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## Acronyms

AAC	Aircraft Approach Category
AAF	Army Air Field
AASF	Army Aviation Support Facility
AAQS	Ambient Air Quality Standards
AC	Advisory Circular
ACAIS	Air Carrier Activity Information System
ACRP	Airport Cooperative Research Program
ADG	Airplane Design Group
ADO	Airports District Office
AEDT	Aviation Environmental Design Tool
AG	Agricultural District
AGL	Above Ground Level
AGIS	Advanced Ground Informational Systems
AIP	Airport Improvement Program
AIRS	Aerometric Information Retrieval System
ALP	Airport Layout Plan
ALS	Approach Lighting System
ALSF	Approach Lighting System with Sequenced Flashers
AMSL	Above Mean Sea Level
AOA	Airport Operations Area
AOC	Airport Operating Certificate
AOE	Airport of Entry
ΑΟΡΑ	Aircraft Owners and Pilots Association
APM	Airport Planning Manual
APP-400	National Airport Planning and Environmental Division
APV	Approach Procedure with Vertical Guidance
AQP	Aquifer Protection Area
ARC	Airport Reference Code
ARFF	Aircraft Rescue and Firefighting Facility
ARP	FAA Office of Airports
ARTCC	Air Route Traffic Control Center
ASDA	Accelerate Stop Distance Available
ASDI	Aircraft Situation Display to Industry
ASLF-1	Approach Light System with Sequenced Flashing lights
ASO	Aviation Service Operator
ASOS	Automated Surface Observing System
ASV	Annual Service Volume



ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
ATIS	Automated Terminal Information System
AVGAS	Aviation Gasoline
AWACS	Airborne Warning and Control System
AWG	Airport Work Group
BAR	Boeing Access Road
BCA	Benefit Cost Analysis
BCT	Brigade Combat Team
BFI	King County International Airport/Boeing Field
BLF	Boarding Load Factor
BMP	Best Management Practice
BNSF	Burlington Northern Santa Fe
BTS	Bureau of Transportation Statistics
CAGR	Compound Annual Growth Rate
САР	Civil Air Patrol
CatEx	Categorical Exclusion
CBD	Central Business District
CDP	Conceptual Development Plan
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CG	General Commercial District
СН	Commercial High Intensity District
CH₄	Methane
CIP	Capital Improvement Program
CL	Centerline Lights
CMG	Cockpit to Main Gear
CO/CO <sub>2</sub>	Carbon Monoxide/Dioxide
COL	Non-Recyclable Construction, Demolition, and Land Clearing Waste
CS	Commercial Shopping Center District
CSSN	Capacity/Safety/Security/Noise
CTAF	Common Traffic Advisory Frequency
CZMA	Coastal Zone Management Act
dB	Decibel
DER	Decision End of Runway
DME	Distance Measuring Equipment
DNL	Day-Night Noise Level
DNS	Determination of Non-Significance
DOD	Department of Defense
DOT	Department of Transportation



EA	Environmental Assessment
EDDA	Environmental Due Diligence Audit
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EMB	Embraer Regional Jet
(US)EPA	Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FAS	Final Approach Segment
FATO	Final Approach and Takeoff Area
FBO	Fixed Base Operator
FCT	FAA Contract Tower
FEMA	Federal Emergency Management Agency
FIS	Federal Inspection Services
FMD	Facilities Management Division
FPPA	Farmland Protection Policy Act
FSS	Flight Service Station
GA	General Aviation
GAMA	General Aviation Manufacturers Association
GAO	U.S. General Accounting Office
GDP	Gross Domestic Product
GEG	Spokane International Airport
GMA	Growth Management Act
GPS	Global Positioning System
GQS	Glidepath Qualification Surface
GS	Glide Slope
HCM	Highway Capacity Manual
HFCs	Hydrofluorocarbons
HIRL	High Intensity Runway Lights
I-5	Interstate Highway 5
IAP	Instrument Approach Procedure
ICAO	International Civil Aviation Organization
ICE	Immigration and Customs Enforcement
IFR	Instrument Flight Rules
IH	Industrial Heavy District
IL	Industrial Light District
ILS	Instrument Landing System
IM	Industrial Moderate District
IMC	Instrument Meteorological Conditions



