

## Appendix A - Glossary

---

The terms and definitions here are relevant to airport design standards and retrieved from AC 150/5300-13A, Airport Design.

### A

Accelerate-Stop Distance Available (ASDA). See Declared Distances.

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. For this AC, the terms aircraft and airplane are synonymous, referring to all types of fixed-wing airplanes, including gliders. Powered lift (tilt-rotors) and helicopters are not included except where specifically noted.

Aircraft Approach Category (AAC). As specified in 14 CFR Part 97 § 97.3, Symbols and Terms Used in Procedures, a grouping of aircraft based on a reference landing speed (VREF), if specified, or if VREF is not specified, 1.3 times stall speed (VSO) at the maximum certificated landing weight. VREF, VSO, and the maximum certificated landing weight are those values as established for the aircraft by the certification authority of the country of registry.

Airplane. A fixed-wing aircraft that is heavier than air, and is supported in flight by the dynamic reaction of the air against its wings (see Aircraft).

Airplane Design Group (ADG). A classification of aircraft based on wingspan and tail height. When the aircraft wingspan and tail height fall in different groups, the higher group is used.

Airport Elevation. The highest point on an airport's usable runways expressed in feet above mean sea level (MSL).

Airport Layout Plan (ALP). A scaled drawing (or set of drawings), in either traditional or electronic form, of current and future airport facilities that provides a graphic representation of the existing and long-term development plan for the airport and demonstrates the preservation and continuity of safety, utility, and efficiency of the airport to the satisfaction of the FAA.

Airport Reference Code (ARC). An airport designation that signifies the airport's highest Runway Design Code (RDC), minus the third (visibility) component of the RDC. The ARC is used for planning and design only and does not limit the aircraft that may be able to operate safely on the airport.

Airport Reference Point (ARP). The approximate geometric center of all usable runways at the airport.

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

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.

Approach Reference Code (APRC). A code signifying the current operational capabilities of a runway and associated parallel taxiway with regard to landing operations.

Approach Surface Baseline (ASBL). A horizontal line tangent to the surface of the earth at the runway threshold aligned with the final approach course.

## B

Blast Fence. A barrier used to divert or dissipate jet blast or propeller wash.

Blast Pad. A surface adjacent to the ends of runways provided to reduce the erosive effect of jet blast and propeller wash. A blast pad is not a stopway.

Building Restriction Line (BRL). A line that identifies suitable and unsuitable locations for buildings on airports.

Bypass Taxiway. A taxiway used to reduce aircraft queuing demand by providing multiple takeoff points.

## C

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).

Circling Approach. A maneuver initiated by the pilot to align the aircraft with a runway for landing when a straight-in landing from an instrument approach is not possible or is not desirable.

Clearway (CWY). A defined rectangular area beyond the end of a runway cleared or suitable for use in lieu of runway to satisfy takeoff distance requirements (see also Takeoff Distance Available [TODA]).

Cockpit to Main Gear Distance (CMG). The distance from the pilot's eye to the main gear turn center.

Compass Calibration Pad. An airport facility used for calibrating an aircraft compass.

Crossover Taxiway. A taxiway connecting two parallel taxiways (also referred to as a transverse taxiway).

## D

Decision Altitude (DA). A specified altitude on a vertically-guided approach at which a missed approach must be initiated if the required visual reference to continue the approach has not been established. DA is referenced to mean sea level (MSL).

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

Takeoff Run Available (TORA) – the runway length declared available and suitable for the ground run of an aircraft taking off;

Takeoff Distance Available (TODA) – the TORA plus the length of any remaining runway or clearway beyond the far end of the TORA; the full length of TODA may need to be reduced because of obstacles in the departure area;

Accelerate-Stop Distance Available (ASDA) – the runway plus stopway length declared available and suitable for the acceleration and deceleration of an aircraft aborting a takeoff; and

Landing Distance Available (LDA) – the runway length declared available and suitable for landing an aircraft.

Departure Reference Code (DPRC). A code signifying the current operational capabilities of a runway with regard to takeoff operations.

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 beyond the beginning of the runway.

## E

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.

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:

## F

Fixed-By-Function Navigation Aid (NAVAID). An air navigation aid that must be positioned in a particular location in order to provide an essential benefit for aviation is fixed-by-function. Table 6-1 gives fixed-by-function designations for various NAVAIDs as they relate to the Runway Safety Area (RSA) and Runway Object Free Area (ROFA). Some NAVAIDs that are not fixed-by-function in regard to the RSA or ROFA may be fixed-by-function in regard to the Runway Protection Zone (RPZ):

Frangible. 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. See AC 150/5220-23, Frangible Connections.

## G

General Aviation. All non-scheduled flights other than military conducted by non-commercial aircraft. General aviation covers local recreational flying to business transport that is not operating under the FAA regulations for commercial air carriers.

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.

Glideslope (GS). Equipment in an Instrument Landing System (ILS) that provides vertical guidance to landing aircraft.

## H

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 Airport (HAA). The height of the circling approach descent altitude (MDA) above the airport elevation.

Height Above Threshold (HATH). The height of the Decision Altitude (DA) or Minimum Descent Altitude (MDA) above the threshold.

Hot Spot. A location on an airport movement area with a history of potential risk of collision or runway incursion, and where heightened attention by pilots and drivers is necessary.

