Abbreviations

AAAE	American Association of Airport Executives
AASHTO	American Association of State Highway and Transportation Officials
AC	Advisory Circular
ACI	Airports Council International
ADF	Automatic Direction Finder
ADG	Airplane Design Group
ADO	Airport District Office
AEP	Airport Emergency Plan
AFD	Airport Facilities Directory
AGL	Above Ground Level
AIP	Airport Improvement Program
ALP	Airport Layout Plan
ALS	Approach Lighting System
ALSF-1	Approach Light System with Sequence Flasher Lights
AMSL	Above mean sea level
AOPA	Aircraft Owners and Pilots Association
ARC	Airport Reference Code
ARFF	Aircraft Rescue and Firefighting Facility
ARP	Airport Reference Point
ARTCC	Air Route Traffic Control Center
ASDA	Accelerate-Stop Distance Available
ASOS	Automated Surface Observation System
ASR	Airport Surveillance Radar
ASV	Annual Service Volume
ATC	Air Traffic Control
ATCT	Air Traffic Control Tower
ATIS	Automated Terminal Information System
AVGAS	Aviation Gasoline
AWOS	Automatic Weather Observation System

BLM	Bureau of Land Management
BRL	Building Restriction Line
CE	Categorical Exclusion
CIP	Capital Improvement Program
CL	Centerline
CTAF	Common Traffic Advisory Frequency
dBA	A-weighted Decibels
DCE	Documented Categorical Exclusion
DH	Decision Height
DME	Distance Measuring Equipment
DNL	Day-Night Sound Levels
DOT	Department of Transportation
DWL	Dual Wheel Loading
EA	Environmental Assessment
ECAP	Environmental Compliance Assurance Procedure
ECS	Environmental Classification Summary
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
EPA	The United States Environmental Protection Agency
EPM	Environmental Procedures Manual
ERS	Environmental Review Summary
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FATO	Final Approach and Takeoff area
FBO	Fixed Base Operator
FDC	Flight Data Center
FIS	Federal Inspection Service
FMS	Flight Management System
FOD	Foreign Object Debris
FONSI	Finding Of No Significant Impact
FSS	Flight Service Station

GA	General Aviation
GAMA	General Aviation Manufacturers Association
GIS	Geographic Information Systems
GPS	Global Positioning System
GS	Glide Slope
GSE	Ground Support Equipment
HAT	Height Above Threshold
HIRL	High Intensity Runway Lights
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
ILS	Instrument Landing System
INM	Integrated Noise Model
LAAS	Local Area Augmentation System
LATS	Washington State Long-Term Air Transportation Study
LCC	Low-Cost Carrier
LDA	Landing Distance Available
LDN	Day-Night Sound Levels (see DNL)
LIRL	Low Intensity Runway Lights
LOA	Letter of Agreement
LOC	Localizer Beam
LNAV	Lateral Navigation
LPV	Localizer Performance with Vertical guidance
MALS	Medium Intensity Approach Light System
MALSF	Medium Intensity Approach Light System with sequence flashing Lights
MALSR	Medium Intensity Approach Light System with Runway alignment indicators
MDA	Minimum Descent Altitude
MGW	Maximum Gross Weight
MIRL	Medium Intensity Runway Lights
MITL	Medium Intensity Taxiway Lights
MOA	Military Operations Area
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding

MPO	Metropolitan Planning Organization
MSL	Mean Sea Level
MTOW	Maximum Takeoff Weight
NAS	National Airspace System
NASAO	National Association of State Aviation Officials
NAVAID	Air Navigation Facility/Aid
NBAA	National Business Aircraft Association
NCP	Noise Compatibility Program
NDB	Non-Directional Beacon
NEM	Noise Exposure Map
NM	Nautical Mile
NOTAM	Notices to Airmen
NPA	Non-Precision Approach
NPIAS	National Plan of Integrated Airport Systems
NTSB	National Transportation Safety Board
O&D	Origination/Destination
OFA	Object Free Area
OFZ	Obstacle Free Zone
PAPI	Precision Approach Path Indicator
PASP	Pre-Activity Safety Plan
PCI	Pavement Condition Index
PIR	Precision Instrument Runway
RAIL	Runway Alignment Indicator Lights
RCW	Revised Code of Washington
REIL	Runway End Identifier Lights
RNAV	Area Navigation
RNP	Required Navigation Performance
ROFA	Runway Object Free Area
RPZ	Runway Protection Zone
RSA	Runway Safety Area
RVZ	Runway Visibility Zone
RVR	Runway Visual Range
RW	Runway