INM	Integrated Noise Model
INS	Immigrations and Naturalization Service
ISGP	Industrial Stormwater General Permit
JPATS	Justice Prisoner & Alien Transportation System
KCIA	King County International Airport
LATS	Long-Term Air Transportation Study
LDA	Landing Distance Available
LIRL	Low Intensity Runway Lights
LITL	Low Intensity Taxiway Lights
LOC	Localizer
LOI	Letter of Intent
LOS	Level of Service or Line of Sight
LPV	Localizer Performance with Vertical Guidance
LWCF	Land and Water Conservation Fund Act
MALS	Medium Intensity Approach Lighting System
MALSF	Medium Intensity Approach Lighting System with Sequenced Flashers
MALSR	Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
MAS	Missed Approach Segment
MGW	Main Gear Width
MHHW	Mean Higher High Water
MIC	Manufacturing Industrial Center
MIRL	Medium Intensity Runway Lights
MITL	Medium Intensity Taxiway Lights
MNMT	Mean Normal Maximum daily Temperature
MOA	Military Operations Area
MOF	Museum of Flight
MOS	Modification of Standard(s)
MP	Master Plan
MSA	Metropolitan Statistical Area
MTOW	Maximum Takeoff Weight
N <sub>2</sub> O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NACD	Native American Consultation Database
NAS	National Airspace System
NASA	National Aeronautics and Space Administration
NAVAIDS	Navigational Aids
NBAA	National Business Aviation Association
NCDC	National Climatic Data Center
NCP	Noise Compatibility Program
NDB	Non-Directional Beacon



NEPA National Environmental Policy Act	
NHPA National Historic Preservation Act	
NM Nautical Mile	
NMFS National Marine Fisheries Service	
NO <sub>2</sub> Nitrogen Dioxide	
NOAA National Oceanic and Atmospheric Adm	ninistration
NPDES National Pollutant Discharge Eliminatio	on System
NPE Non-Primary Airports Entitlement	
NPIAS National Plan of Integrated Airport Syst	tems
NPS National Park Service	
NRCS National Resources Conservation Service	ce
NRHP National Register of Historic Places	
NWI National Wetlands Inventory	
O <sub>3</sub> Ozone	
O&D Origin and Destination	
OCS Obstacle Clearance Surface	
ODALS Omnidirectional Approach Lighting Syst	tem
<b>OE/AAA</b> Obstruction Evaluation/Airport Airspac	e Analysis
OFA Object Free Area	
OL Office Low Intensity Districts	
OPBA Operation per Based Aircraft	
PAE Snohomish County Airport/Paine Field	
PAPI Precision Approach Path Indicator	
Pb Lead	
PCA Permit Compliance System	
PFC Passenger Facility Charge	
PFCs Perfluorocarbons	
PHS Priority Habitats and Species	
PLU Pierce County Airport/Thun Field	
PMx Particulate Matter	
POFZ Precision Obstacle Free Zone	
PPRP Prior Permission Required Pavement	
PSRC Puget Sound Regional Council	
PVC Poor Visibility and Ceiling	
PWT Bremerton National Airport	
RCL Runway Centerline Lighting	
RDC Runway Design Code	
REIL Runway End Identifier Lights	
<b>RM</b> Residential Multifamily District	



RMH	Residential Manufactured Home District
RNAV	Area Navigation
RNP	Required Navigation Procedure
RNT	Renton Municipal Airport
RO	ARP Regional Office
ROFA	Runway Object Free Area
ROW	Right of Way
RPZ	Runway Protection Zone
RS	Residential Single-Family District
RSA	Runway Safety Area
RTR	Remote Transmitter/Receiver
RTM	Revenue Ton Mile
RVR	Runway Visual Range
S36	Crest Airpark (Kent)
S43	Harvey Field
S50	Auburn Municipal Airport
SEA	Seattle-Tacoma International Airport
SEL	Sound Exposure Level
SEPA	State Environmental Policy Act
SF <sub>6</sub>	Sulfur Hexafluoride
SHPO	State Historic Preservation Office
SID	Standard Instrument Departures
SIP	State Implementation Plan
SKOL	Southern Kansas Oklahoma Line Railroad
SM	Statute Miles
SO/SO <sub>2</sub>	Sulfur Oxide/Dioxide
SPCC	Spill Prevention, Control, and Countermeasures
SPPP	Stormwater Pollution Prevention Plan
SRE	Snow Removal Equipment
SSALR	Short Simplified Approach Lighting System with Runway Alignment Indicator Lights
SSALS	Simplified Short Approach Lighting System
STAR	Standard Terminal Arrival Routes
TACAN	Tactical Air Navigation
TAF	Terminal Area Forecasts
тсн	Threshold Crossing Height
TDG	Taxiway Design Group
TDZ	Touchdown Zone
TDZL	Touchdown Zone Lights
TERPS	United States Standard for Terminal Instrument Approach Procedures
TFSSP	Twelve-Five Standard Security Program





