

KURDISTAN REGIONAL GOVERNMENT



SULAYMANIYAH INTERNATIONAL AIRPORT

MATS

CHAPTER 1

Definitions

(First Edition)

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CHAPTER 1**DEFINITIONS**

Accepting Unit / Controller. Air traffic control / air traffic controller next to take control of an aircraft.

Note. See definition "transferring unit/controller.

Acrobatic Flight. Manoeuvres intentionally performed by an aircraft involving an abrupt change in its attitude, an abnormal attitude, or an abnormal variation in speed.

Accuracy. A degree of conformance between the estimated or measured value and the true value.

Note. For measured positional data the accuracy is normally expressed in terms of a distance from a stated position within which there is a defined confidence of the true position falling.

ADS. Automatic Dependent Surveillance.

ADS Service. A service using aircraft information provided by means of Automatic Dependent Surveillance.

Advisory Airspace . An airspace of defined dimensions, or designated route, within which air traffic advisory service is available.

Advisory Route. A designated route along which air traffic advisory service is available.

Note. Air traffic control service provides a much more complete service than air traffic advisory service, advisory areas and routes are therefore not established within controlled airspace but air traffic advisory service may be provided below and above control areas.

Aerodrome . A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aerodrome Control Service. Air traffic control service for aerodrome traffic.

Aerodrome Control Tower. A unit established to provide air traffic control service to aerodrome traffic.

Aerodrome Elevation. The elevation of the highest point of the landing area.

Aerodrome Taxi Circuit. The specified path of aircraft on the manoeuvring area during specified wind conditions.

Aerodrome Traffic. All traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome.

Note. An aircraft is in the vicinity of an aerodrome when it is in , entering or leaving an aerodrome traffic circuit.

Aerodrome Traffic Circuit. The specified path to be flown by aircraft operating in the vicinity of an aerodrome.

Aerodrome Traffic Zone. An airspace of defined dimensions established around an aerodrome for the protection of aerodrome traffic.

Aeronautical Fixed Service (AFS). A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.

Aeronautical Fixed Station. A station in the aeronautical fixed service.

Aeronautical Ground Light. Any light specially provided as an aid to air navigation , other than a light displayed on an aircraft.

Aeronautical Information Publication (AIP). A publication issued by or with the authority of a state and containing aeronautical information of a lasting character essential to air navigation.

Aeronautical Mobile Service. A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate, emergency position-indicating radiobeacon stations may also participate in this service on designated distress and emergency frequencies.

Aeronautical Telecommunication Service. A telecommunication service provided for any aeronautical purpose.

Aeronautical Station. A land station in the aeronautical mobile service. In certain instances, an aeronautical station may be located, for example, on board ship or on a platform at sea.

Aeroplane. A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reaction on surfaces which remain fixed under given conditions of flight.

Airborne Collision Avoidance System (ACAS). An aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponder.

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reaction of the air against the earth's surface.

Aircraft Address. A unique combination of 24 bits available for assignment to an aircraft for the purpose of air-ground communications, navigation and surveillance.

Aircraft Identification. A group of letters, figures or a combination thereof which is either identical to, or the coded equivalent of, the aircraft call sign to be used in air-ground communications, and which is used to identify the aircraft in ground-ground air traffic services communications.

Aircraft Observation. The evaluation of one or more meteorological elements made from an aircraft in flight.

Aircraft Proximity. A situation in which, in the opinion of a pilot or air traffic services personnel, the distance between aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved may have been compromised. An aircraft proximity is classified as follows:

Risk Of Collision. The risk classification of an aircraft proximity in which serious risk of collision has existed.

Safety Not Assured. The risk classification of an aircraft proximity in which the safety of the aircraft may have been compromised.

No Risk Of Collision. The risk classification of an aircraft proximity in which no risk of collision has existed.

Risk Not determined. The risk classification of an aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.

Air-Filed flight plan (AFIL). A flight plan provided to an air traffic services unit by an aircraft during its flight.

Air – Ground Communication. Two way communication between aircraft and stations or locations on the surface of the earth.

Air – Ground Control Radio Station. An aeronautical telecommunication station having primary responsibility for handling communications pertaining to the operation and control of aircraft in a given area.