SASO	Specialized Aeronautical Service Operator
SIR	Safety Improvement Report
SWL	Single Wheel Loading
SEPA	Washington State Environmental Policy Act
TAF	Terminal Area Forecasts
TERPS	United States Standards for Instrument Procedures
TLOF	Touchdown and Lift-off area
TODA	Take-Off Distance Available
TOFA	Taxiway Object Free Area
TORA	Take-Off Run Available
TRACON	Terminal Radar Approach Control
TSA	Transportation Security Administration
TTF	Through The Fence
TW	Taxiway
TWSA	Taxiway Safety Area
TWOFA	Taxiway Object Free Area
UAV	Unmanned Aerial Vehicle
UHF	Ultra High Frequency
VASI	Visual Approach Slope Indicator
VFR	Visual Flight Rules
VHF	Very High Frequency
VLJ	Very Light Jet
VMP	Vegetation Management Plan
VOR	VHF Omni-Directional Range Navigation System
VORTAC	VHF Omni-Directional Range/Tactical Air Navigation
WAAS	Wide Area Augmentation System
WAC	Washington Administrative Code
WASP	Washington Aviation System Plan
WSDOT	Washington State Department of Transportation
WTP	Washington Transportation Plan

Definitions

Advisory Circular (AC) – A series of FAA publications providing guidance and standards for the design, operation, and performance of aircraft and airport facilities.

Air Cargo – Commercial freight (including packages and mail) transported by passenger and all-cargo airliners.

Air Carrier – A commercial airline with published schedules operating at least five round trips per week.

Air Freight – Items principally transported by all-freight carriers and as belly freight on scheduled passenger services, including heavy-weight items as well as routine palletized shipments.

Air Mail – Items carried as belly freight on some commercial carriers and carried as freight by freight forwards (i.e., FedEx) under contract with the U.S. Postal Service (USPS).

Air Taxi – An aircraft operator who conducts operations for hire or compensation in accordance with FAR Part 135 in an aircraft with 30 or fewer passenger seats and a payload capacity of 7,500 pounds or less. An air taxi operates on an on-demand basis and does not meet the "scheduled-flight" qualifications of a commuter.

Aircraft Approach Category – An element of the ARC. A grouping of airplanes based on wingspan, per the following:

- ***Category A*** – Speed less than 91 knots
- ***Category B*** – Speed 91 knots or more, but less than 121 knots
- ***Category C*** – Speed 121 knots or more, but less than 141 knots
- ***Category D*** – Speed 141 knots or more, but less than 166 knots
- ***Category E*** – Speed 166 knots or more

Aircraft Mix – The classification of aircraft into groups which are similar in size and operational characteristics

Aircraft Operations – Airborne movements of aircraft at an airport including aircraft landings (arrivals) at and takeoffs (departures). These operations can be further defined by the following:

- ***Local Operations*** include those performed by aircraft that operate in the local traffic pattern or within sight of the airport; and/or are known to be departing for or arriving from a local practice area.
- ***Itinerant Operations*** are all others.

Airplane Design Group (ADG) – An element of the ARC. A grouping of airplanes based on wingspan, per the following:

- ***Group I*** – Up to, but not including 49 feet
- ***Group II*** – 49 feet up to, but not including, 79 feet
- ***Group III*** – 79 feet up to, but not including, 118 feet
- ***Group IV*** – 118 feet up to, but not including, 171 feet
- ***Group V*** – 171 feet up to, but not including, 214 feet
- ***Group IV*** – 214 feet up to, but not including, 262 feet

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

Airport Improvement Program (AIP) – A congressionally mandated program through which FAA provides funding assistance for the development and enhancement of airport facilities. AIP is periodically reauthorized by Congress through appropriations from the Aviation Trust Fund, which is funded through excise taxes on airline tickets, aviation fuel, etc.

Airport Layout Plan (ALP) – A scaled drawing of existing and proposed land and facilities necessary for the operation and development of the airport. The ALP shows boundaries and proposed additions to all areas owned or controlled by the airport operator for airport purposes, the location and nature of existing and proposed airport facilities and structures, as well as the location of existing and proposed non-aviation areas and improvements on the airport.

Airport Master Plan – A standard planning document that presents a concept of the ultimate development of an airport, including the research and logic from which the plan was evolved, as well as the plan in graphic and written formats. An airport master plan is normally presented to the State or FAA for approval and would typically also be approved and adopted by the airport sponsor.

