

Appendix A: GLOSSARY OF TERMS & ACRONYMS

La Grande / Union County Airport

Airport Master Plan Update

DEFINITIONS

ABOVE GROUND LEVEL. The elevation of a point or surface above the ground.

ACCELERATE – STOP DISTANCE AVAILABLE (ASDA). See declared distances

ADVISORY CIRCULAR. External publication issued by the FAA consisting of non-regulatory material providing for the recommendations relative to a policy, guidance and information relative to a specific aviation subject.

AIR CARRIER. An operator, which: (1) performs at least five round trips per week between two or more points and publishes flight schedules which specifies the times, days of the week, and places between which such flights are performed; or (2) transport mail by air pursuant to a current contract with the U.S. Postal Service. Certified in accordance with Federal Aviation Regulation (FAR) Parts 121 and 127.

AIR ROUTE TRAFFIC CONTROL CENTER (ARTCC). A facility established to provide air traffic control service to an aircraft operating on an IFR flight plan within controlled airspace and principally during the enroute phase of flight.

AIR TAXI. An air carrier certificated in accordance with FAR Part 135 and authorized to provide, on demand, public transportation of persons and property by aircraft. Generally operates small aircraft for hire for specific trips.

AIR TRAFFIC CONTROL FACILITIES (ATC-F). Electronic equipment and buildings aiding air traffic control (ATC)- for communications, surveillance of aircraft including weather detection and advisory systems.

AIRCRAFT. An aircraft is a device that is used or intended to be used for flight in the air.

AIRCRAFT APPROACH CATEGORY. A grouping of aircraft based on 1.3 times the stall speed in their maximum certificated landing weight. The categories are as follows:

- 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 greater than 166 knots.

AIRCRAFT OPERATION. The landing, takeoff, or touch-and-go procedure by an aircraft on a runway at an airport.

AIRCRAFT OPERATIONS AREA (AOA). A restricted and secure area on the airport property designed to protect all aspects related to aircraft operations.

AIRFIELD. The portion of an airport which contains the facilities necessary for the operation of aircraft.

AIRPLANE. An engine-driven fixed-wing aircraft heavier than air that is supported in flight by the dynamic reaction of the air against its wings.

AIRPLANE DESIGN GROUP (ADG). A grouping of aircraft based upon relative wingspan or tail height (whichever is most demanding). The groups are as follows:

Group	Tail Height (ft)	Wingspan (ft)
I	<20	<49
II	20 - <30	49 - <79
III	30 - <45	79 - <118
IV	45 - <60	118 - <171
V	60 - <66	171 - <214
VI	66 - <80	214 - <262

AIRPORT. An airport is an area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.

AIRPORT BEACON. A navigational aid located at an airport which displays a rotating light beam to identify whether an airport is lighted.

AIRPORT ELEVATION. The highest point on an airport’s usable runway expressed in feet above mean sea level (MSL).

AIRPORT IMPROVEMENT PROGRAM. A program authorized by the Airport and Airway Improvement Act of 1982 that provides funding for airport planning and development.

AIRPORT LAYOUT DRAWING (ALD). The drawing of the airport showing the layout of existing and proposed airport facilities.

AIRPORT LAYOUT PLAN (ALP). A scaled drawing of the existing and planned land and facilities necessary for the operation and development of the airport.

AIRPORT LAYOUT PLAN DRAWING SET. A set of technical drawings depicting the current and future airport conditions. The FAA required drawings include the Airport Layout Plan, the Airport Airspace Drawing, and the Inner Portion of the Approach Surface Drawing, On-Airport Land Use Drawing, and Property Map.

AIRPORT MOVEMENT AREA SAFETY SYSTEM. A system that provides automated alerts and warnings of potential runway incursions or other hazardous aircraft movement events.

AIRPORT OBSTRUCTION CHART. A scaled drawing depicting the Federal Aviation Regulation (FAR) Part 77 surfaces, a representation of objects that penetrate these surfaces, runway, taxiway and ramp areas, navigational aids, buildings, roads and other details in the vicinity of the airport.

AIRPORT REFERENCE CODE (ARC). A coding system used to relate airport design criteria to the operational (Aircraft Approach Category) to the physical characteristics (Airplane Design Group) of the airplanes intended to operate at the airport.

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

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

AIRSIDE. The portion of an airport that contains facilities necessary for the operation of aircraft.

AIRSPACE. The volume of space above the surface of the ground that is provided for the operation of aircraft.

ALERT AREA. See special-use airspace.

ALTITUDE. The vertical distance measured in feet above mean sea level.

ALIGNED TAXIWAY. A taxiway with its centerline aligned with a runway centerline. Sometimes referred to as an “inline taxiway.”

APPROACH PROCEDURE WITH VERTICAL GUIDANCE (APV). An Instrument Approach Procedure (IAP) providing both vertical and lateral electronic guidance.