AIRMET Information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of special en – route weather phenomena which may affect the safety of low - level aircraft operations and which was not already included in the forecast issued for low – level flights in the flight information region concerned or sub – area thereof.

AIRPROX. The code word used in an air traffic incident report designate aircraft proximity.

Air – Report. A report from an aircraft in flight prepared in conformity with requirements for position, and operational and/or meteorological reporting.

Air – Taxiing. Movement of a helicopter / VTOL above the surface of an aerodrome, normally in ground effect and at a ground speed normally less than 37 km/h (20 kt).

Note 1. VTOL stands for VERTICAL TAKE-OFF AND LANDING.

Note 2. The actual height may vary, and some helicopters may require air-taxiing above 8 m (25 Ft) Above Ground Level (AGL) to reduce ground effect turbulence or provide clearance from cargo slingloads.

Air – To – Ground Communication. One way communication from aircraft to stations or locations on the surface of the earth.

Air Traffic. All aircraft in flight or operating on the manoeuvring area of an aerodrome.

Air Traffic Advisory Service. A service provided within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans.

Air Traffic Control Clearance. Authorization for an aircraft to proceed under conditions specified by air traffic control unit.

Note 1. For convenience, the term “ air traffic control clearance ” is frequently abbreviated to “ Clearance ” when used in appropriate contexts.

Note 2. The abbreviated term “ Clearance ” may be prefixed by the word “ Taxi ” , “ Take-Off ” , “ Departure ” , “ En-route ” “ Approach ” or “ Landing ” to indicate the particular portion of flight to which the air traffic control clearance relates.

Air Traffic Control Instruction. Directives issued by air traffic control for the purpose of requiring a pilot to take a specified action.

Air Traffic Control Service. A service provided for the purpose of :

- a. preventing collision:
 - 1. between aircraft, and
 - 2. on the manoeuvring area between aircraft and obstructions, and
- b. expediting and maintaining an orderly flow of air traffic.

Air Traffic Control Unit. A generic term meaning variously, area control center, approach control unit or aerodrome control tower.

Air Traffic Flow Management (ATFM). A service established with the objective of contribution to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible, and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

Air Traffic Management (ATM). The aggregation of airborne functions and ground – based functions (air traffic services, air space management and air traffic flow management) required to ensure the safe and efficient movement of aircraft during all phases of operations.

Air Traffic Service (ATS). A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service(area control service, approach control service or aerodrome control service).

Air Traffic Services Airspaces. Airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified.

Note. ATS airspaces are classified as class A to G as shown in chapter 5 of this manual.

Air Traffic Services Reporting Office. A unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure.

Note- An air traffic services reporting office may be established as a separate unit or combine with an existing unit, such as another air traffic unit, or a unit of the aeronautical information service.

Air Traffic Services Unit. A generic term meaning variously, air traffic control unit, flight information center or air traffic services reporting office.

Airway. A control area or portion thereof established in the form of corridor.

ALERFA. The code word used to designate an alert phase.

Alerting Service. A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.

Alert phase. A situation wherein apprehension exists as to the safety of an aircraft and its occupants.

Allocation, allocate. Distribution of frequencies, SSR Codes, etc. to a State, unit or service. Distribution of 24-bit aircraft addresses to a State or common mark registering authority.

Alternate Aerodrome. An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing. Alternate aerodromes include the following: -

Take-off Alternate. An alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure.

En-route Alternate. An aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route.

Destination Alternate. An alternate aerodrome to which an aircraft may proceed should it become either impossible or inadvisable to land at the aerodrome of intended landing.

Note. The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.

Altitude. The vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL).

Approach control service. Air traffic control service for arriving or departing controlled flights.

Approach control unit. A unit established to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes.

Approach funnel. A specified airspace around a nominal approach path within which an aircraft approaching to land is considered to be making a normal approach.

Approach sequence. The order in which two or more aircraft are cleared to approach to land at aerodrome.

Appropriate ATS authority. The relevant authority designated by the state responsible for providing air traffic service in the airspace concerned.

Appropriate authority.