Airport Reference Code (ARC) – An FAA design criteria based upon the approach speed (aircraft approach category) and wing span (airplane design group) of an aircraft which produces a minimum annual 500 operations per year at an airport

Airport Reference Point (ARP) – The latitude and longitude of the approximate center of the airport.

Airport Sponsor – A private or public agency that is authorized to own and operate an airport, to obtain property interests, to obtain funds, and to be legally, financially, and otherwise able to meet all applicable requirements of current laws and regulations.

Airside – The portion of the airport meant for taxiing, takeoff, landing, parking, loading and unloading, or any other aircraft operation, including the aircraft parking aprons, taxiways, runways, and safety areas.

Airspace – The area above the ground in which aircraft travel. It is divided into corridors, routes and restricted zones for the control and safety of aircraft operations.

All-Cargo Carrier – An air carrier certificated in accordance with FAR Part 121 to provide scheduled air freight, express, and mail transportation over specific routes, as well as the conduct of nonscheduled operations that may include passengers.

Approach Lighting System (ALS) – A series of lights that assists the pilot when aligning aircraft with the extended runway centerline on final approach.

Air Route Traffic Control Center (ARTCC) – An FAA facility established to provide air traffic control service to aircraft operating on Instrument Flight Rules (IFR) flight plans within controlled airspace during the en route portion of flight.

Air Traffic Control (ATC) – A service operated by the appropriate authority to promote the safe, orderly, and expeditious flow of air traffic. The ATC system includes ARTCCs, Towers, airport ground radar and other elements such as navigational aids to pilots.

Air Traffic Control Tower (ATCT) – The airport traffic control facility located on an airport that is responsible for traffic separation within the immediate vicinity of the airport and on the surface of the airport.

Annual Service Volume (ASV) – An FAA planning tool that reflects the ability of airfield facilities (i.e., runways, taxiways, and approach aids) to accommodate aviation demand that includes commercial, general aviation, and military operations. It accounts for differences in runway use, aircraft mix, weather conditions, etc. that would encountered over a year's time.

Approach End of Runway – The near end of the runway as viewed from the cockpit of a landing aircraft.

Approach Surface – An FAR Part 77 imaginary surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.

Assurance – An assurance (or grant assurance) is a provision contained in a Federal grant agreement to which the recipient of AIP funding has voluntarily agreed to comply with in consideration of the funding provided.

Automated Surface Observation System (ASOS) – The primary surface weather observing system in the U.S. that supports aviation operations and weather forecasting. An ASOS has automated sensors that record wind direction and speed, visibility, cloud ceiling, precipitation, etc and sends that data automatically to the National Weather Service. At many locations, a computer-generated voice broadcasts the minute-by-minute weather reports to pilots on a discrete radio frequency.

Automated Weather Observing System (AWOS) – An automated weather reporting system that provides airport weather observations to pilots on a discrete radio frequency via a computer-generated voice. Less sophisticated than ASOS, it is oftentimes installed using state or local funding.

Avigation Easement – A form of limited property right purchase that establishes legal land-use control prohibiting incompatible development of areas required for airports and aviation-related purposes.

Based Aircraft – Aircraft stationed at an airport on an annual basis.

Building Restriction Line (BRL) – A line which identifies suitable building area locations on airports. The BRL is drawn to exclude the runway protection zones, the runway visibility zones required for clear line of sight from the airport traffic control tower, and all airport areas with a clearance of less than 35 feet beneath the FAR Part 77 surfaces.

Capacity – A measure of the maximum number of aircraft operations that can be accommodated by an airport's airfield over a designated time period (i.e., hour or year).

Capital Improvement Program (CIP) – A schedule of planned projects and costs for an airport typically prepared and adopted by the airport sponsor and other public agencies.

Ceiling – The height above the ground of the base of the lowest layer of clouds or obscuring phenomena aloft that is reported as broken or overcast and not classified as scattered, thin, or partial. Ceiling figures in aviation weather reports may be determined as measured, estimated, or indefinite.

Charter – A nonscheduled flight offered by either a supplemental or certificated air carrier.

Circling Approach – An instrument approach procedure in which an aircraft executes the published instrument approach to one runway, then maneuvers visually to land on a different runway. Circling approaches are also used at airports that have published instrument approaches with a final approach course that is not aligned within 30 degrees of any runway.

Commuter Air Carrier – An air carrier certified in accordance with FAR Part 135 that operates aircraft seating with a maximum of 60 passengers and provides at lease five scheduled round trips per week between two or more points, or carries mail.

