

Glossary

AC – Advisory Circular – FAA publication that provides policy, guidance and recommendations for aviation related issues. Advisory circulars related to the airport improvement program including airport planning, design, and safety issues can be found at: http://www.faa.gov/airports/resources/advisory_circulars/

ACIP – Airport Capital Improvement Plan – The planning program used by the Federal Aviation Administration to identify, prioritize and distribute funds for airport development and the needs of the National Airspace System to meet specified national goals and objectives. An ACIP datasheet is used to describe a project and submit to the FAA for prioritization.

ADS-B – Automatic Dependent Surveillance-Broadcast - A surveillance system that continuously broadcasts GPS position information, aircraft identification, altitude, velocity vector, and direction to all other aircraft and air traffic control facilities within a specific area. Automatic dependent surveillance-broadcast (ADS-B) information will be displayed in the cockpit via a cockpit display of traffic information unit, providing the pilot with greater situational awareness. ADS-B transmissions will also provide controllers with a more complete picture of traffic and will update that information more frequently than other surveillance equipment.

AFD - Airport/Facility Directory – Regional booklet published every 56 days by the National Aeronautical Charting Office (NACO) that provides textual information about all airports, both VFR and IFR. The A/FD includes runway length and width, runway surface, load bearing capacity, runway slope, airport services, and hazards such as birds and reduced visibility. A PDF version is available on the FAA web site: http://www.naco.faa.gov/index.asp?xml=naco/online/d_afd

AFSS - Automated Flight Service Station

AIP – Airport Improvement Program – Federal grant program that provides funding for the rehabilitation and development of airports included in the National Plan of Integrated Airports System (NPIAS). <http://www.faa.gov/airports/central/aip/>

State funding for airport development and preservation is also referred to as the State Airport Improvement Program (State AIP.) <http://www.iowadot.gov/aviation>

ALP – Airport Layout Plan – A scaled drawing of existing and proposed land and facilities necessary for the operation and development of the airport. Any airport will benefit from a carefully developed plan that reflects current FAA design standards and planning criteria. For guidance on developing Airport Master Plans, refer to AC 150/5070-6, *Airport Master Plans*. http://www.faa.gov/airports/central/planning_capacity/

ALS - Approach Lighting System – Configuration of lights symmetrically dispersed on the extended runway centerline at the approach end of the runway. An ALS augments the electronic landing aids and allows lower approach minimum to be established.

AOA – Airport Operations Area – The portion of Airport which encompasses the landing, take off, taxiing and parking areas for aircraft.

ARC – Airport Reference Code – A category established for an airport that relate airport design criteria to the operational and physical characteristics of that airplanes using the airports. The ARC is determined by the most demanding type of aircraft or group of aircraft with at least 500 operations at the airport in one year. The ARC includes two components: aircraft approach category and aircraft wing span.

Aircraft Approach Category - A grouping of aircraft based on 1.3 times their stall speed in the landing configuration at the certificated maximum flap setting and maximum landing weight at standard atmospheric conditions. 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; and Category E: Speed 166 knots or more.

Airplane Design Group - A grouping of airplanes based on wingspan. The groups are as follows: Group I: Up to but not including 49 feet (15 m); Group II: 49 feet (15 m) up to but not including 79 feet (24 m); Group III: 79 feet (24 m) up to but not including 118 feet (36 m); Group IV: 118 feet (36 m) up to but not including 171 feet (52 m); Group V: 171 feet (52 m) up to but not including 214 feet (65 m); Group VI: 214 feet (65 m) up to but not including 262 feet (80 m).

ARP – Airport Reference Point – The approximate geometric center of all usable runways. ARP consists of a latitude coordinate and a longitude coordinate, listed in degrees, minutes, and one decimal place in seconds. The ARP is calculated based on FAA guidelines.

ASD – Air Service Development – State grant program for airports with scheduled commercial air service.

ASDA - Accelerate-stop distance available – The runway plus stopway (SWY) length declared available and suitable for the acceleration and deceleration of an airplane aborting a takeoff.

ASOS – Automated Surface Observing System – A primary surface weather observing system designed to provide continuous minute-by-minute observations and weather forecast activities.

ATC – Air Traffic Control - A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

AWOS – Automated Weather Observing System – A weather observation system consisting of various sensors, a processor, a computer-generated voice and a transmitter to broadcast local, minute-by-minute weather data directly to the pilot.

BCA – Benefit Cost Analysis – A study to identify the total cost of benefits related to the cost of project. Any project that will require more than \$5 million in discretionary money will need to have to have a BCA. http://www.faa.gov/airports/aip/bc_analysis/

BRL – Building Restriction Line - A line that identifies suitable building area locations on airports.

CWY - Clearway - A defined rectangular area beyond the end of a runway cleared or suitable for use in lieu of runway to satisfy takeoff distance requirements.

CIP – Capital Improvement Program – A plan developed and maintained by airport sponsors that includes all airport planning and development projects, including projects eligible for federal, state or local funding. Projects identified in a CIP should be included in the most current Airport Layout Plan.