тнро	Tribal Historic Preservation Office
TIA	Turn Initiation Area
TIW	Tacoma Narrows Airport
TLOF	Touchdown and Liftoff Area
TODA	Takeoff Distance Available
TOFA	Taxiway Object Free Area
TORA	Takeoff Run Available
TRACON	Terminal Radar Approach Control
TSA	Transportation Security Administration
TSA	Taxiway Safety Area
TSS	Threshold Siting Surface
UNICOM	Universal Communications
UP	Union Pacific
UPS	United Parcel Service
URARPAPA	Uniform Relocation Assistance and Real Property Acquisition Policies Act
USACE	U.S. Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VCOA	Visual Climb Over the Airport
VFR	Visual Flight Rules
VGS	Vertical Guidance System
VHF	Very High Frequency
VIJ	Very Light Jet
VMC	Visual Meteorological Conditions
VOC	Volatile Organic Compounds
VOR	Very High Frequency Omnidirectional Range
VOR/DME	Very High Frequency Omnidirectional Range with Distance Measuring Equipment
VORTAC	Very High Frequency Omnidirectional Range/Tactical Air Navigation
WAAS	Wide Area Augmentation System
WANG	Washington National Guard
WDFW	Washington State Department of Fish and Wildlife
WHPA	Wellhead Protection Area
WHR	Washington Heritage Register
WSDOE	Washington State Department of Ecology





### Glossary

Above Mean Sea Level. The elevation of an object above the average sea level.

- Air Carrier. A commercial airline with published schedules operating at least five round trips per week.
- Aircraft Operation. An aircraft arrival (landing) or an aircraft departure (takeoff) represents one aircraft operation.
- **Aircraft Rescue and Firefighting Facility.** A facility housing specifically trained personnel and equipment in response, firefighting, hazard mitigation, evacuation, and rescue of passengers and crew of an aircraft involved in a ground emergency.
- **Airport Layout Plan.** The official, FAA approved drawing of an airport's existing and proposed facilities.
- **Airport Reference Code.** An FAA design criteria based upon the approach speed (represented by a capital letter) and wingspan (represented by a roman numeral) of an aircraft that produces a minimum annual itinerant operations per year at an airport.
- **Airport Traffic Control Tower.** A central operations tower in the terminal air traffic control system with an associated IFR room if radar equipped, using air to ground communications and/or radar, visual signaling, and other devices to provide the safe and expeditious movement of air traffic.
- **Air Route Traffic Control Center.** A facility providing air traffic control to aircraft on an IFR flight plan within controlled airspace and principally during the enroute phase of flight.
- **Air Traffic Control.** The control of aircraft traffic in the vicinity of airports from control towers, and in the airways between airports from control centers.
- **Annual Service Volume.** A reasonable estimated of an airport's annual capacity (i.e., the level of annual aircraft operations that will result in an average annual aircraft delay of approximately one to four minutes).
- Anthropogenic. Of human cause or origin.
- **Approach Lighting System.** Radiating light beams guiding pilots to the extended runway centerline on final approach and landing.
- **Area Navigation.** A method of navigation that permits aircraft operation on any desired course within the coverage of station-referenced navigation signals or within the limits of a self-contained system capability, or a combination of these.
- **Boarding Load Factor.** The ratio of aircraft seats available for passenger boarding compared to the number of passengers actually boarding.





