



DEFINITIONS

ABEAM — The general position of an aircraft in relation to a fix, point or object that is approximately 90 degrees to the right or left of the aircraft's track.

ABORT — To terminate a planned aircraft manoeuvre.

ACCIDENT — Any aviation occurrence where, at any time during the period commencing when the first person boards an aircraft for the purpose of flight and ending when the last person disembarks from the aircraft after the flight:

A. a person, other than a stowaway, sustains a serious injury or fatal injury that is not self-inflicted or inflicted by another person or caused by natural causes, as a result of that person:

1. being in the aircraft;
2. coming into direct contact with any part of the aircraft, including any part that may have become detached from the aircraft; or
3. being directly exposed to the jet blast of the aircraft;

B. the aircraft sustains damage or structural failure adversely affecting the structural strength, performance or flight characteristics of the aircraft and normally requiring major repair or replacement of any affected component part, other than damage or failure that is limited to:

1. the engine, its cowlings, or its accessories;
2. the propellers, wing tips, antennas, tires, brakes or fairings; or
3. small dents or puncture holes in the aircraft skin; or

C. the aircraft is missing or is completely inaccessible.

ACTIVE RUNWAY — Any runway currently being used for take-off or landing. When multiple runways are being used, they are all considered active runways.

AERODROME — Any area of land, water (including the frozen surface thereof) or other supporting surface used, designed, prepared, equipped or set apart for use, either in whole or in part, for the arrival, departure, movement or servicing of aircraft. This includes any buildings, installations and equipment situated thereon or associated therewith.

AERONAUTICAL GROUND LIGHT — any light specially provided as an aid to air navigation, other than a light displayed on an aircraft.

AIR TAXI — Movement of a helicopter above the surface of an aerodrome, but normally not above 100 feet AGL. The aircraft may proceed via either hover taxi or flight at speeds more than 20 knots. The pilot is solely responsible for selecting a safe airspeed/altitude for the operation being conducted. (See HOVER TAXI).

AIR TRAFFIC — All aircraft in flight and aircraft operating on the manoeuvring area of an aerodrome.

AIR TRAFFIC CONTROL CLEARANCE — Authorization issued by an ATC unit for an aircraft to proceed within controlled airspace in accordance with the conditions specified by that unit.

AIR TRAFFIC CONTROL INSTRUCTION — A directive issued by an ATC unit for air traffic control purposes.

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AIR TRAFFIC CONTROL UNIT — As the circumstances require, this may be:

- A. an Area Control Centre, established to provide air traffic control service to IFR aircraft and CVFR aircraft;
- B. a Terminal Control Unit, established to provide air traffic control service to IFR and CVFR aircraft arriving at, or departing from, one or more airports; or
- C. an Airport Control Tower Unit, established to provide air traffic control service to airport traffic.

AIR TRAFFIC CONTROLLER — A person holding a valid licence to control air traffic.

AIR TRAFFIC SERVICES — The following services that are provided by ATC units:

A. IFR CONTROL SERVICES

1. **AREA CONTROL SERVICE** — The control service provided by ACCs to IFR and CVFR aircraft operating within specified control areas.

2. **TERMINAL CONTROL SERVICE** —

The control service provided by ACCs and TCUs to aircraft operating within specified control areas.

B. VFR CONTROL SERVICES

1. **AIRPORT CONTROL SERVICE** — The control service provided by Airport Control Towers to airport traffic.

2. **RADAR SERVICE** — The control service provided by ATC units to:

- a. VFR aircraft operating within Class B, C and D airspace; and
- b. aircraft in a Tower Radar Area.

C. INFORMATION SERVICES

1. **AIRCRAFT MOVEMENT INFORMATION SERVICE (AMIS)** — The service provided by ACCs for the collection, processing, and dissemination of aircraft movement information, for use by air defence units.

2. **ALERTING SERVICE** — The service provided by ATC units to notify appropriate organizations regarding aircraft in need of search and rescue aid, and to assist such organizations, as required. This service also includes the alerting of crash equipment, ambulances, doctors, and any other safety services.