- a. **Regarding Flight Over The High Seas:** The relevant authority of the state of registry.
- b. **Regarding Flight Other Than Over The High Seas:** The relevant authority of the state having sovereignty over the territory being overflown.

Apron. A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.

Apron Management Service. A service provided to regulate the activities and movement of aircraft and vehicles on an apron.

Area Control Center (ACC). A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.

Area Control Service. Air traffic control service for controlled flights in controlled areas.

Area Navigation (RNAV). A method of navigation which permits aircraft operation on any desired flight path within the coverage of station-referenced navigation aids or within the limits of the capability of self-contained aids, or a combination of these.

Area Navigation Route. An ATS route established for the use of aircraft capable of employing area navigation.

Assignment, Assign. Distribution of frequencies to stations. Distribution of SSR codes or 24-bit aircraft addresses to aircraft.

ATIS. The symbol used to designate automatic terminal information service.

ATS Route. A specified route designed for channelling the flow of traffic as necessary for the provision of air traffic service.

Note 1. The term "ATS route" is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.

Note 2. An ATS route is defined by route specification which include an ATS route designator, the track to or from significant points (waypoints), distance between significant points, reporting requirements and, as determined by the appropriate ATS authority, the lowest safe altitude.

Automatic Dependent Surveillance (ADS). A surveillance technique in which aircraft automatically provide, via a data link, data derived from on-board navigation and position-fixing systems, including aircraft identification, four-dimensional position and additional data as appropriate.

Automatic Terminal Information Service (ATIS). The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof.

Data Link-Automatic-Terminal Information service (D-ATIS). The Provision of ATIS via data link.

Voice-Automatic Terminal Information Service (Voice ATIS). The Provision of ATIS by means of continuous and Repetitive voice broadcasts.

Base Turn. A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. The tracks are not reciprocal. (See ICAO Doc 8168 Figure III-3-2 C).

Note. Base turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.

Blind Transmission. A transmission from one station to another station in circumstances where two-way communication cannot be established but where it is believed that the called station is able to receive the transmission.

Broadcast. A transmission of information relating to air navigation that is not addressed to a specific station or stations.

Ceiling. The height above the ground or water of the base of lowest layer of cloud below 6 000 m (20 000 ft) covering more than half the sky.

Change Over Point. The point at which an aircraft navigating on an ATS route segment defined by reference to VOR is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft.

Circling Approach. An extension of an instrument approach procedure which provides for visual circling of the aerodrome prior to landing.

Clearance Limit. The point to which an aircraft is granted an air traffic control clearance.

Clearance Void Time. A time specified by an air traffic control unit at which a clearance ceases to be valid unless the aircraft concerned has already taken action to comply therewith.

Code (SSR). The number assigned to a particular multiple pulse reply signal transmitted by a transponder in Mode “ A ” or Mode “ C ”.

Contact Point. A specified position, time or level at which an aircraft is required to establish radiocommunication with an air traffic control unit.

Control Area. A controlled airspace extended upwards from a specified limit above the earth.

Controlled Aerodrome. An aerodrome at which air traffic control service is provided to aerodrome traffic.

Note. The term "Controlled Aerodrome" indicates that air traffic control service is provided to aerodrome traffic but does not necessarily imply that a control zone exists.

Controlled Airspace. An airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.

Note. Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E as described in chapter 5 of this manual.

Controlled Flight. Any flight which is subject to an air traffic control clearance.

Controller-Pilot Data Link Communications (CPDLC). A means of communication between controller and pilot, using data link ATC communications.

Controlled VFR Flight. A controlled flight conducted in accordance with Visual Flight Rules.

Control Zone. A controlled airspace extending upwards from the surface of the earth to a specified upper limit.

Crossing Tracks. Intersecting tracks or portion thereof other than those specified for Reciprocal tracks and Same track.(See ICAO Doc 4444 Figure 5-7).

Cruise Climb. An aeroplane cruising technique resulting in a net increase in altitude as the aeroplane mass decreases.

Cruising Level. A level maintained during a significant portion of a flight.

Current Flight Plan (CPL). The flight plan, including changes, if any, brought about by subsequent clearances.

Note. When the word "message" is used as a suffix to this term, it denotes the content and format of the current flight plan data sent from one unit to another.