ANNUAL INSTRUMENT APPROACH (AIA). An approach to an airport with the intent to land by an aircraft in accordance with an IFR flight plan when visibility is less than three miles and/or when the ceiling is at or below the minimum initial approach altitude.

APPROACH LIGHTING SYSTEM (ALS). An airport lighting facility, which provides visual guidance to landing aircraft by radiating light beams by which the pilot aligns the aircraft with the extended centerline of the runway on his/her final approach and landing.

APPROACH MINIMUMS. The altitude below which an aircraft may not descend while on an IFR approach unless the pilot has the runway in sight.

APPROACH SURFACE. An imaginary obstruction limiting surface defined in FAR Part 77 which is longitudinally centered on an extended runway centerline and extends outward and upward from the primary surface at each end of a runway at a designated slope and distance based upon the type of available or planned approach by aircraft to a runway.

APPROACH SURFACE BASELINE (ASBL). A horizontal line tangent to the surface of the earth at the runway threshold aligned with the final approach course.

APRON. A specified portion of the airfield used for passenger, cargo or freight loading and unloading, aircraft parking, and the refueling, maintenance and servicing of aircraft.

AREA NAVIGATION. The air navigation procedure that provides the capability to establish and maintain a flight path on an arbitrary course that remains within the coverage area of navigational sources being used.

AUTOMATIC DIRECTION FINDER (ADF). An aircraft radio navigation system, which senses and indicates the direction to a non-directional radio beacon (NDB) ground transmitter.

AUTOMATED SURFACE OBSERVATION SYSTEM (ASOS). A reporting system that provides frequent airport ground surface weather observation data through digitized voice broadcasts and printed reports.

AUTOMATED WEATHER OBSERVATION STATION (AWOS). Equipment used to automatically record weather conditions (i.e. cloud height, visibility, wind speed and direction, temperature, dew-point, etc.).

AUTOMATED TERMINAL INFORMATION SERVICE (ATIS). The continuous broadcast of recorded non-control information at towered airports. Information typically includes wind speed, direction and active runway.

AVIGATION EASMENT. A contractual right or a property interest in land over which a right of unobstructed flight in the airspace is established.

AZIMUTH. Horizontal direction expressed as the angular distance between true north and the direction of a fixed point (as the observer's heading).

BASE LEG. A flight path at right angles to the landing runway off its approach end. The base leg normally extends from the downwind leg to the intersection of the extended runway centerline. See Traffic Pattern.

BASED AIRCRAFT. The general aviation aircraft that uses a specific airport as a home base.

BEARING. The horizontal direction to or from any point, usually measured clockwise from true north or magnetic north.

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

BLAST PAD. A prepared surface adjacent to the end of a runway for the purpose of eliminating the erosion of the ground surface by the wind forces produced by airplanes at the initiation of takeoff operations.

BUILDING RESTRICTION LINE (BRL). A line that identifies suitable building area locations on the airport.

BYPASS TAXIWAY. A taxiway used to reduce aircraft queuing demand by providing multiple takeoff points.

CAPITAL IMPROVEMENT PLAN. The planning program used by the FAA to identify, prioritize, and distribute funds for airport development and the needs of the National Airspace System to meet specified national goals and objectives.

CATEGORY-I (CAT-I). An instrument approach or approach and landing with a Height Above Threshold (HATh) or minimum descent altitude not lower than 200 ft (60 m) and with either a visibility not less than ½ statute mile (800m), or a runway visual range not less than 1800 ft (550m).

CATEGORY-II (CAT-II). An instrument approach or approach and landing with a Height Above Threshold (HATh) lower than 200 ft (60 m) but not lower than 100 ft (30 m) and a runway visual range not less than 1200 ft (350m).

CATEGORY-III (CAT-III). An instrument approach or approach and landing with a Height Above Threshold (HATh) lower than 100 ft (30m), or no HATh, or a runway visual range less than 1200 ft (350m).

CEILING. The height above the ground surface to the location of the lowest layer of clouds which is reported as either broken or overcast.

CIRCLING APPROACH. A maneuver initiated by the pilot to align the aircraft with the runway for landing when flying a predetermined circling instrument approach under IFR.

CLASS A AIRSPACE. See Controlled Airspace.

CLASS B AIRSPACE. See Controlled Airspace.

CLASS C AIRSPACE. See Controlled Airspace.

CLASS D AIRSPACE. See Controlled Airspace.

CLASS E AIRSPACE. See Controlled Airspace.

CLASS G AIRSPACE. See Controlled Airspace.

CLEARWAY (CYW). A defined rectangular area beyond the end of the runway cleared or suitable for use in lieu of runway to satisfy takeoff distance requirements.

COMMON TRAFFIC ADVISORY FREQUENCY. A radio frequency identified in the appropriate aeronautical chart which is designated for the purpose of transmitting airport advisory information and procedures while operating to and from an uncontrolled airport.