3. **FLIGHT INFORMATION SERVICE** — The service provided by ATC units for the purpose of giving advice and information, useful for the safe and efficient movement of aircraft. This service includes:

- a. information on adverse weather conditions as reported, visually observed, or radar observed;
- b. information on the unserviceability of NAVAIDs and facilities;
- c. traffic information;
- d. radar assistance, on request, to all aircraft operating within radar coverage and desiring position information, navigational guidance, or both; and
- e. VHF/UHF direction-finding assistance to aircraft operating within the range of stations so equipped.

D. SUPPLEMENTARY SERVICES

1. **ALTITUDE RESERVATION SERVICE** — The service provided by ARE, ARW and ACCs to provide reserved altitudes for specified air operations in controlled airspace and to provide information concerning these reservations and military activity areas in controlled and uncontrolled airspace.

AIRBORNE COLLISION AVOIDANCE SYSTEM — 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 transponders.

AIRCRAFT MOVEMENT — A take-off, landing, or simulated approach by an aircraft.

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AIRCRAFT MOVEMENT SURFACE CONDITION REPORT — The report that details the surface conditions for all aircraft movement areas including runway, taxiways and aprons.

AIRCRAFT OCCURRENCE — Any deviation from the ICAO Regulations associated with the operation of an aircraft.

AIRFILE — A term used to indicate that a flight plan or flight itinerary information was filed by an aircraft in flight.

AIRMET — Short-term meteorological information intended primarily for aircraft in flight, to notify pilots of potentially hazardous weather conditions not described in the current area forecast and not requiring a SIGMET. The criteria for issuing an AIRMET are the unforeseen development, dissipation or non-occurrence of forecast

- A. IFR conditions (broken or overcast cloud condition at less than 1000 ft. AGL and/or visibility less than 3 SM);
- B. freezing precipitation (not requiring a SIGMET);
- C. moderate icing;
- D. moderate turbulence;
- E. thunderstorms (isolated as opposed to a line);
- F. an increase in the surface mean wind over a large area to 20 kt. or more, or an increase in gusts to 30 kt. or more, when no winds were originally forecast; or
- G. a difference between the forecast and observed wind direction greater than 60°.

AIRPORT — An aerodrome in respect of which an airport certificate is in force.

AIRPORT CONTROLLER — Duty controller assigned to the airport control position in an Airport Control Tower.

AIRPORT TRAFFIC — All traffic on the manoeuvring area of an airport and all aircraft flying in the vicinity of an airport.

ALTIMETER SETTING REGION — Designated areas within which aircraft shall use the altimeter setting of the nearest station along the route of flight.

ALTITUDE —

- A. The vertical distance of a level, a point or an object considered as a point, measured from mean sea level.
- B. Altitude indicated on an altimeter set to the current altimeter setting.

ALTITUDE READOUT — The Mode C-derived altitude information displayed in a digital target tag, a Hold List or a Suspend List.

ALTITUDE READOUT VALUE — The altitude figures currently displayed in an altitude readout.

ALTITUDE RESERVATION — An airspace of defined dimensions within controlled airspace, reserved for the use of a civil or military agency during a specified period. An altitude reservation may be confined to a fixed area (stationary) or moving in relation to the aircraft that operate within it (moving).

ALTITUDE RESERVATION SPECIALIST — An employee in ARE or ARW assigned responsibility for processing requests for altitude reservations.

AMIS SECTION — A section established within an ACC to provide Aircraft Movement Information Service to air defence units.

APPROACH AREA — (see Final Approach Area).

APPROACH LIGHTS — Lights indicating a desired line of approach to a landing area.

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APRON — That part of an aerodrome, other than the manoeuvring area, intended to accommodate the loading and unloading of passengers and cargo, the refuelling, servicing, maintenance, and parking of aircraft, and any movement of aircraft, vehicles, and pedestrians necessary for such purposes.

ARC — The track over the ground, of an aircraft flying at a constant distance from a NAVAID, by reference to distance measuring equipment (DME).

AREA CONTROLLER — Duty controller assigned to a control position in an ACC.

AREA NAVIGATION — A method of navigation that permits aircraft operations on any desired track within the coverage of station-referenced navigation signals, or within the limits of a self-contained navigation system.

AREA OF RESPONSIBILITY — A geographical area within which alerting service is provided by a unit designated as the responsible unit.

ARRIVAL CONTROLLER — Duty controller assigned to an arrival control position.

AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS) — The provision of current, routine information to arriving and departing aircraft, by means of continuous and repetitive recorded broadcasts throughout the day or a specified portion of the day.

BACKTRACK — The taxiing of an aircraft on an active runway, in a direction opposite to the landing or take-off direction.

BASE LEG — A flight path extending from the end of the downwind leg to the extended centreline of the approach end of the landing runway (or landing path).

BEACON — An aeronautical light arranged, either through optical design or mechanical motion, to be visible to all azimuths, either continuously or consecutively, to designate a particular point on the surface of the earth.

CAUTIONARY (WAKE TURBULENCE) —

Information to an aircraft on one of the following:

- A. The possible location of wake turbulence.
- B. The location of a heavy or medium aircraft behind which it will pass or follow.

CAVOK — An abbreviation indicating the simultaneous occurrence of the following meteorological conditions:

- A. no cloud below 5,000 feet, or below the highest minimum sector altitude, whichever is higher, and no cumulonimbus;
- B. a visibility of 6 statute miles/10 kilometres or more; and
- C. no precipitation, thunderstorms, shallow fog, or low drifting snow.

CEILING — The lowest height at which a broken or overcast condition exists, or the vertical visibility when an obscured condition such as snow, smoke or fog exists, whichever is the lower.

CLEARANCE LIMIT — The point to which an aircraft is granted an ATC clearance.

CLEARED FOR THE OPTION —

For an arriving aircraft — ATC authorization for an aircraft to make a touch-and-go, low approach, missed approach, stop and go, or full stop landing at the discretion of the pilot.

For a departing aircraft — ATC authorization for an aircraft to make a simulated rejected take-off, reduced power take-off and a simulated engine out failure on departure procedure at the discretion of the pilot.

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CLOSED RNAV STAR — A STAR that terminates at the Final Approach Course Fix (FACF). Normally used when the inbound track is within plus or minus 90 degrees, of the final approach course, to the runway.

COASTING — A function that displays the predicted position of a target for a flight plan correlated radar tracks in the event of a missed or ambiguous radar return. (IVAC v1.x does not include this feature)

CODE (SSR Code) — The number assigned to a particular multiple-pulse reply signal transmitted by a transponder.

COMMON POINT —

A. A single fix, whether a ground based NAVAID, a fix derived from NAVAIDs, or geographical coordinates expressed in degrees of latitude and longitude, over which two or more aircraft will pass, or have passed before proceeding on the same track or diverging tracks.

B. For the purpose of longitudinal separation between aircraft using DME and/or GPS, a common point is defined as the same DME NAVAID, the same GPS reference position or a collocated DME NAVAID/GPS reference position.

COMPANY INSTRUMENT APPROACH PROCEDURE — An approach procedure, approved by local authority, for use by an operator, or number of operators, that is not published in the Aeronautical Information Publication.

COMPANY ROUTE — A route exclusive of an airway or air route, for the specific use of an operator or number of operators.

COMPULSORY REPORTING POINT — A reporting point over which an aircraft must report to ATC.

CONFLICT — Actual or predicted convergence of aircraft which violates one or more separation minima.

CONFLICT RESOLUTION — The resolution of potential conflicts between IFR/VFR and VFR/ VFR aircraft that are radar identified and in communication with ATC.

CONTACT APPROACH — An approach wherein an aircraft on an IFR flight plan, having an air traffic control authorization, operating clear of clouds with at least 1 mile or 1500 metres flight visibility and a reasonable expectation of continuing to the destination airport in those conditions, may deviate from the instrument approach procedure and proceed to the destination airport by visual reference to the surface of the earth.

CONTROLLED AIRPORT — An airport at which an airport control service is provided.

CONTROLLED AIRSPACE — An airspace of defined dimensions within which air traffic control service is provided.

CONTROLLED VFR FLIGHT — A flight conducted under the visual flight rules within Class B Airspace and in accordance with an air traffic control clearance.

CONTROLLER JURISDICTION SYMBOL (CJS) — One or two alphanumeric characters that identify a sector.

COORDINATING CONTROLLER — A duty controller assigned to coordinate flight data between two or more control positions.