Commercial Air Carrier – An air carrier certified in accordance with FAR Parts 121 or 127 to conduct scheduled services on specified routes. These air carriers may also provide nonscheduled or charter services as a secondary operation.

Commercial Service Airports – Publicly owned airports that enplane 2,500 or more passengers annually and receive scheduled passenger aircraft service. It is a NPIAS classification. Commercial service airports are either one of the following:

- ***Primary*** – Airport that enplanes more than 10,000 passengers annually.
- ***Nonprimary*** – Airport that enplanes between 2,500 and 10,000 passengers annually.

Controlled Airspace – Airspace of defined dimensions within which air traffic control service is provided to IFR flights and to VFR flights in accordance with the airspace classification. Controlled airspace is designated as Class A, Class B, Class C, Class D, or Class E. Aircraft operators are subject to certain pilot qualifications, operating rules, and equipment requirements as specified in FAR Part 91, depending upon the class of airspace in which they are operating:

- ***Class A*** – Airspace between 18,000 and 60,000 feet MSL over the conterminous United States. IFR clearances are required for all aircraft operating in Class A airspace.
- ***Class B*** – Airspace area around the busiest U.S. hub airports, typically to a radius of 20 nautical miles and up to 10,000 feet above ground level. Operations within Class B airspace require an ATC clearance and at least a Private pilot certificate (local waivers available), radio communication, and an altitude-reporting (Mode C) transponder.
- ***Class C*** – Airspace area around busy U.S. airports (other than Class B). Radio contact with approach control is mandatory for all traffic. Typically includes an area from the surface to 1,200 feet AGL out to 5 miles and from 1,200 to 4,000 feet AGL to 10 miles from the airport.
- ***Class D*** – Airspace around an airport with an operating control tower; typically to a radius of 5 miles from the surface to 2,500 feet AGL. Radio contact with the control tower required prior to entry.
- ***Class E*** – General controlled airspace comprising control areas, transition areas, Victor airways, the Continental Control Area, etc.
- ***Class F*** – International airspace designation not used in the U.S.
- ***Class G*** – Uncontrolled airspace, generally the airspace from the surface up to 700 or 1,200 feet AGL in most of the U.S., but up to as high as 14,500 feet in some remote Western and sparsely populated areas.

Day-Night Average Sound Level (DNL) – A noisemeasure used to describe the average sound level over a 24-hour period, typically an average day over the course of a year. DNL may be determined for individual locations or expressed in noise contours.

Decibel (dB) – Sound is measured by its pressure or energy in terms of decibels. The decibel scale is logarithmic. A ten-decibel increase in sound is equal to a tenfold increase in sound energy.

Declared Distances – The distances the airport owner declares 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 or clearway beyond the far end of the TORA.
- ***Accelerate-Stop Distance Available (ASDA)*** – The runway plus stopway (SWY) length declared available and suitable for the acceleration and deceleration of an airplane aborting a takeoff.
- ***Landing Distance Available (LDA)*** – The runway length declared available and suitable for a landing airplane.

Decision Height (DH) – During a precision approach, the height (or altitude) at which a decision must be made to either continue the approach or execute a missed approach.

Demand – Level of activity that needs to be accommodated.

Demand Management – The art or science of controlling demand as a strategy to avoid congestion.

Design Aircraft – An aircraft whose dimensions and/or other operational requirements make it the most demanding aircraft currently using an airport's facilities (i.e., runways and taxiways). (***Note:*** If the airport's facilities are designed to accommodate the Design Aircraft, they can accommodate less demanding aircraft as well.) The design aircraft must be an aircraft that has or is expected to conduct 500 or more annual operations (250 landings) at a given airport, and is used as the basis for airport planning and design at that airport.

Displaced Threshold – A threshold that is located at a point on the runway other than the designated beginning of the runway, often for the purpose of avoiding obstructions on approach. The portion of pavement behind a displaced threshold may be available for takeoffs in both directions and landings from the opposite direction.

Distance Measuring Equipment (DME) – A flight instrument that measures the line-of-sight distance of an aircraft from a navigational radio station in nautical miles.

Enplanements – The number of revenue passengers boarding an aircraft at an airport. Does not include arriving or through passengers.

Enroute System – That part of the National Airspace System where aircraft are operating between origin and destination airports.

Environmental Assessment (EA) – A concise document that assesses the environmental impacts of a proposed Federal Action. It discusses the purpose and need for the proposed action and alternatives, as well as their environmental impacts. An environmental assessment should provide sufficient evidence and analysis for a Federal determination whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). Public participation and consultation with other Federal, state, and local agencies is a cornerstone of the EA process.