COMPASS LOCATOR (LOM). A low power, low/medium frequency radio-beacon installed in conjunction with the instrument landing system at one or two or the marker sites.

CONICAL SURFACE. An imaginary obstruction-limiting surface defined in FAR Part 77 that extends from the edge of the horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

CONTROLLED AIRPORT. An airport that has an operating airport traffic control tower.

CONTROLLED AIRSPACE. Airspace of defined dimensions within which air traffic control services are provided to instrument flight rules (IFR) and visual flight rules (VFR) flights in accordance with the airspace classification. Controlled airspace in the United States is designated as follows.

- **CLASS A.** The airspace from 18,000 feet mean sea level (MSL) up to but not including 60,000 MSL (flight level FL600).
- **CLASS B.** Generally, the airspace from the surface to 10,000 feet MSL surrounding the nation's busiest airports. The configuration of Class B airspace is unique to each airport, but typically consists of two or more layers of airspace and is designed to contain all published instrument approach procedures to the airport. An air traffic control clearance is required for all aircraft to operate in the area.
- **CLASS C.** Generally, the airspace from the surface to 4,000 feet above the airport elevation (charted as MSL) surrounding those airports that have an operational control tower and radar approach and are served by a qualifying number of IFR operations or passenger enplanements. Although individually tailored for each airport, Class C airspace typically consists of a surface area with a five nautical miles (nm) radius and an outer area with a 10 nm radius that extends from 1,200 feet to 4,000 feet above the airport elevation. Two-way radio communication is required for all aircraft.
- **CLASS D.** Generally, that airspace from the surface to 2,500 feet above the airport elevation (charted as MSL) surrounding those airports that have an operational control tower. Class D airspace is individually tailored and configured to encompass published instrument approach procedures. Unless otherwise authorized, all persons must establish two-way radio communications.
- **CLASS E.** Generally, controlled airspace not classified as Class A, B, C or D. Class E airspace extends upward from either the surface or a designated altitude to the overlying or adjacent controlled airspace. When designated as a surface area, the airspace will be configured to contain all instrument procedures. Class E airspace encompasses all Victor Airways. Only aircraft following instrument flight rules are required to establish two-way radio communications with air traffic control.
- **CLASS G.** Generally, that airspace not classified as Class A, B, C, D or E. Class G airspace extends from the surface to the overlying Class E airspace

CONTROLLED FIRING AREA. See special-use airspace.

CROSSWIND. Wind flow that is not parallel to the runway of the flight of an aircraft.

CROSSWIND COMPONENT. The component of wind that is at a right angle to the runway centerline or the intended flight path of an aircraft.

CROSSWIND LEG. A flight path at right angles to the landing runway off its upwind end. See Traffic Pattern.

DECIBEL. A unit of noise representing a level relative to a reference of a sound pressure 20 micro newtons per square meter.

DECISION HEIGHT. The height above the end of the runway surface at which a decision must be made by a pilot during the ILS or Precision Approach Radar approach to either continue the approach or to execute a missed approach.

DECLARED DISTANCES. The distances declared available for the airplane’s takeoff run, takeoff distance, accelerate-stop distance and landing distance requirements. The distances are:

- **TAKEOFF RUN AVAILABLE (TORA).** The runway length declared available and suitable for the ground run of an airplane taking off.
- **TAKEOFF DISTANCE AVAILABLE (TODA).** The TORA plus the length of any remaining runway and/or clearway beyond the far end of the TORA.
- **ACCELERATE – STOP DISTANCE AVAILABLE (ASDA).** The runway plus stopway length declared available for the acceleration and deceleration of an aircraft aborting a takeoff.
- **LANDING DISTANCE AVAILABLE (LDA).** The runway length declared available and suitable for landing.

DESIGN AIRCRAFT. An aircraft with characteristics that determine the application of airport design standards for a specific runway, taxiway, taxilane, apron, or other facility (such as Engineered Materials Arresting System [EMAS]). This aircraft can be a specific aircraft model or a composite of several aircraft using, expected, or intended to use the airport or part of the airport. (Also called “critical aircraft” or “critical design aircraft.”)

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

DISTANCE MEASURING EQUIPMENT (DME). Equipment (airborne and ground) used to measure, in nautical miles, the slant range distance of an aircraft from the DME navigational aid.

DNL. The 24-hour average sound level, in A-weighted decibels, obtained after the addition of ten decibels to sound levels for the periods between 10 pm and 7 am as averaged over a span of one year. It is the FAA standard metric for determining the cumulative exposure of individuals to noise.

DOWNWIND LEG. A flight path parallel to the landing runway in the direction opposite to landing. The downwind leg normally extends between the crosswind leg and the base leg. Also see Traffic Pattern.

EASEMENT. 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 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.

