

Appendix A

GLOSSARY^a

Aircraft Operations: The airborne movement of aircraft in controlled or noncontrolled airport terminal areas and about given en route fixes. There are two types of operations-- local and itinerant.

1. Local operations are performed by aircraft which:
 - a. Operate in the local traffic pattern or within sight of the airport.
 - b. Are known to be departing for, or arriving from, flight in local practice areas within a 20 mile radius of the airport.
 - c. Execute simulated instrument approaches or low passes at the airport.
2. Itinerant operations are all aircraft operations other than local operations.

Air Defense Identification Zone (ADIZ): The area of air-space over land or water within which the ready identification, the location, and the control of aircraft are required in the interest of national security.

Air Navigation Facility (NAVAID): A facility designed for use as an aid to air navigation, including landing areas, lights, any apparatus or equipment for disseminating weather information, for signaling, for radio direction-finding, or for radio or other electronic communication, and any other structure or mechanism having a similar purpose for guiding and controlling flight in the air or the landing or takeoff of aircraft.

Airport Layout Plan: A plan for an airport showing boundaries and proposed additions to all areas owned or controlled by the sponsor for airport purposes, the location and nature of existing and proposed airport facilities and structures, and the location on the airport of existing and proposed nonaviation areas and improvements thereon.

a. This material was adapted from entries in the "FAA Glossary," Order 1000.15A

Airport Master Plan: An assembly of appropriate documents and drawings covering the development of a specific airport from a physical, economical, social, and political jurisdictional perspective. The airport layout plan is a part of this plan.

Airport Operation: A landing or a takeoff at the airport at which the facility is located. (A low approach below traffic pattern altitudes or a touch-and-go operation shall be counted as both a landing and a takeoff; i.e., two operations.)

Airport Sponsor: A public agency or tax-supported organization, such as an airport authority, that is authorized to own and operate the 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.

Airport Surveillance Radar (ASR): Radar providing position of aircraft by azimuth and range data. It does not provide elevation data. It is designed for range coverage up to 60 nautical miles and is used by terminal area air traffic control.

Airport System Planning: The development for planning purposes of information and guidance to determine the extent, type, nature, location, and timing of airport development needed in a specific area to establish a viable and balanced system of public airports. It includes identification of the specific aeronautical role of each airport within the system, development of estimates of systemwide development costs, and the conduct of such studies, surveys, and other planning actions as may be necessary to determine the short-, intermediate-, and long-range aeronautical demands required to be met by a particular system of airports.

Airport Traffic Area: Unless otherwise specifically designated in FAR Part 93, that airspace within a horizontal radius of 5 statute miles from the geographical center of any airport at which a control tower is operating, extending from the surface up to, but not including, an altitude of 3,000 feet above the elevation of the airport.

Airport Traffic Control Tower (ATCT): A central operations facility in the terminal air traffic control system, consisting of a tower cab structure, including an associated IFR room if radar equipped, using air/ground communications and/or radar, visual signaling and other devices, to provide safe and expeditious movement of terminal air traffic.

Air Route Surveillance Radar (ARSR): A radar facility remotely connected to an air route traffic control center used to detect and display the azimuth and range of en route aircraft operating between terminal areas, enabling an ATC controller to provide air traffic control service in the air route traffic control system.

Air Route Traffic Control Center (ARTCC): A facility established to provide air traffic control service to aircraft operating on an IFR flight plan within controlled air space and principally during the en route phase of flight.

Airspace: Space in the air above the surface of the earth or a particular portion of such space, usually defined by the boundaries of an area on the surface projected upward.

Airspace Reservation: Airspace in which the flight of aircraft is prohibited or restricted.

Air Traffic Clearance: An authorization by air traffic control, for the purpose of preventing collision between known aircraft, for an aircraft to proceed under specified traffic conditions within controlled airspace.

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

Airway: A path through the navigable airspace designated by appropriate authority within which air traffic service is provided.

Approach Control Facility: A terminal air traffic control facility (TRACON, CST, RAPCON, RATCF, Tower, etc.) providing approach control service.

Approach Fix: The fix from or over which final approach (IFR) to an airport is executed.

Approach Gate: That point on the final approach course which is 1 mile from the approach fix on the side away from the airport or 5 miles from the landing threshold, whichever is farther from the landing threshold.

Area Navigation (RNAV): 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.

Automated Radar Terminal Systems (ARTS): Computer-aided radar display subsystems capable of associating alphanumeric data with radar returns.

Controlled Airspace: Airspace, designated as a continental control area, control area, control zone, terminal control area, or transition area, within which some or all aircraft may be subject to air traffic control.