Environmental Impact Statement (EIS) – An EIS is a document that provides a discussion of the significant environmental impacts which would occur as a result of a proposed project, and informs decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts. Public participation and consultation with other federal, state, and local agencies is a cornerstone of the EIS process.

Entitlement Funds – Federal aid funds (see AIP) apportioned to each airport for authorized and approved projects, based on a statutory formula that takes into account the airport's passenger enplanements and cargo.

Federal Aviation Administration (FAA) – A branch of the U.S. Department of Transportation responsible insuring the safe and efficient use of the nation's airspace, for fostering civil aeronautics and air commerce, and for supporting the requirements of national defense. In addition to regulating airports, aircraft manufacturing and parts certification, aircraft operation and pilot certification, the FAA operates Air Traffic Control, purchases and maintains navigation equipment, certifies airports and aids airport development, among other activities. The FAA also administers the AIP that provides grants from the Airport and Airway Trust Fund for airport development.

Federal Aviation Regulations (FARs) – The body of Federal regulations relating to aviation, published as Title 14 of the Code of Federal Regulations.

Final Approach – The flight path of an aircraft which is inbound to the airport on an approved final instrument approach course, beginning at the point of interception of that course and extending to the airport or the point where circling for landing or missed approach is executed.

Fixed Base Operator (FBO) – Any aviation business duly licensed and authorized by written agreement with the airport owner to provide aeronautical activities at the airport under strict compliance with such agreement and pursuant to these regulations and standards. Typically provide services such as hangar space, fuel, flight training, repair, and maintenance to general aviation airport users.

Fixed Wing – Any aircraft not considered to be a rotorcraft.

Flight Service Station (FSS) – Air traffic facility operated by the FAA to provide flight service assistance such as pilot briefings, en route communications, search and rescue assistance and weather information.

General Aviation (GA) – All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remunerations or hire. Often misunderstood to be only small, propeller-driven aircraft; even a large jet or cargo plane operated under FAR Part 91 can be a general aviation aircraft.

Glideslope (GS) – Provides vertical guidance for aircraft during approach and landing. Generally a 3-degree angle of approach to a runway established by means of airborne instruments during instrument approaches, or visual ground aids for the visual portion of an instrument approach and landing.

Geographic Information Systems (GIS) – An information system that is designed for storing, integrating, manipulating, analyzing, and displaying data referenced by spatial or geographic coordinates.

Global Positioning System (GPS) – Satellite-based navigation system operated by Department of Defense, providing extremely accurate position, time, and speed information to civilian and military users. Based on a "constellation" of 24 satellites, GPS will replace ground-based navigation systems (VOR, ILS) as the primary worldwide air navigation system in the 21st Century.

Hazard to Air Navigation – An object which, as a result of an aeronautical study, the FAA 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.

Instrument Approach − 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 from Federal Aviation Regulations (14 CFR 91) that govern the procedures for conducting instrument flight. Pilots are required to follow these rules when operating in controlled airspace during Instrument Meteorological Conditions (i.e., visibility of less than three miles and/or ceiling lower than 1,000 ft). These procedures may also be used under visual conditions and provide for positive control by ATC.

Instrument Landing System (ILS) – ILS is designed to provide an exact approach path for alignment and descent of aircraft. Generally consist of a localizer, glide slope, outer marker, middle marker, and approach lights. There are three types of ILS:

- ***Cat I*** – Category I ILS which provides for approach to a height above touchdown of not less than 200 feet and with visibility of not less than ½ mile or a Runway Visual Range of not less than 2400 (RVR 1800 with operative touchdown zone and runway centerline lights).
- ***Cat II*** – Category II ILS approach procedure which provides for approach to a height above touchdown of not less than 100 feet and with a Runway Visual Range of not less than 1200.
- ***Cat III*** – Category III ILS approach procedure which provides for approaches to minima less than CAT II.

Instrument Runway – A runway equipped with electronic and visual navigation aids for which a precision or non-precision approach procedure having straight-in landing minimums has been approved.

Itinerant Operation – All aircraft operations at an airport other than local.

Joint Use Airport – Airport with existing formal written joint use agreement between the military and the local civilian sponsor.

Local Aircraft Operations – Includes aircraft operating in the local air traffic pattern or within sight of the air traffic control tower; aircraft that are known to be departing for, or arriving from local practice areas located within a 25-mile radius of the ATCT; or aircraft making simulated instrument approaches or low passes at the airport.