Danger Area. An airspace of defined dimensions, within which activities dangerous to the flight of aircraft may exist at specified times. e. g area where parachute dropping, or bombing and gunnery ranges operate.

Data Link - Automatic Terminal Information Service (D - ATIS). The provision of ATIS via data link.

Data Link Communications. A form of communication intended for the exchange of messages via a data link.

Dead Reckoning (DR) navigation. The estimating or determining of position by advancing an earlier known position by the application of direction, time and speed data.

Decision Altitude (DA). Or Decision Height (DH). A specified altitude or height in the precision approach or approach with vertical guidance at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

Note 1. Decision altitude (DA) is referenced to mean sea level and decision height (DH) is referenced to the threshold elevation.

Note 2. The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In Category III operations with a decision height the required visual reference is that specified for the particular procedure and operation.

Note 3. For convenience where both expressions are used they may be written in the form "Decision Altitude/Height" and abbreviated "DA/H).

Declared Capacity. A measure of the ability of the ATC system or any of its subsystems or operating positions to provide service to aircraft during normal activities. It is expressed as the number of aircraft entering a specified portion of airspace in a given period of time, taking due account of weather, ATC unit configuration, staff and equipment available, and any other factors that may affect the workload of the controller responsible for the airspace.

Dependent parallel approaches. Simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway center lines are prescribed.

DME Distance. The line of sight distance (slant range) from the source of a DME signal to the receiving antenna.

DETRESFA. The code word used to designate a distress phase.

Discrete Code. A four-digit SSR Code with the last two digits not being “ 00 ”.

Distress Phase. A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.

Elevation. The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level (MSL).

Emergency Phase. A generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.

Estimated Elapsed Time. The estimated time required to proceed from one significant point to another.

Estimated Off-Block Time. The estimated time at which the aircraft will commence movement associated with departure.

Estimated Time of Arrival. For IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome. For VFR flights, the time at which it is estimated that the aircraft will arrive over the aerodrome.

Expected Approach Time. The time at which ATC expects that an arriving aircraft, following a delay, will leave the holding point to complete its approach for a landing.

Note. The actual time of leaving the holding point will depend upon the approach clearance.

Filed Flight Plan (FPL). The flight plan as filed with an ATIS unit by the pilot or a designated representative, without any subsequent changes.

Final Approach. That part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified,

- a. at the end of the last procedure turn, base turn or inbound turn of a race track procedure, if specified; or
- b. at the point of interception of the last track specified in the approach procedure; and ends at a point in the vicinity of an aerodrome from which :
 1. a landing can be made; or
 2. a missed approach procedure is initiated.

Final Approach And Take-Off Area (FATO). A defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by performance Class 1 helicopters, the defined area includes the projected take-off area available.

Final Approach Segment. That segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

Flight Crew Member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Flight Information Centre (FIC). A unit established to provide flight information service and alerting service.

Flight Information region (FIR). An airspace of defined dimensions within which flight information service and alerting service are provided.

Flight Information Service (FIS). A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

Flight Level (FL). A surface of constant atmospheric pressure which is related to a specific pressure datum, 1013.2 hectopascals (hPa), and is separated from other such surfaces by special pressure intervals.

Note 1. A pressure type altimeter calibrated in accordance with the Standard Atmosphere :

- a. When set to QNH altimeter setting, will indicate ALTITUDE.
- b. When set to QFE altimeter setting, will indicate HEIGHT above the QFE reference datum.
- c. When set to a pressure of 1013.2 hPa, may be used to indicate FLIGHT LEVEL.

Note 2. The terms "Height" and "Altitude", used in Note (1) above indicate altimeter rather than geometric heights and altitudes.

Flight Plan . Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

Note. Specifications for flight plans are contained in Chapter 4 of this manual.

Flight Progress Board. A board designed and used for the tabular display of flight data.

Flight Progress Strip. Strip used for display of flight data on a flight progress board.

Flight Status. An indication of whether a given aircraft requires special handling by air traffic services units or not.

Flight Visibility. The visibility forward from the cockpit of an aircraft in flight.

Flow Control. Measures designed to adjust the flow of traffic into a given airspace, along a given route, or bound for a given aerodrome, so as to ensure the most effective utilization of the airspace.