END-AROUND TAXIWAY (EAT). A taxiway crossing the extended centerline of a runway, which does not require specific clearance from air traffic control (ATC) to cross the extended centerline of the runway.

ENPLANED PASSENGERS. The total number of revenue passengers boarding aircraft, including originating, stop-over, and transfer passengers, in scheduled and non-scheduled services.

ENPLANMENT. The boarding of a passenger, cargo, freight or mail on an aircraft at an airport.

ENTITLEMENT. Federal funds for which a commercial service airport may be eligible based upon its annual passenger enplanements.

ENTRANCE TAXIWAY. A taxiway designed to be used by an aircraft entering a runway. Entrance taxiways may also be used to exit a runway.

EXIT TAXIWAY. A taxiway designed to be used by an aircraft only to exit a runway.

ENVIRONMENTAL ASSESSMENT (EA). An environmental analysis performed pursuant to the National Environmental Policy Act to determine whether an action would significantly affect the environment and thus require a more detailed environmental impact assessment.

ENVIRONMENTAL AUDIT. An assessment of the current status of a party's compliance with applicable environmental requirements of a party's environmental compliance policies, practices and controls.

FEDERAL AVIATION REGULATIONS. The general and permanent rules established by the executive departments and agencies of the Federal Government for aviation, which are published in the Federal Register. These are aviation subset of the Code of Federal Regulations.

FINAL APPROACH. A flight path in the direction of landing along the extended runway centerline. The final approach normally extends from the base leg to the runway. See Traffic Pattern

FINAL APPROACH AND TAKEOFF AREA (FATO). A defined area over which the final phase of the helicopter approach to a hover, or a landing is completed and from which takeoff is initiated.

FINAL APPROACH FIX. The designated point at which the final approach segment for an aircraft landing on a runway begins for a non-precision approach.

FIXED BASE OPERATOR (FBO). An FBO typically offers the following services (or a combination thereof): aircraft charter operation, aircraft rental, aircraft storage, flight training, aircraft sales/leasing, aircraft component maintenance, aircraft parts sales, and aircraft maintenance.

FLIGHT SERVICE STATION. An operations facility in the national flight advisory system which utilizes data interchange facilities for the collection and dissemination of Notices to Airmen, weather, and administrative data and which provides pre-flight and in-flight advisory services to pilots through air and ground based communication facility.

FRANGIBLE NAVAID. A navigational aid 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.

GENERAL AVIATION. That portion of civil aviation that encompasses all facets of aviation except air carriers holding a certificate of convenience and necessity, and large aircraft commercial operators.

GENERAL AVIATION AIRPORT. An airport that provides air service to only general aviation.

GLIDE PATH ANGLE (GPA). The GPA is the angle of the final approach descent path relative to the approach surface baseline.

GLIDE PATH QUALIFICATION SURFACE (GQS). An imaginary surface extending from the runway threshold along the runway centerline extended to the Decision Altitude (DA) point.

GLIDE SLOPE (GS). Provides vertical guidance for aircraft during approach and landing. The glide slope consists of 1) electronic components emitting signals which provide vertical guidance by reference to airborne instruments during instrument approaches such as ILS; or 2) visual ground aids, such as VASI, which provide vertical guidance for VFR approach or for the visual portion of an instrument approach and landing.

GLOBAL POSITIONING SYSTEM (GPS). A system of 24 satellites used as reference points to enable navigators equipped with GPS receivers to determine their latitude, longitude and altitude.

HAZARD to AIR NAVIGATION. An existing or proposed object that the FAA, as a result of an aeronautical study, determines will have a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft, operation of air navigation facilities, or existing or potential airport capacity.

HEIGHT ABOVE THRESHOLD (HATH). The height of the Decision Altitude (DA) above the threshold.

HELIPAD. A designated area for the takeoff, landing and parking of helicopters.

HIGH INTENSITY RUNWAY LIGHTS. The highest classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.

HIGH-SPEED EXIT TAXIWAY. A long radius taxiway designed to expedite aircraft turning off the runway after land (at speeds up to 60 knots), thus reducing runway occupancy time.

HORIZONTAL SURFACE. An imaginary obstruction-limiting surface defined in FAR Part 77 that is specified as a portion of a horizontal plane surrounding a runway located 150 feet above the established airport elevation. The specific horizontal dimensions of this surface are a function of the types of approaches existing or planned for the runway.

INITIAL APPROACH FIX. The designated point at which the initial approach segment begins for an instrument approach to a runway.

INSTRUMENT APPROACH PROCEDURE. A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or to a point from which a landing may be made visually.

INSTRUMENT FLIGHT RULES (IFR). Rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.

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 and 5) approach lights.

INSTRUMENT METEOROLOGICAL CONDITIONS. Meteorological conditions expressed in terms of specific visibility and ceiling conditions that are less than the minimums specified for visual meteorological conditions.

ITINERANT OPERATIONS. All aircraft operations other than local operations.