Local Area Augmentation System (LAAS) – An enhancement of the Global Positioning System (GPS) providing greater navigation accuracy and system integrity for civilian operations.

Land Use Compatibility – The ability of land uses surrounding the airport to coexist with airport-related activities with minimum conflict.

Landside – The general public common use areas of the airport such as terminals, public roadways, parking lots and buildings which are not contained in the airside area.

Local Operation – Operations performed by an aircraft that:

- Operates within the local traffic pattern or within sight of the airport.
- Are known to be departing for or arriving from an Airport within a 20-mile radius of the airport in question.r

- Execute practice maneuvers such as touch and goes or simulated instrument approaches at the airport.

The majority of local operations are conducted by based aircraft.

Localizer – A navigational aid and component of an ILS which provides lateral course guidance to the runway.

Mean Sea Level (MSL) – The average height of the surface of the sea for all stages of the tide over a 19-year period; used as a reference for elevations.

Middle Marker – A beacon that defines a point along the glide slope of an ILS, normally located at or near the point of decision height.

Minimum Standards – The qualifications or criteria established by an airport sponsor as the minimum requirements to be met by businesses engaged in on-airport aeronautical uses as a condition for the right to conduct those activities.

Missed Approach Procedure – An instrument procedure used to redirect a landing aircraft back around to attempt another landing. This may be due to visual contact not established at authorized minimums or instructions from air traffic control, or for other reasons.

Military Operations Area (MOA) – Depicted on navigational charts, MOAs are airspace in which military flight operations (training and practice combat) are conducted. They may be transited by VFR civilian traffic, but special vigilance is recommended.

National Airspace System (NAS) – The common network of U.S. airspace, includes air navigation facilities, equipment and services, airports or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information, manpower and material.

National Plan of Integrated Airport Systems (NPIAS) – FAA planning document that identifies more than 3,300 airports that are significant to national air transportation and thus eligible to receive Federal grants under the Airport Improvement Program (AIP). It also includes estimates of the amount of AIP money needed to fund infrastructure development projects that will bring these airports up to current design standards and add capacity to congested airports. FAA is required to provide Congress with a 5-year estimate of AIP eligible development every 2 years. The NPIAS comprises all commercial service airports, all reliever airports, and selected general aviation airports.

National Transportation Safety Board (NTSB) – The independent federal agency charged with investigating and finding "probable cause" of transportation accidents.

Navigational Aids (NAVAIDs) – Any facility used by an aircraft for navigation.

Noise Abatement – A measure or action that minimizes the amount of impact of noise on the environs of an airport. Noise abatement measures include aircraft operating procedures and use or disuse of certain runways or flight tracks.

Noise Contour Map – A map representing average annual noise levels summarized by lines connecting points of equal noise exposure.

Non-Directional Beacon (NDB) – A radio beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine his bearing to and from the station. When the radio beacon is installed in conjunction with the ILS marker, it is normally called a compass locator.

Non-Precision Approach Procedure – A standard instrument approach procedure with only horizontal guidance or area-type navigational guidance for straight-in approaches, and no electronic vertical guidance (i.e., glideslope) is provided.

Non-Towered Airport – An airport without a control tower, which encompasses the majority of America's 13,000 airports (only approximately 680 airports have control towers). ***Note:*** Non-Towered airports are far from being "uncontrolled" in that pilots follow traffic pattern procedures and self-announce positions and intentions using the CTAF, usually called the UNICOM frequency.

Notices to Airmen (NOTAM) – A notice 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. NOTAMs are distributed via two methods: telecommunications (Class I) and/or postal services (Class 11).

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 OFZ is the airspace below 150 feet 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. The OFZ is sub-divided as follows:

- ***Runway OFZ*** – The airspace above a surface centered on the runway centerline.
- ***Inner-Approach OFZ*** – The airspace above a surface centered on the extended runway centerline. It applies to runways with an approach lighting system.

- ***Inner-Transitional OFZ*** – The airspace above the surfaces located on the outer edges of the runway OFZ and the inner-approach OFZ. It applies to runways with approach visibility minimums lower than ¾ statute mile.

Obstruction to Air Navigation – An object of greater height than any of the heights or surfaces presented in Subpart C of Code of Federal Regulation (14 CFR), Part 77. (Obstructions to air navigation are presumed to be hazards to air navigation until an FAA study has determined otherwise.)