Forecast. A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.

Geodetic Datum. A minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system/frame.

Glide Path. A descent profile determined for vertical guidance during a final approach.

Ground Speed. The speed of an aircraft relative to the surface of the earth.

Ground - To - Air Communication. One – way communication from stations or locations on the surface of the earth to aircraft.

Ground Visibility. The visibility at an aerodrome, as reported by an accredited observer.

Heading. The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from north (True, Magnetic, Compass or Grid)

Height. The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.

Holding Fix. A geographical location that serves as a reference for a holding procedure.

Holding Point. A specified location, identified by visual or other means, in the Vicinity of which the position of an aircraft in flight is maintained in accordance with air traffic control clearances.

Holding Procedure. A predetermined manoeuvre which keeps an aircraft within a specified airspace while waiting further clearance.

Human Factors Principles. Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

Human Performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

IFR. The symbol used to designate Instrument Flight Rules.

IFR Flight. A flight conducted in accordance with the instrument flight rules.

IMC . The symbol used to designate instrument meteorological conditions.

INCERFA. The code word used to designate an uncertainty phase.

Incident. An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Independent Parallel Approaches. Simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway center lines are not prescribed.

Independent Parallel Departures. Simultaneous departures from parallel or near-parallel instrument runways.

Indicated Air Speed. The uncorrected reading on the airspeed indicator.

Initial Approach Segment. That segment of an instrument approach procedure between the initial approach fix and the intermediate approach fix or, where applicable, the final approach fix or point.

Instrument Approach procedure. A series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply.

Instrument Meteorological Conditions (IMC). Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for Visual Meteorological Conditions (VMC).

Note 1 . The specified minima for visual meteorological conditions are contained in Chapter 7 of this manual.

Note 2 . In a control zone, a VFR flight may proceed under instrument meteorological conditions if and as authorized by air traffic control.

Intermediate Approach Segment. That segment of an instrument approach procedure between either the intermediate approach fix and the final approach fix or point, or between the end of a reversal, racetrack or dead reckoning track procedure and the final approach fix or point, as appropriate.

International NOTAM Office. An office designated by a state for the exchange of NOTAM internationally.

Landing Area. That part of a movement area intended for the landing or take-off of aircraft.

Level. A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.

Location Indicator. A four-letter code group formulated in accordance with rules prescribed by ICAO and assigned to the location of an aeronautical fixed station.

Lowest Usable Flight Level. Is that flight level which corresponds to, or immediately above, the established minimum flight altitude.

Note. If the minimum flight altitude has not been established by the state, then that minimum shall be :

- a. over high terrain or in mountainous areas, at a level which is at least 600 m (2000ft) above the highest obstacle located within 8 km of the estimated position of the aircraft ;
- b. elsewhere than as specified in (a), at a level which is at least 300 m (1000 ft) above the highest obstacle located within 8 km of the estimated position of the aircraft.

Manoeuvring Area. That part of an aerodrome to be used for take-off, landing and taxiing of aircraft, excluding aprons.

Meteorological Information. Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.

Meteorological Office. An office designated to provide meteorological service for international air navigation.

Meteorological Report. A statement of observed meteorological related to a specified time and location.

Minimum Descent Altitude/Height MDA/H. A specified altitude or height in non-precision approach or circling approach below which descent must not be made without the required visual reference.

Note 1. Minimum descent altitude (MDA) is referenced to mean sea level and minimum descent height (MDH) is referenced to aerodrome elevation or to the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. A minimum descent height for a circling approach is referenced to the aerodrome elevation.

Note 2 . The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In the case of circling approach the required visual reference is the runway environment.

Note 3 . For convenience when both expressions are used they may be written in the form " Minimum Descent Altitude/Height " and abbreviated " MDA/H ".

Minimum Fuel. The term used to describe a situation in which an aircraft's fuel supply has reached a state where little or no delay can be accepted.

Note. This is not an emergency situation but merely indicates that an emergency situation is possible, should any undue delay occur.

Minimum Safe Level. The lowest level for instrument flight in a sector of an Airway or Advisory Route (ADR) as determined by the appropriate authority. If this level has not been prescribed, then the level shall be determined as at least 1000 ft above the highest obstacle located within 5 NM of the estimated position of the aircraft.