CORRELATION — A function that matches a radar track with flight plan data on the basis of an aircraft's discrete SSR code or a manual input. (Show FlightPlan in IVAC v1.x)

CORRELATION LINE — A line, with reference to which aircraft movement information is required.

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CROSSWIND — For runway operations a crosswind is considered to exist whenever the surface wind exceeds an angle of 19 to 90 degrees to the runway in use, thus subtracting from the ground speed of an aircraft using that particular runway.

CROSSWIND COMPONENT — The wind speed measured in knots at angles from 20 to 90 degrees from the runway in use which would equal the effect of a wind applied at 090 degrees to the runway in use. Components are specified in a component table for a specified permissible crosswind.

CROSSING TRACK — A term used in the application of separation, indicating tracks that converge or diverge at an angle of 45 degrees to 135 degrees inclusive.

DEPARTURE CONTROLLER — Duty controller assigned to a departure control position.

DISCRETE EMERGENCY FREQUENCY — A frequency used by AFF at specified airports for direct ground communications with cockpit crews during an incident.

DISTANCE MEASURING EQUIPMENT (DME) — Equipment, airborne and ground, used to measure, in nautical miles, the slant range distance from a DME NAVAID.

DME FIX — A geographical position determined by reference to a NAVAID, which provides distance and azimuth information and is defined by a specified distance in nautical miles and a radial in degrees magnetic or true from the NAVAID.

DOWNWIND LEG — A flight path parallel to the landing runway (or landing path) in the direction opposite to landing.

DOWNWIND TERMINATION WAYPOINT (DTW) — The waypoint located downwind to the landing runway abeam the FAF where an open RNAV STAR terminates.

EMERGENCY COORDINATION CENTRE (ECC) — An agency, established at selected airports, to provide assistance to aircraft experiencing emergencies such as bomb threats or hijacking.

ESTABLISHED HOLDING AREA — A holding area which has been predetermined by the unit responsible for the airspace concerned.

ESTIMATE — The time, in UTC, at which an IFR aircraft is calculated, by either the controller or pilot, to arrive over a significant point.

ESTIMATED — The terminology used within Air Traffic Services when communicating an ATC estimate.

ESTIMATED TIME OF ARRIVAL — The time at which it is estimated that the aircraft will land, provided no delay is experienced. Calculation of the estimated time of arrival in the case of an IFR flight, to an aerodrome served by one or more navigation aids, is based on the average time required by the aircraft to complete an instrument approach procedure at the aerodrome.

ESTIMATING — The terminology used within Air Traffic Services when communicating a pilot estimate.

EXPANDED FRONTAL WIDTH — Either the lateral distance between the outermost aircraft in a moving altitude reservation, when such distance has been stated in an APREQ and has been approved, or the approved frontal width for a non-standard formation flight.

EXPECT APPROACH CLEARANCE TIME — The time at which it is expected that an aircraft will be cleared to commence approach for a landing.

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EXPECT FURTHER CLEARANCE TIME — The time at which it is expected that further clearance will be issued to an aircraft.

FACT FINDING BOARD — A team convened following an operating irregularity involving air traffic controllers, to investigate the occurrence.

FINAL APPROACH — The segment of an instrument approach between the final approach fix or point and the runway, airport or missed approach point, whichever is encountered last, wherein alignment and descent for landing are accomplished.

FINAL APPROACH COURSE — The microwave landing system (MLS), localizer, global positioning system (GPS) or area navigation (RNAV) course, LF/MF bearing or VHF/UHF radial that defines the final approach track specified in an instrument approach procedure (IAP) or, in the case of a radar approach, the extended runway centreline.

FINAL APPROACH COURSE FIX — A fix or waypoint aligned on the final approach course of an instrument procedure:

- A. prior to the point of glide path intercept on a precision approach;
- B. prior to the final approach fix on a nonprecision approach procedure that has a designated final approach fix;
- C. prior to any step-down fixes on a nonprecision approach with designated fixes but no final approach fix; and
- D. on a non-precision approach procedure with no final approach fix or step-down fixes at a point that would permit a normal landing approach.

FINAL APPROACH FIX — The fix of a nonprecision instrument approach procedure (IAP) where the final approach segment commences.

FINAL APPROACH LEG OR FINAL LEG — A flight path extending from the end of the base leg in the direction of landing, to and along the extended centreline of the runway (or landing path), to the threshold of the landing runway (or landing path).