Operation – A take-off, departure or overflight of an aircraft. Every aircraft flight requires at least two operations, a take-off and landing.

Outer Marker – An ILS navigation facility in the terminal area navigation system located four to seven miles from the runways edge on the extended centerline indicating the beginning of final approach.

Overflight – Aircraft whose flights originate or terminate outside the metropolitan area that transit the airspace without landing.

Part 77 – The part of Federal Aviation Regulations (FARs) covering objects affecting navigable airspace. It provides for the establishment of "imaginary surfaces" on and around an airport to identify potential aeronautical hazards in order to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. Imaginary surfaces include the primary surface, approach surfaces, transitional surfaces, the horizontal surface, and the conical surface.

Part 91, 121, 125, 135 – The parts of Federal Aviation Regulations (FARs) covering non-commercial operations (Part 91), major scheduled air carriers (Part 121), commuters (Part 125), non-scheduled carriers and air taxis (Part 135).

Part 61, 141, 142 – The parts of FARs covering pilot certification and flight school operations: the pilot certification and standard flight school (Part 61), the integrated curriculum type school (Part 141) requiring slightly fewer flying hours, and Part 142 program allowing replacement of more flight time with advanced flight simulators.

Pavement Condition Index (PCI) – Numerical index between 0 and 100 used to indicate the condition of a selected portion of pavement with 100 representing excellent pavement.

Precision Approach Path Indicator (PAPI) – Provides visual approach slope guidance to aircraft during an approach. It is similar to a VASI but provides a sharper transition between the colored indicator lights.

Precision Approach Procedure – A standard instrument approach procedure in which an electronic glide slope is provided, such as an ILS. GPS precision approaches may be operational in the future.

Prohibited Area – An airspace area where flight is prohibited except by prior arrangement with the controlling agency. An example is the P-56 area over downtown Washington, D.C., prohibiting flight over the White House.

Public Use Airport – An airport open to public use without prior permission, and without restrictions within the physical capabilities of the facility. It may or may not be publicly owned.

Reliever Airport – A public use airport that relieves airport congestion at a commercial service airport and provides general aviation access to the overall community. It is a NPIAS classification.

Restricted Area – Airspace which (when "Active" or "Hot") usually excludes civilian aircraft, oftentimes for military training/operations (i.e., rocket flights, practice air-to-air combat or ground-based artillery practice). Temporary restricted areas are established for events such as forest fires, natural disasters or major news stories. Flight through a restricted area may be authorized by the "controlling agency" or by FAA.

Rotocraft – A heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors. Includes helicopters and gyroplanes.

Rules and Regulations – Directions approved and enforced by an airport sponsor to protect public health, safety, interest, and welfare on the airport, as well as to augment any ordinances and resolutions pertaining to the airport.

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

Runway End Identifier Lights (REIL) – Two synchronized flashing lights (one on each side of the runway threshold) that identify the approach end of the runway.

Runway Incursion – Any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in loss of separation with an aircraft taking off, intending to take off, landing or intending to land.

Runway Protection Zone (RPZ) – An area off the runway end to enhance the 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 airplanes in the event of an undershoot, overshoot, or excursion from the runway.

Runway Threshold – The beginning of the portion of the runway usable for landing.

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

Special Use Airspace – All airspace in which restrictions or prohibitions to flight are imposed for military or government needs (see MOA, Restricted Area, Prohibited Area).

SuperAWOS – Automated AWOS and Unicom system that is FAA certified for altimeter settings among other weather data, which is required for GPS approach implementation.

T-Hangar – An aircraft hangar in which aircraft are parked alternatively tail to tail, each in the T-shaped space left by the other row of aircraft or aircraft compartments.

Taxilane (TL) – The portion of the aircraft parking area used for access between taxiways and aircraft parking positions.

Taxiway (TW) – A defined path established for the taxiing of aircraft from one part of an airport to another.

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.

Terminal Area Capacity – The ability of an airport terminal area to accommodate aircraft, passengers, and cargo. Individual elements within terminal areas that comprise the overall terminal capacity typically include airline gate positions, airline apron areas, cargo apron areas, general aviation apron areas, airline passenger terminals, general aviation terminals, cargo buildings, automobile parking and aircraft maintenance facilities, among others.

Terminal Area Forecast (TAF) – The official forecast of aviation activity at FAA facilities, which are prepared to meet the budget and planning needs of FAA and provide information for use by state and local authorities, the aviation industry, and the public. The TAF includes forecasts for the following:

- FAA towered airports.
- Federally contracted towered airports.
- Nonfederal towered airports.
- Non-towered airports.