Minimum Sector Altitude. The lowest altitude which may be used which will provide a minimum clearance of 300 m (1000 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 NM) radius centered on a radio aid to navigation.

Missed Approach Point (MAPt). That point in an instrument approach procedure at or before which the prescribed missed approach procedure must be initiated in order to ensure that the minimum obstacle clearance is not infringed.

Missed Approach Procedure. The procedure to be followed if the approach cannot be continued.

Mode (SSR). The conventional identifier related to specific functions of the interrogation signals transmitted by an SSR interrogator. There are four modes specified in Annex 10: A, C, S and intermode.

Movement Area. That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and aprons.

Nautical Mile (NM). The length equal to 1852 meters exactly.

Near-Parallel Runways. Non-intersecting runways whose extended center lines have an angle of convergence/divergence of 15 degrees or less.

Night. In IRAQ: Night is the period between 15 minutes after sunset to 15 minutes before sunrise.

Non-Radar Separation. The separation used when aircraft position information is derived from sources other than radar.

Normal Operating Zone (NOZ). Airspace of defined dimensions extending to either side of an ILS localizer course and/or MLS final approach track. Only the inner half of the normal operating zone is taken into account in independent parallel approaches.

NOTAM. A notice distributed by means of telecommunication 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.

Class I NOTAM distribution. Distribution by means of telecommunication.

Class II NOTAM distribution. Distribution by means other than telecommunication.

Obstacle Assessment Surface (OAS). A defined surface intended for the purpose of determining those obstacles to be considered in the calculation of obstacle clearance Altitude/Height for a specific ILS facility and and procedure.

Obstacle Clearance Altitude (OCA) or Obstacle Clearance Height (OCH). The lowest altitude or the lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable, used in establishing compliance with appropriate obstacle clearance criteria.

Note 1. Obstacle clearance altitude is referenced to mean sea level and obstacle clearance height is referenced to the threshold elevation or in the case of non-precision approaches to the aerodrome elevation or the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. An obstacle clearance height for a circling approach is referenced to the aerodrome elevation.

Note 2. For convenience when both expressions are used they may be written in the form "Obstacle Clearance Altitude/Height" and abbreviated "OCA/H".

Operational Control. The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.

Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Pilot-In-Command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Precision Approach Procedure. An instrument approach procedure utilizing azimuth and glide path information provided by ILS or PAR.

Precision Approach Radar (PAR). Primary Radar equipment used to determine the position of an aircraft during final approach, in terms of lateral and vertical deviations relative to a nominal approach path, and in range relative to touchdown.

Note. Precision approach radars are designated to enable pilots of aircraft to be given guidance by radiocommunication during the final stages of the approach to land.

Pressure-Altitude. An atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.

Primary Radar. A radar system which uses reflected radio signals.

Primary Surveillance Radar (PSR). A surveillance radar system which uses reflected radio signals.

Procedural Control. A system of air traffic control based on reports of position, levels and speeds made by the aircraft concerned.

Procedure Turn. A manoeuvre in which a turn is made away from a designated track followed by a turn in the opposite direction to permit the aircraft to intercept and proceed along the reciprocal of the designated track. (see ICAO Doc 8168 Figure III-3-2 A & B).

Note 1. Procedure turns are designated "Left" or "Right" according to the direction of the initial turn.

Note 2. Procedure turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.

Profile. The orthogonal projection of a flight path or portion thereof on the vertical surface containing the nominal track.

PSR Blip. The visual indication, in non-symbolic form, on a radar display of the position of an aircraft obtained by primary radar.

Prohibited Area. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.

Racetrack Procedure. A procedure designed to enable the aircraft to reduce altitude during the initial approach segment and/or establish the aircraft inbound when the entry into a reversal procedure is not practical (See ICAO Doc 8168 figure III-3-2 D).

Radar. A radio detection device which provides information on range, azimuth and/or elevation of objects.

Radar Approach. An approach in which the final approach phase is executed under direction of a radar controller.

Radar Clutter. The visual indication on a radar display of unwanted signals.

Radar Contact. The situation which exists when the radar position of a particular aircraft is seen and identified on a radar display.