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

LANDSIDE. The portion of an airport that provides the facilities necessary for the processing of passengers, cargo, freight and ground transportation vehicles.

LANDING DISTANCE AVAILABLE (LDA). See declared distances.

LARGE AIRPLANE. An airplane that has a maximum certified takeoff weight in excess of 12,500 pounds.

LOCAL AREA AUGMENTATION SYSTEM. A differential GPS system that provides localized measurement correction signals to the basic GPS signals to improve navigational accuracy, integrity, continuity and availability.

LOCAL OPERATIONS. Aircraft operations performed by aircraft that are based at the airport and that operate in the local traffic pattern or within sight of the airport, that are known to be departing for or arriving from flights in local practice areas within a prescribed distance from the airport, or that execute simulated instrument approaches at the airport.

LOCAL TRAFFIC. Aircraft operating in the traffic pattern or within site of the tower, or aircraft known to be departing or arriving from the local practice areas, or aircraft executing practice instrument approach procedures. Typically, this includes touch-and-go training operations.

LOCALIZER. The component of an ILS, which provides course guidance to the runway.

LOCALIZER TYPE DIRECTIONAL AID (LDA). A facility of comparable utility and accuracy to a localizer, but is not part of a complete ILS and is not aligned with the runway.

LORAN. Long range navigation, an electronic navigational aid which determines aircraft position and speed by measuring the difference in the time of reception of synchronized pulse signals from two fixed transmitters. Loran is used for en route navigation.

LOW IMPACT RESISTANT (LIR) SUPPORT. A support designed to resist operational and environmental static loads and fail when subjected to a shock load such as that from a colliding aircraft.

LOW INTENSITY RUNWAY LIGHTS. The lowest classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.

MAIN GEAR WIDTH (MGW). The distance from the outer edge to outer edge of the widest set of main gear tires.

MEDIUM INTENSITY RUNWAY LIGHTS. The middle classification in terms of intensity or brightness for lights designated for use in delineating the sides of a runway.

MICROWAVE LANDING SYSTEM (MLS). An instrument approach and landing system that provides precision guidance in azimuth, elevation, and distance measurement.

MILITARY OPERATIONS AREA (MOA). See special-use airspace.

MILITARY TRAINING ROUTE. An air route depicted on aeronautical charts for the conduct of military flight training at speeds above 250 knots.

MISSED APPROACH COURSE (MAC). The flight route to be followed if, after an instrument approach, a landing is not effected, and occurring normally when the aircraft has descended to the decision height and has not established visual contact or when directed by air traffic control to pull up or to go around again.

MODIFICATION to STANDARDS. Any approved nonconformance to FAA standards, other than dimensional standards for Runway Safety Areas (RSAs), applicable to an airport design, construction, or equipment procurement project that is necessary to accommodate an unusual local condition for a specific project on a case-by-case basis while maintaining an acceptable level of safety.

MOVEMENT AREA. The runways, taxiways, and other areas of an airport which are utilized for taxiing/hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and parking areas. At those airports with a tower, air traffic control clearance is required for entry onto the movement area.

NATIONAL AIRSPACE SYSTEM. The network of air traffic control facilities, air traffic control areas, and navigational facilities through the US.

NATIONAL PLAN OF INTEGRATED AIRPORT SYSTEMS. The national airport system plan developed by the Secretary of Transportation on a bi-annual basis for the development of public use airports to meet national air transportation needs.

NAUTICAL MILE. A unit of length used in navigation, which is equivalent to the distance spanned by one minute of arc in latitude, that is, 1,852 meters or 6,076 feet. It is equivalent to approximately 1.15 statute mile.

NAVAID. A term used to describe any electrical or visual air navigational aid, light, sign, and associated supporting equipment.

NOISE CONTOUR. A continuous line on a map of the airport vicinity connecting all points of the same noise exposure level.

NONDIRECTIONAL BEACON (NDB). A beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine his/her bearing to and from the radio beacon and home on, or track to, the station. When the radio beacon is installed in conjunction with the Instrument Landing System marker, it is normally called a compass locator.

NONPRECISION APPROACH PROCEDURE. A standard instrument approach procedure in which no electronic glide slope is provided, such as VOR, TACAN, NDB or LOC.

OBJECT FREE AREA (OFA). An area on the ground centered on a runway, taxiway or taxilane centerline provided to enhance the safety of aircraft operations by having the area free of objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

OBSTACLE FREE ZONE (OFZ). The airspace below 150 feet above the established airport elevation and along the runway and extended runway centerline that is required to be kept clear of all objects, except for frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance for aircraft landing or taking off from the runway, and for missed approaches.

OPERATION. A takeoff or landing.

OUTER MARKER (OM). An ILS navigation facility in the terminal area navigation system located four to seven miles from the runway edge on the extended centerline indicating to the pilot that he/she is passing over the facility and can begin final approach.