Terminal Radar Approach Control (TRACON) – An FAA Air Traffic Control Facility which uses radar and two-way communication to provide separation of air traffic within a specified geographic area in the vicinity of one or more airports. TRACONs control IFR and participating VFR flights.

Threshold Siting Surface – Defined in FAA AC 150/5300-13, *Airport Design*, this imaginary surface is utilized to locate a runway threshold in order to meet approach obstacle clearance requirements. The dimensions of TSS vary with the type of aircraft operations, the approach visibility minimums, and the types of navigational instrumentation.

Through-the-Fence Operation – A commercial or non-commercial activity that is directly related to the use of the airport but is developed or located off airport property beyond the sponsor's control. This term is also sometimes loosely used to refer to services performed on the airport by individuals or companies which may or may not have a lease or permit from the sponsor to perform such services.

Tiedown – An apparatus used to secure an aircraft while parked on the apron.

Touch-and-Go Operation – A flight training operation in which a landing approach is made, the aircraft touches-down on the runway, but does not fully reduce speed to turn off the runway. Instead, after the landing, full engine power is applied while still rolling and a takeoff is made, thereby practicing both maneuvers as part of one motion. It counts as two separate aircraft operations.

Traffic Pattern – The traffic flow for aircraft landing and departure at an airport. Typical components of the traffic pattern include: upwind leg, crosswind leg, downwind leg, base leg, and final approach.

Transportation Security Administration (TSA) – U.S. government agency is a component of the Department of Homeland Security and is responsible for security of the nation's transportation systems.

Turbojet Aircraft – An aircraft having a jet engine in which the energy of the jet operates a turbine which in turn operates the air compressor.

Turboprop Aircraft – An aircraft having a jet engine in which the energy of the jet operates a turbine which drives the propeller.

Ultralight – An aircraft operated for sport or recreational purposes that does not require FAA registration, an airworthiness certificate, or pilot certification. They are primarily single-occupant vehicles, although some two-place vehicles are authorized for training purposes. Operation of an ultralight vehicle in certain airspace requires authorization from ATC.

UNICOM – A common, nongovernmental communication facility used at most nontowered airports as the CTAF to provide airport advisory information. Aeronautical charts and publications show the locations and frequencies of UNICOMs.

Unmanned Aerial Vehicle (UAV) – An unpiloted aircraft that can be controlled remotely using GPS or other satellite guidance, or flown autonomously based on pre-programmed flight plans or more complex dynamic automation systems. UAVs are currently primarily used in a number of military roles, but are also used

in a small but growing number of civil applications such as firefighting (when a human observer would be at risk), police observation of civil disturbances and crime scenes, and reconnaissance support in natural disasters.

Utility Airport – An airport designed, constructed and maintained to serve smaller (single and twin-engine) airplanes in aircraft approach categories A and B.

Very High Frequency Omni-Directional Range (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. Voice features may be used by ATC or FSS for transmitting instructions to pilots.

Very High Frequency Omni-Directional Range Station With Tactical Air Navigation (VORTAC) – A navigational aid providing VOR azimuth and TACAN distance measuring equipment (DME) at one site.

Very Light Jet (VLJ) – A small jet aircraft approved for single-pilot operation, seating 4-8 people, with a maximum take-off weight of under 10,000 pounds. They are lighter than what is commonly termed business jets.

Visual Approach – An approach conducted on an IFR flight plan, operating in VFR conditions under the control of an air traffic facility and having an air traffic control authorization, may proceed to destination airport under VFR.

Visual Approach Slope Indicator (VASI) – A visual aid for the final approach to the runway threshold consisting of two wing bars of lights located in tandem on either side of the runway. Each bar produces a split beam of light—the upper segment is white, the lower is red.

Visual Flight Rules (VFR) – Rules and procedures specified in 14 CFR 91 for aircraft operations under visual meteorological conditions, or weather conditions with a ceiling of 1,000 feet above ground level and visibility of three miles or greater. Under VFR, it is the pilot's responsibility to maintain visual separation and not that of the air traffic controller.

Visual Runway – A runway without an existing or planned straight-in instrument approach procedure.

Wide Area Augmentation System (WAAS) – An enhancement to the GPS system providing greater navigation accuracy and system integrity and permitting GPS to be used for precision instrument approaches to most airports.

Wind Coverage – Percent of time for which aeronautical operations are considered safe due to acceptable crosswind components.

Wind Rose – A scaled graphical presentation of wind information.