CSVI – Commercial Service Vertical Infrastructure – A state program that provides funding to commercial service airports in Iowa to improve landside facilities such as terminals, hangars, and maintenance buildings.

DME – Distance Measuring Equipment – Equipment (airborne and ground) used to measure, in nautical miles, the slant range of an aircraft from the DME navigational aid. On many instrument landing system procedures, a DME transmitter is placed at or near the localizer or glide slope transmitter to provide runway distance information for the pilot. The pilot has a DME receiver on board the aircraft which displays the distance from the DME transmitter.

EA – Environmental Assessment – Federal grant assistance or ALP approval of new airport construction or major expansion normally requires an assessment of potential environmental impacts in accordance with FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects, and the National Environmental Policy Act of 1969.

http://www.faa.gov/airports_airtraffic/airports/regional_guidance/central/environmental/

EPA – Environmental Protection Agency

FAA – Federal Aviation Administration – The federal agency responsible for regulating and administering aviation programs. <http://www.faa.gov>

FAR – Federal Aviation Regulation –
http://www.faa.gov/regulations_policies/faq_regulations/

FBO – Fixed Base Operator

FSS - Flight Service Station - FAA air traffic facility that provides pilot briefing, en route communications, Visual Flight Rules (VFR) search and rescue services, assists lost aircraft and aircraft in emergency situations, originates Notices to Airmen, and more.

GA – General Aviation Airports – Airports that serve general aviation activity and do not receive scheduled commercial service.

GAVI – General Aviation Vertical Infrastructure - A state program that provides funding to general aviation airports in Iowa to improve landside facilities such as terminals, hangars, fuel facilities and maintenance buildings.

GCO – Ground Communications Outlet – Used at non-towered airports employing the public telephone network and a radio frequency to provide pilots with convenient access from their aircraft to Flight Services for efficient clearance delivery and flight plan closure.

GPS – Global Positioning Satellite – A space-based radio position navigation and time-transfer system. The system provides accurate position and velocity information and precise time on a continuous global basis, to an unlimited number of properly equipped users. The system is unaffected by weather and provides a worldwide common grid reference system.

GS – Glide Slope Indicator – A transmitter used in an instrument landing system which provides the pilot with vertical navigation information on a display in the aircraft for descent to the lowest authorized decision height for the associated approach procedure.

IAP - Instrument approach procedure - A series of predetermined maneuvers by reference to flight instruments with specified protection from obstacles and assurance of navigation signal reception capability.

IFR – Instrument Flight Rules – A set of rules governing the conduct of flight under instrument meteorological conditions.

ILS – Instrument Landing System – A precision approach system designed to provide an approach path for exact alignment and descent of an aircraft on final approach to a runway. The system normally consists of the following electronic components and visual aids; localizer, glide slope, outer marker, middle marker, and approach lights.

LDA - Landing Distance Available - The runway length declared available and suitable for a landing airplane.

LNAV - Lateral Navigation – Azimuth navigation, without positive vertical guidance. This type of navigation is associated with nonprecision approach procedures or en route.

LOC – Localizer – A transmitter used in an instrument landing system which provides the pilot with information on a display in the aircraft regarding his alignment with the runway centerline during a landing approach.

LPV - Localizer Performance with Vertical Guidance – LPV is one of the four lines of approach minimums found on an RNAV (GPS) approach chart. Lateral guidance accuracy is equivalent to a localizer. The approach uses an electronic glide path that is not dependent on any ground equipment or barometric aiding and may be as low as 200 feet and 1/2 SM visibility depending on the airport terrain and infrastructure. WAAS avionics approved for LPV is required.

MALS – Medium Intensity Approach Lighting System – An approach lighting system with a threshold light bar and seven five-light bars located on the extended runway centerline, with the first bar located 200 feet from the runway threshold.

MALSR – MALS with Runway Alignment Indicator Lights (RAILS) – A MALS lighting system with RAILS, which consists of five sequenced flashing lights on the extended runway centerline.

MIRL – Medium Intensity Runway Lighting – Medium intensity and variable lighting system which outlines the edge of the runway during periods of darkness and restricted visibility.

MITL – Medium Intensity Taxiway Lighting – Medium intensity and variable lighting system which outlines the taxiways during periods of darkness and restricted visibility.

NACO - National Aeronautical Charting Office - The office within the FAA that is the publisher and distributor of civil aeronautical charts and flight information publications.
<http://www.naco.faa.gov/>

NASR - National Airspace System Resources - Database is an FAA database that is maintained by the Office of Air Traffic and contains aeronautical information on all the airports in the US. The aeronautical information contained in the NASR database is extensive and includes airport data, airspace data, NAVAID data, instrument approach procedures data, and more.

NAS - National Airspace - Consists of a complex collection of facilities, systems, equipment, procedures, and airports operated by thousands of people to provide a safe and efficient flying environment.

NASAO – National Association of State Aviation Officials

NAVAID – Navigation Aid – Any visual or electronic device airborne or on the surface which provides point-to-point guidance information or position data to aircraft in flight.