PILOT CONTROLLED LIGHTING. Runway lighting systems at an airport that are controlled by activating the microphone of a pilot on a specified radio frequency.

PRECISION APPROACH. A standard instrument approach procedure, which provides runway alignment and glide slope (descent) information. It is categorized as follows:

- **CATEGORY I.** A precision approach which provides for approaches with a decision height of not less than 200 feet and visibility not less than ½ mile or Runway Visual Range (RVR) 2400 with operative touchdown zone and runway centerline lights.
- **CATEGORY II.** A precision approach, which provides for approaches with a decision height of not less than 100 feet and visibility not less than 1200 feet RVR.
- **CATEGORY III.** A precision approach, which provides for approaches with minima less than Category II.

PRECISION APPROACH PATH INDICATOR (PAPI). A lighting system providing visual approach slope guidance to aircraft during a landing approach. It is similar to a Visual Approach Slope Indicator (VASI) but provides a sharper transition between the colored indicator lights.

PRECISION OBJECT FREE ZONE (POFZ). An area centered on the extended runway centerline, beginning at the runway threshold and extending behind the runway threshold that is 200 feet long by 800 feet wide. The POFZ is a clearing standard, which requires the POFZ to be kept clear of above ground objects protruding above the runway safety area edge elevation (except for NAVAIDs). The POFZ applies to all new authorized instrument approach procedures with less than ¾ mile visibility.

PRIMARY AIRPORT. A commercial service airport that enplanes at least 10,000 annual passengers.

PRIMARY SURFACE. An imaginary obstruction limiting surface defined in FAR Part 77 that is specified as a rectangular surface longitudinally centered about a runway. The specific dimensions of this surface are a function of the types of approaches existing or planned for the runway.

PROHIBITED AREA. See special-use airspace.

REMOTE TRANSMITTER / RECEIVER (RTR). See remote communications outlet. RTRs serve ARTCCs.

RELIEVER AIRPORT. An airport to serve general aviation aircraft, which might otherwise use a congested air-carrier served airport.

RESTRICTED AREA. See special-use airspace.

RNAV. Area Navigation – airborne equipment, which permits flights over determined tracks within prescribed accuracy tolerances without the need to overfly ground-based navigation facilities. Used en route and for approaches to an airport.

RUNWAY. A defined rectangular area on an airport prepared for an aircraft landing and taking off. Runways are normally numbered in relation to their magnetic direction, rounded off to the nearest 10 degrees. The runway heading on the opposite end of the runway is 180 degrees from that runway end. Aircraft can takeoff or land from either end of a runway, depending upon wind direction.

RUNWAY ALIGNMENT INDICATOR LIGHT. A series of high intensity sequentially flashing lights installed on the extended centerline of the runway usually in conjunction with an approach lighting system.

RUNWAY BLAST PAD. A surface adjacent to the ends of runways provided to reduce the erosive effect of jet blast and propeller wash.

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 GRADIENT. The average slope, measured in percent, between the two ends of a runway.

RUNWAY PROTECTION ZONE (RPZ). An area off the runway end to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape. Its dimensions are determined by the aircraft approach speed and runway approach type/minima.

RUNWAY REFERENCE CODE (RRC). A code signifying the current operational capabilities of a runway and associated parallel taxiway.

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.

RUNWAY VISUAL RANGE (RVR). An instrumentally derived value, in feet, representing the horizontal distance a pilot can see down the runway from the runway end.

RUNWAY VISIBILITY ZONE (RVZ). An area on the airport to be kept clear of permanent objects so that there is an unobstructed line-of-site from any point five feet above the runway centerline to any point five feet above an intersecting runway centerline.

SEGMENTED CIRCLE. A system of visual indicators designed to provide traffic pattern information at airports without operating control towers.

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. The shoulder does not necessarily need to be paved.

SLANT-RANGE DISTANCE. The straight line distance between an aircraft and a point on the ground.

SMALL AIRPLANE. An airplane that has a maximum certified takeoff weight of up to 12,500 pounds.

SPECIAL USE AIRSPACE. Airspace of defined dimensions identified by a surface area wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. Special-use airspace classifications include:

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

STANDARD INSTRUMENT DEPARTURE (SID). A preplanned coded air traffic control IFR departure routing, preprinted for pilot use in graphic and textual form only.

STANDARD TERMINAL ARRIVAL (STAR). A preplanned coded air traffic control IFR arrival routing, preprinted for pilot use in graphic and textual or textual form only.

STOP-AND-GO. A procedure wherein an aircraft will land, make a complete stop of the runway, and then commence a takeoff from that point. A stop-and-go is recorded as two operations: one operations for the landing and one operations for the takeoff.

STOPWAY. An area beyond the takeoff runway, no less wide than the runway and centered on the extended centerline of the runway, able to support an airplane during an aborted takeoff, without causing structural damage to the airplane, and designated for use in decelerating the airplane during an aborted takeoff.

