. (FAA Website)** An approach to an airport conducted with visual reference to the terrain.

**Visual Runway. (FAA AC 150/5300-13)** A runway without an existing or planned straight-in instrument approach procedure.

**Visual Flight Rules (VFR). (FAA FAR Sec. 170.3)** Rules that govern the procedures for conducting flight under visual conditions. The term “VFR” is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, “VFR” is used by pilots and controllers to indicate the type of flight plan.

**Weighted Sound Level (also referred to as DBA). (FAA AC 20-133)** A single event sound level which has been filtered or weighted to discriminate against the low and high frequency extremes to approximate the auditory sensitivity of the human ear.

**Wetland.** Land on which water covers the soil or is present either at or near the surface of the soil or within the root zone, all year or for varying periods of time during the year, including during the growing season. **(FAA AC 150/5200-33A)** Wetlands provide a variety of functions and can be regulated by local, state, and Federal laws. Normally, wetlands are attractive to many types of wildlife, including many which rank high on the list of hazardous wildlife species.

**Wetland Mitigation Banking. (FAA AC 150/5200-33A)** Wetland mitigation banking is the creation or restoration of wetlands in order to provide mitigation credits that can be used to offset permitted wetland losses. Mitigation banking benefits wetland resources by providing advance replacement for permitted wetland losses; consolidating small projects into larger, better designed and managed units; and encouraging integration of wetland mitigation projects with watershed planning.

**Wind Rose.** A diagram indicating the prevalence of winds from various directions in relation to existing or proposed runway alignments.

**Yearly Day-Night Average Sound Level (YDNL). (FAA FAR Sec. 150.7)** The 365-day average, in decibels, day-night average sound level. The symbol for YDNL is also Ldn.

**Zoning. (FAA AC 150/5020-1)** An exercise of the police powers of the State, as delegated to local governments, designating the uses permitted on each parcel of land within the zoning jurisdiction.

**Zoning Ordinance. (FAA AC 150/5190-4A general definition)** Primarily a legal document that allows a local government effective and legal regulation of uses of property while protecting and promoting the public interest.