

## Airports 101: Airport and Aviation Terminology

### Airport Master Plan

An airport master plan is a comprehensive study of an airport and describes the short-, medium-, and long-term development plans to meet future aviation demand.

### Aircraft Operation

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

### Airport Improvement Program (AIP)

The AIP provides grants to public agencies, and sometimes to private owners and entities, for the planning and development of public-use airports that are included in the NPIAS.

### Airport Layout Plan (ALP)

A scaled drawing (or set of drawings), in either traditional or electronic form, of current and future airport facilities. The ALP 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 ARC is a combination of the design aircraft's Aircraft Approach Category (AAC) and Airplane Design Group (ADG). The ARC is used for planning and design purposes only and does not limit or restrict operations at the airport to certain types of sizes of aircraft.

### Airport Reference Point (ARP)

The approximate geometric center of all active runways at the airport.

### Aircraft Approach Category (AAC)

A grouping of aircraft based upon approach speed in a landing configuration at their maximum certified landing weight.

### Airplane Design Group (ADG)

A classification of aircraft based upon wingspan and tail height.

### Average Annual Growth Rate (AAGR)

AAGR is utilized in aviation forecasting as it is useful in expressing short- and long-term trends. AAGR is calculated by taking the sum of growth over a specified number of years and dividing by the number of years. This is a linear measure that does not account for the effects of compounding.

### Based Aircraft

Based aircraft are those that are stored either in a storage facility or on a parking apron at the airport, for a majority of the year.

### Building Restriction Line (BRL)

A notional line identified on the Airport Layout Plan which delineates suitable and unsuitable locations for the development of vertical structures.

## Declared Distances

The distances the airport owner declares available for an aircraft's takeoff run, takeoff distance, accelerate-stop distance, and landing distance requirements. These distances are:

- Takeoff Run Available (TORA)
- Takeoff Distance Available (TODA)
- Accelerate-Stop Distance Available (ASDA)
- Landing Distance Available (LDA)

## Design Aircraft / Critical Aircraft

An aircraft with characteristics that determine the application of airport design standards for a specific runway, taxiway, taxilane, apron, or other facility. The selected aircraft is determined to be the most demanding aircraft that makes regular use of the airport. 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 physical runway pavement.

## Enplanement

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

## Federal Aviation Administration (FAA)

The FAA is a government authority which operates under the United States Department of Transportation (DOT). The FAA regulates all aspects of civil aviation in the United States.

## Fixed Base Operator (FBO)

A business enterprise located at on airport that provides services to pilots and passengers including aircraft rental, training, fueling, maintenance, parking, and the sale of pilot supplies.

## General Aviation (GA)

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.

## Hot Spot

A location on an airport movement area with a potential heightened risk of collision or runway incursion and includes areas which are atypical. These identified areas require heightened pilot attention to ensure the safety of themselves, passengers, and bystanders.

## Imaginary Surfaces

Described in Federal Aviation Regulations (FAR) Part 77 as established surfaces based on the runway that are used to identify objects that may impact airport plans, aircraft departure/arrival procedures, or routes. There are five types of imaginary surfaces: primary, transitional, approach, horizontal, and conical.

### **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 a competent authority.

### **Itinerant Operations**

Operations by aircraft that leave the local airspace.

### **Large Aircraft**

An aircraft with a maximum certificated take-off weight of more than 12,500 lbs.

### **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.

### **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 that are used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft including helicopters and tiltrotors, exclusive of loading aprons and aircraft parking areas.

### **National Plan of Integrated Airport Systems (NPIAS)**

The NPIAS identifies nearly 3,310 existing and proposed airports that are included in the national airport system, the roles they currently serve, and the amounts and types of airport development eligible for Federal funding under the Airport Improvement Program (AIP) over the next 5 years. The FAA is required to publish a 5-year estimate of AIP eligible development every two years.

### **National Environmental Policy Act (NEPA)**

A U.S. Environmental law that promotes the enhancement of the environment. NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. Using the NEPA process, agencies evaluate the environmental and related social and economic effects of their proposed actions. Agencies also provide opportunities for public review and comment on those evaluations.

### **Navigational Aid (NAVAID)**

Electronic and visual air navigation aids, lights, signs, and associated supporting equipment.

### **Object Free Area (DFA)**

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 needed for air navigation or aircraft ground maneuvering purposes.

## 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.

## Runway Safety Area (RSA)

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.

## Runway Protection Zone (RPZ)

A trapezoidal 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.

## Small Aircraft

An aircraft with a maximum certificated takeoff weight of 12,500 lbs or less.

## Terminal Area Forecast (TAF)

The official forecast of aviation activity, both aircraft and enplanements, at FAA airport facilities. This includes FAA-towered airports, federally contracted towered airports, non-federal towered airports, and some non-towered airports. The TAF does not provide forecasts for airports with under 100,000 annual operations.

## 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 number classification of aircraft based upon the aircraft main gear width, and distance from the cockpit to the main gear.

## TRI

TRI is the Tri-Cities Airport location identifier. Airport Location Identifiers are commonly referred to as Airport Codes, and these codes are given to airports throughout the world. In the United States, Airport Location Identifiers are assigned to both publicly owned and operated airports by the FAA and privately owned airports. The Location Identifier is a three- or four-digit alphanumeric identifier. For airports within the US, the identifier starts with a "K" and is followed by 3 or 4 letters and/or numbers.

## Threshold

The beginning of the 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.