- **Common Traffic Advisory Frequency.** The name given to a VHF radio frequency used at U.S., Canadian, and Australian airports that do not have an active or on-site control tower.
- **Compound Annual Growth Rate.** A calculation frequently used in business forecasting that provides a constant rate of return over a specified time period, and is it is often useful to compare data from similar data sets such as year-on-year growth in sectors of the aviation industry.
- **Criteria Pollutants.** The six most common air pollutants as identified by the United States Environmental Protection Agency through the National Ambient Air Quality Standards (NAAQS). They are ozone (O<sub>3</sub>), carbon monoxide (CO), sulfur oxide (SO), nitrogen dioxide (NO<sub>2</sub>), particulate matter (coarse particles PM<sub>10</sub> and fine particles PM<sub>2.5</sub>), and lead (Pb).
- **Day-Night Noise Level.** The daily average noise metric in which noise occurring between 10:00 p.m. and 7:00 a.m. is penalized by 10 db. DNL is often expressed as annual average noise levels.
- **Decibel.** A measurement used to quantify sound levels referencing a scale from the threshold of human hearing, 0 dB, upward toward the threshold of pain, about 120-140 dB.
- **Distance Measuring Equipment.** Equipment used to measure, in nautical miles, the distance of an aircraft from the broadcasting facility.
- **Facilities Management Division.** The governing body for King County that oversees and maintains the County's real estate assets. BFI is included among these assets.
- **Federal Aviation Regulations.** The rules and regulations that govern the operation of aircraft, airways, airmen, and airports.
- **Fixed Based Operator.** A facility on an airport providing various services for aircraft such as maintenance, fuel, storage, etc.
- Fleet Mix. The mix or differing aircraft types operated at a particular airport or by an airline.
- **Flight Plan.** Specific information related to the intended flight of an aircraft, filed with a Flight Service Station or Air Traffic Control facility.
- General Aviation. Civil aviation excluding air carriers, commercial operations, and military aircraft.
- **Glide Slope.** An 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.
- Global Positioning System. A satellite-based radio positioning, navigation, and time-transfer system.
- **High Intensity Runway Lights.** High intensity light fixtures delineating the limits of a runway served by a precision instrument approach procedure.





- **Instrument Approach.** A series of predetermined maneuvers developed for the orderly transfer of 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 Procedure.** Procedures developed by the FAA to guide aircraft to airports including distance, topography, elevation, coordinates, angle of approach, and missed approach procedures.
- **Instrument Flight Rules.** Rules specified by the FAA for the flight under weather conditions in which visual reference cannot be made to the ground and the pilot must rely on instruments to fly and navigate.
- **Instrument Landing System.** A precision instrument approach system that normally consists of a localizer antenna, glide slope antenna, outer marker, middle marker, and ad approach lighting system.
- **Instrument Meteorological Conditions.** Weather conditions that require that pilots rely primarily on instrumentation for navigation under IFR, rather than by visual reference and VFR.
- **Itinerant Operation.** An aircraft landing or takeoff that originates at one airport and terminates at another (place-to-place).
- Knots. A measure of speed used in navigation. One knot is equal to one nautical mile per hour (1.15 knots 1 mile per hour).
- **Landing Minimums.** Prescribed altitudes and visibility distances that the pilot uses to make a decision as to whether or not it is safe to land on a particular runway.
- **Local Operation.** An aircraft landing or takeoff that remains in the local traffic pattern (i.e. training or touch-and-go operation).
- **Level of Service.** A measure that determines the quality of service provided by transportation devices, or transportation infrastructure, and is generally linked to time and speed of the vehicles.
- Low Intensity Runway Lights. Low intensity light fixtures delineating the limits of a runway having no instrument approach procedures.
- Load Factor. The percentage of seats occupied on an aircraft by passengers.
- Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights. A medium intensity approach lighting system providing a visual lighting path for landing pilots, consisting of nine light bars with five steady burning white fixtures, five sequential flashing white fixtures, and a threshold bar of 18 steady burning green fixtures.
- **Medium Intensity Runway Lights.** Medium intensity light fixtures delineating the limits of a runway supplied with a non-precision instrument approach procedure.