Radar Control. Term used to indicate that radar – derived information is employed directly in the provision of air traffic control service.

Radar Controller. A qualified air traffic controller holding a radar rating appropriate to the functions to which he is assigned.

Radar Display. An electronic display of radar-derived information depicting the position and movement of aircraft.

Radar Identification. The situation which exists when the radar position of a particular aircraft is seen on a radar display and positively identified by the air traffic controller.

Radar Map. Information superimposed on a radar display to provide ready indication of selected features.

Radar Monitoring. The use of radar for the purpose of providing aircraft with information and advice relative to significant deviations from nominal flight path, including deviations from the terms of their air traffic control clearances.

Radar Position Identification (RPI). The visual indication, in non-symbolic and/or symbolic form, on a radar display of the position of an aircraft obtained by primary and/or secondary surveillance radar.

Radar Position Symbol (RPS). The visual indication, in symbolic form, on a radar display, of the position of an aircraft obtained after automatic processing of positional data derived from primary and/or secondary surveillance radar.

Radar Separation. The separation used when aircraft position information is derived from radar sources.

Radar Service. Term used to indicate a service provided directly by means of radar.

Radar Track Position. An extrapolation of aircraft position by the computer based upon radar information and used by the computer for tracking purposes.

Note. In some cases, information other than radar - derived information is used to assist the tracking processes.

Radar Unit. That element of an air traffic services unit which uses radar equipment to provide one or more services.

Radar Vectoring. Provision of navigational guidance to aircraft in the form of specific headings, based on the use of radar.

Radial. A magnetic bearing extending from a VOR / VORTAC / TACAN.

Radiotelephony. A form of radio communication primarily intended for the exchange of information in the form of speech.

Receiving Unit/Controller. Air traffic services unit/air traffic services controller to which a message is sent.

Reciprocal Tracks. Opposite tracks and intersecting tracks or portion thereof, the angular difference of which is more than 135 degrees but less than 225 degrees, and whose protected airspaces overlap. (see ICAO Doc.4444 figure 5-6).

Release Point. The position, time or level at which an aircraft comes under the jurisdiction of another Air Traffic Control Unit.

Repetitive Flight Plan (RPL). A flight plan related to a series of frequently recurring, regularly operated individual flights with identical basic features, submitted by an operator for retention and repetitive use by ATS units.

Reporting Point. A specified geographical location in relation to which the position of an aircraft can be reported.

Required Navigation Performance (RNP). A statement of the navigation performance necessary for operation within a defined airspace.

Note. Navigation performance and requirements are defined for a particular RNP type and/or applications.

Rescue Coordination Center. A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.

Rescue Unit. A unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue.

Restricted Area. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions.

Reversal Procedure. A procedure designed to enable aircraft to reverse direction during the initial approach segment of an instrument approach procedure. The sequence may include procedure turns or base turns. (See ICAO Doc 8168 Figure III-3-2 A , B & C).

RNP Type. A containment value expressed as a distance in nautical miles from the intended position within which flights would be for at least 95 per cent of the total flying time.

Example. RNP 4 represents a navigation accuracy of plus or minus 7.4 km (4 NM) on a 95 per cent containment basis.

Runway. A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

Runway - Holding Position. A designated position intended to protect a runway, an obstacle limitation service, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower.

Runway Visual Range (RVR). The range over which the pilot of an aircraft on the center line of a runway can see the runway surface markings or the lights delineating the runway or identifying its center line.

Same Track. Same direction tracks and intersecting tracks or portions thereof, the angular difference of which is less than 45 degrees or more than 315 degrees, and whose protected airspace overlap. (See ICAO Doc 4444 Figure 5-5).

Secondary Radar. A radar system wherein a radio signal transmitted from the radar station initiates the transmission of a radio signal from another station.

Secondary Surveillance Radar (SSR). A surveillance radar system which uses transmitters/receivers (interrogator) and transponder.

Segregated Parallel Operations. Simultaneous operations on parallel or near – parallel instrument runways in which one runway is used exclusively for approaches and the other runway is used exclusively for departure.

Sending Unit/Controller. Air traffic services unit/air traffic controller transmitting a message.