Types of U.S. Controlled Airspace:

1. Continental Control Area: The airspace of the 48 contiguous states, the District of Columbia, and Alaska, excluding the Alaska peninsula west of Longitude 160° 00' 00" West at and above 14,500 feet mean sea level (MSL), but does not include:
 - a. The airspace less than 1,500 feet above the surface of the earth or,
 - b. Prohibited and restricted areas.
2. Control Area: Airspace designated as Colored Federal Airways, VOR Federal Airways, Terminal

Control Areas, Additional Control Areas, and Control Area Extensions, but not including the Continental Control Area.

3. **Control Zone:** Controlled airspace which extends upward from the surface and terminates at the base of the continental control area. Control zones that do not underlie the Continental Control Area have no upper limit. A control zone may include one or more airports and is normally a circular area within a radius of 5 statute miles and any extensions necessary to include instrument approach and departure paths.
4. **Terminal Control Area (TCA):** Controlled airspace extending upward from the surface or higher to specified altitudes, within which all aircraft are subject to operating rules and pilot and equipment requirements specified in FAR Part 91.
5. **Transition Area:** Controlled airspace extending upward from 700 feet or more above the surface of the earth when designated in conjunction with an airport for which an approved instrument approach procedure has been prescribed, or from 1,200 feet or more above the surface of the earth when designated in conjunction with airway route structures or segments. Unless otherwise limited, transition areas terminate at the base of the overlying controlled airspace. Transition areas are designed to contain IFR operations in controlled airspace during portions of the terminal operation and while transiting between the terminal and en route environment.

Control Sector: An airspace area of defined horizontal and vertical dimensions for which a controller, or group of controllers, has air traffic control responsibility, normally within an air route traffic control center (ARTCC) or an approach control facility.

Departure Control: A function of an approach control facility providing air traffic control service for departing IFR and, under certain conditions, VFR aircraft.

Distance Measuring Equipment (DME): Electronic equipment used to measure, in nautical miles, the slant range of the aircraft from a navigation aid.

En Route Air Traffic Control Service: Air traffic control service provided aircraft on an IFR flight plan, generally by centers, when these aircraft are operating between departure and destination terminal areas.

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

Final Approach (VFR): A flight path of a landing aircraft in the direction of landing along the extended runway centerline from the base leg to the runway.

Flight Plan: Specified information relating to the intended flight of an aircraft that is filed orally or in writing with air traffic control.

Flight Progress Strips: Presectioned paper strips used by controllers to record flight information and progress.

Glide Slope (GS): An ILS navigation facility in the terminal area electronic navigation system, providing vertical guidance for aircraft during approach and landing.

IFR Airport: An airport with an authorized instrument approach procedure.

IFR Conditions: Weather conditions below the minimum for flight under visual flight rules.

Initial Approach: The segment (of a standard instrument approach procedure) between the initial approach fix and the intermediate fix or the point where the aircraft is established on the intermediate course or final approach course.

Instrument Approach: An approach to an airport, with intent to land, by an aircraft flying in accordance with an IFR flight plan, when the visibility is less than 3 miles and/or when the ceiling is at or below the minimum initial altitude.

Instrument Approach Runway: A runway served by an electronic aid providing at least directional guidance adequate for a straight-in approach.

Instrument Flight Rules (IFR): FAR rules that govern the procedures for conducting instrument flight.

Instrument Landing System (ILS): A system which provides in the aircraft, the lateral, longitudinal, and vertical electronic guidance necessary for a landing.

Instrument Operation: An aircraft operation in accordance with an IFR flight plan or an operation where IFR separation between aircraft is provided by a terminal control facility or air route traffic control center.

Instrument Runway: A runway equipped with electronic and visual navigation aids and for which a straight-in (precision or nonprecision) approach procedure has been approved or is planned.

Intersection (INT): A point where the signals from two or more navigation aids cross, usually named after the closest geographic location on the ground (towns, rivers, etc.).

Localizer (LOC): An ILS navigation facility in the terminal area electronic navigation system that provides horizontal guidance to the runway centerline for aircraft during approach and landing.

Localizer Type Directional Aid (LDA): A facility of comparable utility and accuracy to a localizer that is not aligned with the runway with an angle of divergence exceeding 3 degrees but not exceeding 30 degrees.

Minimum Vectoring Altitude (MVA): The lowest altitude, expressed in feet above mean sea level (MSL), that an IFR aircraft will be vectored by a radar controller.

Missed Approach: An instrument approach not completed by landing due to: (1) visual contact not established at authorized minimums, or (2) instructions from air traffic control, or (3) other reasons.

NAVAID: (See Air Navigation Facility.)

Nondirectional Beacon (NDB): An L/MF or UHF radio beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine his bearing to or from the radio beacon and "home" on or track to or from the station.

Nonprecision Approach Procedure: A standard instrument approach procedure in which no electronic glide slope is provided.

Nonprecision Instrument Runway: A runway having an existing instrument approach procedure using air navigation facilities with only horizontal guidance for which a straight-in non-precision instrument approach procedure has been approved.