## I

Instrument Approach Procedure (IAP). 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 departure runway. A runway identified by the airport operator, through the appropriate FAA Airports Office, to the FAA Regional Airspace Procedures Team intended primarily for instrument departures.

Island. An unused paved or grassy area between taxiways, between runways, or between a taxiway and a runway. Paved islands are clearly marked as unusable, either by painting or the use of artificial turf.

## J

Joint-Use Airport. An airport owned by the United States that leases a portion of the airport to a person operating an airport specified under Part 139.

## L

Landing Distance Available (LDA). See Declared Distances.

Large Aircraft. An aircraft with a maximum certificated takeoff weight of more than 12,500 lbs (5670 kg).

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.

## M

Main Gear Width (MGW). The distance from the outer edge to outer edge of the widest set of main gear tires.

Minimum Descent Altitude (MDA). The lowest authorized altitude on an approach that does not have vertical guidance. MDA is referenced to mean sea level (MSL).

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. See Order 5300.1.

Movement Area. The runways, taxiways, and other areas of an airport that are used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft including helicopters and tilt-rotors, exclusive of loading aprons and aircraft parking areas (reference Part 139).

Navigation Aid (NAVAID). Electronic and visual air navigation aids, lights, signs, and associated supporting equipment.

## N

Non-movement area. The areas of an airport that are used for taxiing or hover taxiing, or air taxiing aircraft including helicopters and tilt-rotors, but are not part of the movement area (i.e., the loading aprons and aircraft parking areas).

Non-Precision Approach (NPA). For the purposes of this AC, a straight-in instrument approach procedure that provides course guidance, with or without vertical path guidance, with visibility minimums not lower than 3/4 mile (4000 RVR).

Non-Precision Runway. A runway (other than a precision runway) with at least one end having a non-precision approach procedure.

## O

Object. Includes, but is not limited to, above ground structures, Navigational Aids (NAVAIDs), equipment, vehicles, natural growth, terrain, and parked or taxiing aircraft.

Object Free Area (OFA). An area centered on the ground on a runway, taxiway, or taxilane centerline provided to enhance the safety of aircraft operations by remaining clear of objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

Obstacle. An existing object at a fixed geographical location or which may be expected at a fixed location within a prescribed area with reference to which vertical clearance is or must be provided during flight operation.

Obstacle Clearance Surface (OCS). An evaluation surface that defines the minimum required obstruction clearance for approach or departure procedures.

Obstacle Free Zone (OFZ). The OFZ is the three-dimensional airspace along the runway and extended runway centerline that is required to be clear of obstacles for protection for aircraft landing or taking off from the runway and for missed approaches.

Obstruction to Air Navigation. An object of greater height than any of the heights or surfaces presented in Subpart C of Title 14 CFR Part 77, Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities.

## P

Parallel Taxiway. A taxiway parallel to a runway:

- Dual Parallel Taxiways – Two side-by-side taxiways, parallel to each other and the runway.

- Full Parallel Taxiway – A parallel taxiway extending the full length of the runway.
- Partial Parallel Taxiway – A parallel taxiway extending less than full length of the runway.

Precision Approach (PA). For the purposes of this AC, an instrument approach procedure that provides course and vertical path guidance with visibility below 3/4 mile (4000 RVR).

Precision Runway. A runway with at least one end having a precision approach procedure.

## R

Runway (RW). A defined rectangular surface on an airport prepared or suitable for the landing or takeoff of aircraft.

Runway Design Code (RDC). A code signifying the design standards to which the runway is to be built.

Runway Incursion. Any occurrence at an airport involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and takeoff of aircraft.

Runway Protection Zone (RPZ). An area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground.

Runway Safety Area (RSA). A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway.

## S

Shoulder. An area adjacent to the defined edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface; support for aircraft and emergency vehicles deviating from the full-strength pavement; enhanced drainage; and blast protection.

Small Aircraft. An aircraft with a maximum certificated takeoff weight of 12,500 lbs (5670 kg) or less.

Stopway (SWY). An area beyond the takeoff runway, no less wide than the runway and centered upon the extended centerline of the runway, able to support the airplane during an aborted takeoff, without causing structural damage to the airplane, and designated by the airport authorities for use in decelerating the airplane during an aborted takeoff. A blast pad is not a stopway.

## T

Takeoff Distance Available (TODA). See Declared Distances.

Takeoff Run Available (TORA). See Declared Distances.

Taxilane (TL). 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 (TW). 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 distance (CMG).

Taxiway Edge Safety Margin (TESM). The distance between the outer edge of the landing gear of an airplane with its nose gear on the taxiway centerline and the edge of the taxiway pavement.

Taxiway/Taxilane Safety Area (TSA). A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft deviating from the taxiway.

Threshold (TH). The beginning of that portion of the runway available for landing. In some instances, the threshold may be displaced. "Threshold" always refers to landing, not the start of takeoff.

Threshold Crossing Height (TCH). For the purposes of this AC, the TCH is the theoretical height above the runway threshold at which the aircraft's glideslope (GS) antenna would be if the aircraft maintains the trajectory established by the Instrument Landing System (ILS) GS, or the height of the pilot's eye above the runway threshold based on a visual guidance system.

## V

Visual Runway. A runway without an existing or planned instrument approach procedure.

## W

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.