STRAIGHT-IN LANDING / APPROACH. A landing made on a runway aligned within 30 degrees of the final approach course following completion of an instrument approach.

TACTICAL AIR NAVIGATION (TACAN). An ultra-high frequency electronic air navigation system, which provides suitably-equipped aircraft a continuous indication of bearing and distance to the TACAN station.

TAKEOFF DISTANCE AVAILABLE (TODA). See declared distances.

TAKEOFF RUN AVAILABLE (TORA). See declared distances.

TAXILANE. A taxiway designed for low speed and precise taxiing. Taxilanes are usually, but not always, located outside the movement area, providing access from taxiways (usually an apron taxiway) to aircraft parking positions and other terminal areas.

TAXIWAY. A defined path established for the taxiing of aircraft from one part of an airport to another.

TAXIWAY DESIGN GROUP (TDG). A classification of airplanes based on outer to outer Main Gear Width (MGW) and Cockpit to Main Gear (CMG) distance.

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

TETRAHEDRON. A device used as a landing indicator. The small end of the tetrahedron points in the direction of landing.

THRESHOLD. The beginning of that portion of the runway available for landing. In some instances the landing threshold may be displaced.

TOUCH-AND-GO. An operation by an aircraft that lands and departs on a runway without stopping or exiting the runway. A touch-and-go is recorded as two operations: one operation for the landing and one operation for the takeoff.

TOUCHDOWN ZONE (TDZ). The first 3,000 feet of the runway beginning at the threshold.

TOUCHDOWN ZONE ELEVATION (TDZE). The highest elevation in the touchdown zone.

TOUCHDOWN ZONE (TDZ) LIGHTING. Two rows of transverse light bars located symmetrically about the runway centerline normally at 100-foot intervals. The basic system extends 3,000 feet along the runway.

TRAFFIC PATTERN. The traffic flow that is prescribed for an aircraft landing or taking off from an airport. The components of a typical traffic pattern are the upwind leg, crosswind leg, downwind leg, and final approach.

UNCONTROLLED AIRPORT. An airport without an air traffic control tower at which the control of visual VFR traffic is not exercised.

UNCONTROLLED AIRSPACE. Airspace within which aircraft are not subject to air traffic control.

UNICOM. A nongovernmental communication facility, which may provide airport information at certain airports. Locations and frequencies of UNICOMs are shown on aeronautical charts and publications.

UPWIND LEG. A flight path parallel to the landing runway in the direction of landing. See traffic pattern.

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

VERY HIGH FREQUENCY / OMNIDIRECTIONAL RANGE STATION (VOR). A ground-based electronic navigation aid transmitting very high frequency navigation signals, 360 degrees in azimuth, oriented from

magnetic north. Used as the basis for navigation in the national airspace system. The VOR periodically identifies itself by Morse code and may have an additional voice identification feature.

VERY HIGH FREQUENCY OMNIDIRECTIONAL RANGE STATION / TACTICAL AIR NAVIGATION (VORTAC).

A navigation aid providing VOR azimuth, TACAN azimuth and TACAN distance-measuring equipment (DME) at one site.

VICTOR AIRWAY. A control area or portion thereof established in the form of a corridor, the centerline of which is defined by radio navigational aids.

VISUAL APPROACH. An approach wherein an aircraft on an IFR flight plan, operating in VFR conditions under the control on an air traffic control facility and having an air traffic control authorization, may proceed to the airport of destination in VFR conditions.

VISUAL APPROACH SLOPE INDICATOR (VASI). An airport lighting facility providing vertical visual approach slope guidance to aircraft during approach to landing by radiating a directional pattern of high-intensity red and white focused light beams, which indicate to the pilot whether or he or she is on path. Some airports serving large aircraft have three-bar VASIs that provide two visual guide paths to the same runway.

VISUAL FLIGHT RULES (VFR). Rules that govern the procedures for conducting flight under visual conditions. The term VFR is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirement. In addition, it is used by pilots and controllers to indicate type of flight plan.

VISUAL METEOROLOGICAL CONDITIONS. Meteorological conditions expressed in terms of specific visibility and ceiling conditions which are equal to or greater than the threshold values for instrument meteorological conditions.

WARNING AREA. See special-use airspace.

WIDE AREA AUGMENTATION SYSTEM (WAAS). The Wide Area Augmentation System (WAAS) uses a system of ground stations to provide necessary augmentations to the GPS Standard Positioning Service (SPS) navigation signal. A network of precisely surveyed ground reference stations is strategically positioned across the country to collect GPS satellite data. Using this information, a message is developed to correct any signal errors.

WINGSPAN. The maximum horizontal distance from one wingtip to the other wingtip, including the horizontal component of any extensions such as winglets or raked wingtips.