- **Metropolitan Statistical Area.** A geographical region with a central core typically associated with significant population density and economic connectivity between local municipalities. The most common use of the term relates to a city and its suburbs as one unified MSA.
- **Middle Marker.** A beacon that defines a point along the glide slope of an Instrument Landing System, normally located at or near the point of decision height.
- **Missed Approach.** An instrument approach not completed by a landing. This may be due to visual contact not established at authorized minimums or instructions from air traffic control, or other reasons.
- **National Ambient Air Quality Standards.** Standards established by the United States Environmental Protection Agency for six outdoor air pollutants considered harmful to the public health and the environment.
- **National Airspace System.** The common network of U.S. airspace, 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.** Established by the Airport and Airway Improvement Act of 1982, it is the identification of national airport system needs including short- and long-term development costs.
- **Nautical Mile.** A measure of distance used in air and sea navigation. One nautical mile is equal to the length of one minute of latitude along the Earth's equator, officially set as 6,076.115 feet.
- Navaid. Any facility providing assistance or aid to pilots for navigating through the air.
- **Noise Contour.** The "map" of noise exposure around an airport, computed by the Integrated Noise Model. The FAA defines significant noise exposure as any area within the 65 DNL contour, which is the area within an annual average noise exposure of 65 decibels or higher.
- **Non-Directional Beacon.** A navaid providing signals that can be read by pilots of aircraft equipped with direction finding equipment, used to determine bearing and can "home" in or track to or from the desired point.
- **Non-Precision Approach.** A standard instrument approach procedure in which no vertical guidance is provided.
- **Omnidirectional Approach Lighting System.** An approach lighting system consisting of five sequential flashing omnidirectional lights extended along the runway centerline and two located on either side of the runway threshold.
- **Outer Marker.** A navigational facility within the terminal area navigational system located four to seven miles from the runway threshold on the extended centerline indicating the beginning of the final approach.





Passur. An aeronautics data collection database and predictive analysis firm.

- **Precision Approach Path Indicator.** A visual navigational aid providing guidance information to help pilots acquire and maintain the correct approach (in the vertical plane) to a runway.
- **Puget Sound Regional Council.** The metropolitan planning organization (MPO) that manages the transportation planning, economic development, and growth management of the Puget Sound Region, which include in the PSRC are King, Kitsap, Pierce, and Snohomish Counties.
- Runway. A strip of pavement, land, or water used by aircraft for takeoff or landing.
- **Runway Object Free Area.** A defined two-dimensional surface centered on a runway providing enhanced safety for aircraft operations by having the area free of objects protruding above the runway safety area edge elevation, except for objects that need to be located within the area for air navigation or aircraft ground maneuvering purposes.
- **Runway Safety Area.** A defined surface surrounding a runway prepared or suitable for reducing the risk or damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway.
- **Runway Visual Range.** Facilities providing a measurement of horizontal visibility located adjacent to instrument runways.
- Section 4(f). A subsection of the Department of Transportation Act of 1966 that provides consideration for park and recreation lands, wildlife and waterfowl refuges, and historic sites during transportation project development.
- Section 6(f). Similar to Section 4(f) that instead prevents the conversion of lands purchased or developed with Land and Water Conservation Fund Act funds to non-recreation uses unless otherwise approved through the National Park Service.
- Single Event. Noise generated by a single aircraft overflight.
- **Tactical Air Navigation.** An enroute navaid combining azimuth and distance measuring equipment into one unit and operated in the ultra-high frequency band.
- **Taxiway.** A designated area that connects runways with aprons, providing the ability to move aircraft on the ground so they will not interfere with takeoffs or landings.
- Terminal Airspace. The airspace controlled by a terminal radar approach control facility.
- **Terminal Area.** A general term used to describe airspace in which approach control service or airport traffic control service is provided.
- **Terminal Radar Approach Control.** An FAA air traffic control service to aircraft arriving, departing, or transiting airspace controlled the facility.





- "Through the Fence" Agreement. An agreement that allows full airport access to users with land outside of an airport's official property line.
- Transient Aircraft. An aircraft that is not based at the airport in which it is currently located.
- Very High Frequency Omnidirectional Range. A ground based electronic navigation aid transmitting navigation signals for 360° oriented from magnetic north.
- Very High Frequency Omnidirectional Range/Tactical Air Navigation. A ground based electronic navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment at a single site.
- **Visual Approach.** An aircraft approach conducted under IFR, which authorizes the pilot to proceed visually and clear of clouds to the airport. The pilot must, at all times, have either the airport or the preceding aircraft in sight.
- **Visual Flight Rules.** Rules that govern the procedures for conducting flight under visual meteorological conditions.
- **Visual Meteorological Conditions.** Weather conditions under which pilots have the ability to visually see and avoid stationary objects and other aircraft and fly without the use of instrumentation, under VFR.