Note. See definition of "receiving unit/controller".

SIGMET Information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route phenomena which may affect the safety of aircraft operations.

Signal Area. An area on an aerodrome used for the display of ground signals.

Significant Point. A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.

Special VFR Flight. A VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.

SSR Response. The visual indication, in non-symbolic form, on a radar display, of a response from an SSR transponder in reply to an interrogation.

Standard Altimeter setting. A pressure setting of 1013.2 hPa (29.92 Inches) which, when set on the subscale of the sensitive altimeter, will cause the altimeter to read Zero when at Mean Sea Level in the ICAO standard atmosphere.

Standard Instrument Arrival (STAR). A designated instrument flight rule (IFR) arrival route linking a significant point, normally on an ATS route with a point from which a published instrument approach procedure can be commenced.

Standard Instrument Departure (SID). A designated instrument flight rule (IFR) departure route linking the aerodrome or a specified runway of the aerodrome with a specified significant point, normally a designated ATS route, at which the en-route phase of flight commences.

Stopway. A defined rectangular area on the ground at the end of take-off run available prepared as suitable area in which an aircraft can be stopped in the case of an abandoned take-off.

Surveillance Radar. Radar equipment used to determine the position of an aircraft in range and azimuth.

Straight -In-Approach. An approach with the final approach track aligned Within 30 degrees of the extended center line of the runway of intending landing.

Taxiing. Movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing.

Taxiway. A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including :

- a. Aircraft Stand Taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.
- b. Apron Taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron.
- c. Rapid Exit Taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiway thereby minimizing runway occupancy times.

Terminal Control Area (TMA). A control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes.

Threshold. The beginning of that portion of the runway useable for landing.

Total Estimated Elapsed Time. For IFR flights, the estimated time required from take-off to arrival over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or , if navigation aid is associated with the destination aerodrome, to arrive over the destination aerodrome. For VFR flights, the estimated time required from take-off to arrival over the destination aerodrome.

Touchdown. The point where the nominal glide path intercepts the runway.

Note. "Touchdown" as defined above is only a datum and is not necessarily the actual point at which the aircraft will touch the runway.

Track. The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (True, Magnetic or Grid).

Traffic Avoidance Advice. Advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision.

Traffic Information. Information issued by an air traffic services unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision.

Transfer Of Control Point. A defined point located along the flight path of an aircraft, at which the responsibility for providing air traffic control service to the aircraft is transferred from one control unit or control position to the next.

Transferring Unit/Controller. Air traffic control unit/air traffic controller in the process of transferring the responsibility for providing air traffic control service to an aircraft to the next air traffic control unit/air traffic controller along the route of flight.

Transition Altitude. The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.

Transition Layer. The airspace between the transition altitude and the transition Level.

Transition Level. The lowest flight level available for use above the transition altitude.

True Airspeed. The speed of the aeroplane relative to undisturbed air.

Uncertainty Phase. A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.

VFR. The symbol used to designate the visual flight rules.

VFR Flight. A flight conducted in accordance with the visual flight rules.

Visibility. Visibility for the aeronautical purposes is the greater of :

- a. the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background.
- b. the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.

Note. The two distances have different values in air of a given extinction coefficient, and the latter (b) varies with the background illumination. The former (a) is represented by the meteorological optical range (MOR).

Visual Approach. An approach by an IFR flight when either part or all of an instrument approach procedure is not completed and the approach is executed in visual reference to terrain.

Visual Manoeuvring (Circling) Area. The area in which obstacle clearance should be taken into consideration for aircraft carrying out a circling approach.

Visual Meteorological Conditions. Meteorological conditions expressed in term of, visibility, distance from cloud, and ceiling, equal to or better than specified minima.

Note. The specified minima contained in chapter 7 of this manual.

VMC. The symbol used to designate visual meteorological conditions.

Voice – Automatic Terminal Information Service (Voice - ATIS). The provision of ATIS by means of continuous and repetitive voice broadcasts.

Waypoint. A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation. Waypoints are identified as either :

Fly-By Waypoint. A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure, or

Flyover Waypoint. A waypoint at which a turn is initiated in order to join the next segment of a route or procedure.

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