FINAL APPROACH SEGMENT — That part of an instrument approach procedure (IAP) from the time that the aircraft:

- A. completes the last procedure turn or base turn, where one is specified;
- B. crosses the final approach fix (FAF), waypoint or point; or
- C. intercepts the last track specified for the procedure until it reaches the missed approach point (MAP). It is in this part of the procedure that alignment and descent for landing are accomplished.

FIX — A geographical location determined either by visual reference to the ground, or by means of radio aids or other navigational devices.

FIX TOLERANCE AREA — An area determined by considering the position indication errors applicable to a particular type of fix.

FLIGHT INFORMATION REGION (FIR) — An airspace of defined dimensions, extending upwards from the surface of the earth, within which flight information service and alerting service are provided.

FLIGHT LEVEL — An altitude expressed in hundreds of feet, indicated on an altimeter set to 29.92 inches of mercury or 1013.2 millibars.

FLIGHT LINE — The actual photographic run of a photo survey aircraft, where a series of overlapping photographic exposures are being taken and where the aircraft must necessarily move precisely along a predetermined track(s) and at a predetermined critical altitude.

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FLIGHT MANAGEMENT SYSTEM (FMS) - A computer system that uses a large database to allow routes to be programmed and fed into the system by means of a data loader. The system is constantly updated with respect to position and accuracy by reference to conventional navigational aids.

FLIGHT PLAN — Specified information submitted in accordance with the ICAO Regulations relative to the intended flight of an aircraft.

FLIGHT PLAN OFFICE — An office at which flight plans are to be filed. This may be an ATC unit, Flight Service Station, operations office, or other designated airport office.

FLIGHT VISIBILITY — The average range of visibility at any given time, forward from the cockpit of an aircraft in flight.

FLY-BY WAYPOINT - A waypoint that requires the use of turn anticipation to avoid overshoot of the next flight segment.

FLY-OVER WAYPOINT - A waypoint that precludes any turn until the waypoint is overflown by an intercept manoeuvre of the next flight segment.

FORMATION FLIGHT — More than one aircraft which, by prior arrangement between the pilots, normally operate as a single aircraft with regard to navigation and position reporting. Formation flights may be identified on individual IFR flight plans or may be contained within an ALTRV. As circumstances require, they may be:

A. Standard formation — One in which:

1. the formation leader will operate at the assigned altitude and the other formation aircraft will be within one hundred feet vertically of the altitude of the formation leader;
2. the formation will occupy a maximum frontal width of one NM; and
3. the formation will have a maximum longitudinal spacing of one NM between the first and the last aircraft.

B. Non-standard formation — An individual flight plan formation, whereby through prior arrangement with ATC, the flight leader has requested and ATC has approved other than standard formation dimensions.

FREE AREA — An area of defined dimensions, within which the flight of an aircraft, under certain conditions, does not normally require AMIS action.

FUEL REMAINING — A phrase used by both pilots and ATS when referring to the amount of fuel remaining on board until actual fuel exhaustion. When transmitting such information, either in response to an ATS query or a pilot initiated advisory, pilots will state the approximate number of minutes the flight can continue with the fuel remaining. All reserve fuel should be included in the time stated, as should an allowance for established fuel gauge system error.

FUNCTION — A single task performed by the system, either automatically or in response to a manual input.

GO AROUND — An instruction to abandon an approach or landing.

GROUND CONTROLLER — Duty controller assigned to the ground control position in an Airport Control Tower.

GROUND VISIBILITY — The visibility at an airport, as reported by an observer accredited by the local authorities for that purpose or the prevailing visibility as observed by an airport controller.

HAND-OFF — The process of transferring radar identification of an aircraft target and radio communications for that aircraft, to another controller, to enable uninterrupted provision of radar service.

HAZARDOUS SITUATION — An occurrence in which flight safety was jeopardized, or was not assured for a period of time.

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HEADING — The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass, or grid).

HEAVY AIRCRAFT — An aircraft certificated for a maximum take-off weight of 136,000 kilograms (300,000 pounds) or more.

HOLDING AREA — The airspace to be protected for holding aircraft, in accordance with the ATC Holding Criteria Document.