Pattern: The configuration or form of a flight path flown by an aircraft, or prescribed to be flown, as in making an approach to a landing.

Precision Approach Procedure: A standard instrument approach procedure in which an electronic glide slope is provided, e.g., ILS.

Precision Instrument Runway: A runway having an existing instrument approach procedure using an Instrument Landing System (ILS) or a Precision Approach Radar (PAR).

Radar Approach Control (RAPCON or RAPCO): A joint use air traffic control facility, located at a U.S. Air Force Base, using surveillance and precision approach radar equipment in conjunction with air/ground communication equipment, providing for the safe and expeditious movement of air traffic within the controlled airspace of that facility.

Radar Service: A term which encompasses one or more of the following services based on the use of radar which can be provided by a controller to a pilot of a radar-identified aircraft:

1. Radar separation: Radar spacing of aircraft in accordance with established minima.
2. Radar Navigation Guidance: Vectoring aircraft to provide course guidance.
3. Radar Monitoring: The radar flight following of aircraft, whose primary navigation is being performed by the pilot, to observe and note deviations from its authorized flight path, airway, or route.

Segments of an Instrument Approach Procedure: An instrument approach procedure may have as many as four separate segments depending on how the approach procedure is structured.

1. Initial Approach: The segment between the initial approach fix and the intermediate fix or the point where the aircraft is established on the intermediate course or final approach course.
2. Intermediate Approach: The segment between the intermediate fix or point and the final approach fix.
3. Final Approach: The segment between the final approach fix or point and the runway, airport, or missed approach point.
4. Missed Approach: The segment between the missed approach point, or point of arrival at decision height, and the missed approach fix at the prescribed altitude.

Special VFR Operations: Aircraft operating in accordance with clearances within certain control zones in weather conditions less than the basic VFR weather minima.

Standard Instrument Departure (SID): A preplanned coded air traffic control IFR departure routing, preprinted for pilot use in graphic and textual or textual form only.

Standard Terminal Arrival Route (STAR): A preplanned coded air traffic control IFR arrival routing, preprinted for pilot use in graphic and textual or textual form only.

Straight-In Approach (IFR): An instrument approach wherein final approach is commenced without first having executed a procedure turn. (Not necessarily completed with a straight-in landing.)

Straight-In Approach (VFR): Entry into the traffic pattern by interception of the extended runway centerline without executing any other portion of the traffic pattern.

Tactical Air Navigation (TACAN): A radio transponder facility in the en route electronic navigation system, transmitting a pulse train UHF modulated radio wave, used by compatible airborne receiver/interrogator equipment to derive bearing relative to the facility in terms of reference pulse/modulation coincidence and distance in terms of time delay between interrogation and receipt of reply.

Terminal Instrument Procedures: Procedures for instrument approach and departure of aircraft to and from civil and military airports.

Terminal Radar Approach Control (TRACON or TRACO): A terminal air traffic control facility collocated with an ATCT. It uses radar data acquisition and air/ground communication equipment to provide approach and departure traffic control services under IFR conditions.

Terminal Radar Approach Control in Tower Cab (TRACAB or TRCAB):
(See Terminal Radar Approach Control.)

Tower En Route Control Service: Departure, en route, and arrival control service provided to IFR aircraft by one or more approach control facilities.

Transponder: A receiver-transmitter combination designed to receive a signal and automatically transmit a reply signal, usually on a different frequency. A transponder may be airborne (as in the Air Traffic Control Radar Beacon System) or ground based (as in the TACAN System).

Vector: A heading issued to an aircraft by a controller to provide navigational guidance by radar.

Vertical Separation: In air traffic control, separation established by assignment of different altitudes or flight levels.

VFR Airport: An airport without an authorized or planned instrument approach procedure.

VFR Tower: An airport traffic control tower that does not provide approach control service.

VHF Omnidirectional Range (VOR): A radio transmitter facility in the navigation system radiating a VHF radio wave modulated by two signals, the relative phases of which are compared, resolved, and displayed by a compatible airborne receiver to give the pilot a direct indication of bearing relative to the facility.

Visual Approach: An approach wherein an aircraft on an IFR flight plan, operating in VFR conditions under the control of a radar facility and having an air traffic control authorization, may deviate from the prescribed instrument approach procedure and proceed to the airport of destination, served by an operational control tower, by visual reference to the surface.

Visual Flight Rules (VFR): Rules that govern the procedures for conducting flight under visual conditions.

Visual Runway: A runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan, a military-service-approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

VOR/DME: A VOR to which a specific kind of distance measuring device (DME) has been added. (See VORTAC.)

VORTAC: A navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment (DME) at one site. (See VOR, Distance Measuring Equipment, TACAN, Navigational Aid.)