ACRONYMS / ABBREVIATIONS

AC. Advisory circular

ADF. Automatic direction finder

ADG. Airplane design group

AFSS. Automated flight service station

AGL. Above ground level

AIA. Annual instrument approach

AIP. Airport improvement program

ALS. Approach lighting system

ALSF-1. Standard 2,400-foot high-intensity approach lighting system with sequenced flashers (Cat I configuration)

ALSF-2. Standard 2,400-foot high-intensity approach lighting system with sequenced flashers (Cat II configuration)

APV. Instrument approach procedure with vertical guidance

ARC. Airport reference code

ARFF. Aircraft rescue and firefighting

ARP. Airport reference point

ARTCC. Air route traffic control center

ASDA. Accelerate-stop distance available

ASR. Airport surveillance radar

ASOS. Automated surface observation station

ATCT. Air traffic control tower

ATIS. Automated terminal information service

AVGAS. Aviation gasoline (typically 100 low lead (LL))

AWOS. Automated weather observation station

BRL. Building restriction line

- CFR.** Code of Federal Regulations
- CIP.** Capital improvement program
- CPO.** Community Planning Organization
- DME.** Distance measuring equipment
- DNL.** Day-night noise level
- DWL.** Runway weight bearing capacity for aircraft with dual wheels per strut
- DTWL.** Runway weight bearing capacity for aircraft with dual-tandem type landing gear
- EAA.** Experimental Aircraft Association
- FAA.** Federal Aviation Administration
- FAM.** Financial Aid to Municipalities
- FAR.** Federal Aviation Regulation
- FBO.** Fixed base operator
- FY.** Fiscal year
- GA.** General Aviation
- GPS.** Global positioning system
- GS.** Glide slope
- HIRL.** High-intensity runway edge lighting
- IFR.** Instrument flight rules
- ILS.** Instrument landing system
- IM.** Inner marker
- LDA.** Landing distance available
- LGD.** La Grande / Union County Airport
- LIRL.** Low-intensity runway edge lighting
- LMM.** Compass locator at middle marker
- LOC.** ILS localizer
- LOM.** Compass locator at ILS outer marker

- LORAN.** Long range navigation
- MALS.** Medium-intensity approach lighting system
- MALSR.** Medium-intensity approach lighting system with runway alignment indicator lights
- MIRL.** Medium-intensity runway edge lighting
- MITL.** Medium-intensity taxiway edge lighting
- MLS.** Microwave landing system
- MM.** Middle marker
- MOA.** Military operations area
- MSL.** Mean sea level
- NAVAID.** Navigational aid
- NDB.** Nondirectional radio beacon
- NM.** Nautical mile (6,076.1 feet)
- NOTAM.** Notice to airmen
- NPIAS.** National plan of integrated airport systems
- NPRM.** Notice of proposed rulemaking
- ODA.** Oregon Department of Aviation
- ODALS.** Omnidirectional approach lighting system
- OFA.** Object free area
- OFZ.** Object free zone
- OM.** Outer marker
- OPA.** Oregon Pilots Association
- PAC.** Project Advisory Committee
- PAPI.** Precision approach path indicator
- PFC.** Passenger facility charge
- PCL.** Pilot-controlled lighting
- PLASI.** Pulsating visual approach slope indicator

- PMP.** Pavement Maintenance Program
- POFA.** Precision object free area
- PVASI.** Pulsating/steady visual approach slope indicator
- RCO.** Remote communications outlet
- RDG.** Runway design group
- REIL.** Runway end identifier lights
- RNAV.** Area navigation
- RPZ.** Runway protection zone
- RTR.** Remote transmitter/receiver
- RVR.** Runway visibility range
- RVZ.** Runway visibility zone
- SALS.** Short approach lighting system
- SASP.** State Aviation System Plan
- SEL.** Sound exposure level
- SID.** Standard instrument departure
- SM.** Statute mile (5,280 feet)
- SRE.** Snow removal equipment
- SSALF.** Simplified short approach lighting system with sequenced flashers
- SSALR.** Simplified short approach lighting system with runway alignment indicator lights
- STAR.** Standard terminal arrival route
- SWL.** Runway weight bearing capacity for aircraft with single-wheel type landing gear
- STWL.** Runway weight bearing capacity for aircraft with single-wheel tandem type landing gear
- TACAN.** Tactical air navigation
- TDG.** Taxiway design group
- TDZ.** Touchdown zone
- TDZE.** Touchdown zone elevation

- TAF.** Terminal Area Forecast
- TODA.** Takeoff distance available
- TORA.** Takeoff run available
- TRACON.** Terminal radar approach control
- VASI.** Visual approach slope indicator
- VFR.** Visual flight rules
- VHF.** Very high frequency
- VOR.** Very high frequency omnidirectional range
- VORTAC.** VOR and TACAN collocated
- WAAS.** Wide Area Augmentation System