NDB – Nondirectional Beacon – A radio beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine bearing to or from the radio beacon and home on the track to or from the station.

NEPA – National Environmental Protection Act - The national charter for protecting the environment that establishes policy, sets goals, and provides a means for carrying out the policy. FAA Order 5050.4, "National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects" establishes the FAA official policy on meeting NEPA requirements. The FAA may not proceed with programming and funding an AIP project until the environmental review is complete.

NPE - Nonprimary Entitlement – Funding set aside in the federal AIP program for nonprimary, NPIAS airports. Amount of funding is determined by the capital improvement costs in the NPIAS, up to a maximum of \$150,000 per year. Funds can only be used for AIP eligible, justified projects and sponsors must apply and agree to federal terms through the normal AIP process.

Notice of Landing Area Proposal (FAA Form 7480-1) - Federal Aviation Regulations Part 157 requires all persons to notify the FAA at least 90 days before any construction, alteration, activation, deactivation, or change to the status or use of a civil or joint-use (civil/military) airport. <http://forms.faa.gov/forms/faa7480-1.pdf>.

Notice of Proposed Construction or Alteration (FAA Form 7460) - 14 CFR Part 77, Objects Affecting Navigable Airspace, requires persons proposing any construction or alteration described in 14 CFR Section 77.13(a) to give 30-day notice to the FAA of their intent. This includes any construction or alteration of structures more than 200 feet (61 m) in height above the ground level or at a height that penetrates defined imaginary surfaces located in the vicinity of a public-use airport. Notification is done electronically at <https://www.oia.faa.gov/oia/external/portal.jsp>

NOTAM – Notice to Airmen – A notice to airmen containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

NPIAS – National Plan of Integrated Airport System – The federal plan for developing public-use airports that identifies existing and proposed airports that are significant to the national air transportation and estimates the infrastructure development needed to meet the needs of all segments of civil aviation. An updated 5-year national plan is submitted to Congress every two years. Airports included in the NPIAS are eligible for federal grants for airport planning and capital improvements.

OFA - Object Free Area - 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.

OFZ – Obstacle Free Zone - 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 frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance protection for aircraft landing or taking off from the runway, and for missed approaches.

PAPI – Precision Approach Path Indicator – A lighting system that uses light units installed in a single row of four. These systems have an effective visual range of at least 3 miles during the day and up to 20 miles at night and provide visual glide slope guidance in non-precision approach environments.

Primary Airports – Airports that have scheduled air service that board at least 10,000 passengers annually.

RCO – Remote Communication Outlet – An unmanned communications facility remotely controlled by air traffic personnel. RCOs were established to provide ground-to-ground communications between air traffic control specialists and pilots located at a satellite airport for delivering en route clearances, issuing departure authorizations, and acknowledging IFR cancellations or departure/landing times.

REIL - Runway End Identifier Lights - Runway end identifier lights are designed to help pilots spot the approach end of a runway at night, in poor visibility conditions, in an area with a great deal of other lighting, or anywhere that the runway is exceptionally difficult to identify. REIL are two synchronized, flashing lights located one on each side of the runway threshold. They may be visible from only one direction, or they may be omnidirectional. REIL can generally be seen from the air for several miles, even in marginal visibility.

RNAV - Area Navigation – A method of navigation that permits aircraft operations on any desired course within the coverage of station referenced navigation signals or within the limits of self contained system capability.

RPZ - Runway Protection Zone – A trapezoidal-shape area centered about the extended runway centerline that is used to enhance the safety of aircraft operations. It begins 200 feet beyond the end of the runway or area usable for takeoff or landing.

RSA – Runway Safety Area – 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.

Segmented Circle – A system of visual indicators designed to provide traffic pattern information at airports without operating control towers.

TORA - Takeoff run available - The runway length declared available and suitable for the ground run of an airplane taking off.

TODA - Takeoff distance available – The TORA plus the length of any remaining runway or clearway (CWY) beyond the far end of the TORA;

TSA – Transportation Security Administration – A branch of the federal Department of Homeland Security responsible for the security of transportation modes.

Unicom – A non-government communication facility which provides airport information at certain airports.

VASI – Visual Approach Slope Indicator – A lighting facility providing vertical visual approach slope guidance to aircraft during approach to landing. Its purpose is to provide a clear visual means to determine if you are too high, too low, or on the correct glide path VASI lights are visible to the pilot from 3 to 5 miles during the day and up to 20 miles at night.

VNAV - Vertical Navigation – An area navigation systems allow flight crews to display an internally generated descent path that allows a constant rate descent to minimums during approaches that would otherwise include multiple level-offs.

VFR – Visual Flight Rules – Rules that govern the procedures for conducting flight under visual conditions.

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.

Wide Area Augmentation System (WAAS) – A method of navigation based on GPS. Ground correction stations transmit position corrections that enhance system accuracy and add vertical navigation (VNAV) features.

WX - Weather