HOLDING FIX — A fix that is specified as a reference point in establishing and maintaining the position of a holding aircraft.

HOVER TAXI — Movement of a helicopter above the surface of an aerodrome and in ground effect at airspeeds less than approximately 20 knots. The actual height may vary, and some helicopters may require hover taxi above 25 feet AGL, to reduce ground effect turbulence or provide clearance for cargo slingloads. (See AIR TAXI).

IFR AIRCRAFT — An aircraft operating in accordance with the instrument flight rules.

IFR FLIGHT — A flight conducted in accordance with the instrument flight rules.

INITIAL APPROACH FIX (IAF) — A fix at which an aircraft leaves the en route phase of operations in order to commence the approach.

INITIAL APPROACH SEGMENT — That segment of an instrument approach between the initial approach fix or waypoint and the intermediate fix or waypoint, wherein the aircraft departs the en route phase of flight and manoeuvres to enter the intermediate segment.

INSTRUMENT APPROACH PROCEDURE — A series of predetermined manoeuvres for the orderly transfer of an aircraft under instrument flight conditions, from the beginning of the initial approach to a landing or to a point from which a landing may be made visually.

INSTRUMENT FLIGHT RULES (IFR) — Set of rules governing the conduct of flight under instrument meteorological conditions.

INSTRUMENT METEOROLOGICAL CONDITIONS — Meteorological conditions less than the minima specified for visual meteorological conditions (VMC), expressed in terms of visibility and distance from cloud.

INSTRUMENT RUNWAY — Runway intended for the operation of aircraft making a precision or non-precision instrument approach.

INTERMEDIATE APPROACH SEGMENT — That segment of an instrument approach between the intermediate fix or point and the final approach fix or point, wherein aircraft configuration, speed and positioning adjustments are made in preparation for the final approach.

INTERMEDIATE FIX (IF) — The fix at which the aircraft enters the intermediate approach segment of an instrument approach.

INTERROGATOR — A ground-based SSR transmitter.

INTERRUPTIBLE POWER SUPPLY — A power system, with an automatic feature, that is subjected to a short power outage (5-20 seconds) when a break occurs in the normal power supply.

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INTERSECTION — As the circumstances require, this may be:

- A. the point defined by a combination of courses, radials, arcs or bearings of two or more navigational aids; or
- B. the point where two runways, a runway and a taxiway, or two taxiways cross or meet.

ITINERANT AIRCRAFT — For the purpose of completing air traffic records, itinerant aircraft are considered as:

- A. aircraft proceeding to or arriving from another location; or
- B. aircraft that leave the circuit, but will be returning to land.

KNOWN AIRCRAFT — Aircraft of whose movements ATS has been informed.

LAHSO (Land and Hold Short Operations) — Operations which include simultaneous take-offs and landings and/or simultaneous landings when a landing aircraft is able and is instructed by the controller to hold-short of the intersecting runway/taxiway or designated hold-short point.

LANDING — In relation to an aircraft, means the act of coming into contact with a supporting surface and includes the immediately preceding and following acts and, in relation to an airship or free balloon, means the act of bringing the airship or balloon under restraint and includes the immediately preceding and following acts.

LATERAL — A secondary track, described in the DAH, established to facilitate the movement of aircraft from one primary track to another within a system of organized tracks.

LATERAL SEPARATION — Separation between aircraft at the same altitude expressed in terms of distance or angular displacement between tracks.

LIGHT AIRCRAFT — An aircraft certificated for a maximum take-off weight of 5,700 kilogram (12,500 pounds) or less.

LOCAL AIRCRAFT — For the purpose of completing air traffic records, local aircraft are considered as aircraft which remain in the circuit.

LONGITUDINAL SEPARATION — Separation between aircraft at the same altitude, expressed in units of time or distance along track.

LOSS OF SEPARATION — An occurrence in which less than the authorized minimum existed, or in which the minimum was not assured.

LOW APPROACH — An approach over an airport or runway following an instrument or VFR approach, including the go-around manoeuvre, where the pilot intentionally does not make contact with the runway.

MACH-NUMBER TECHNIQUE — The assignment by ATC of Mach-number values to aircraft that are in level flight, climbing or descending, in order to ensure that longitudinal separation is maintained.

MANOEUVRING AREA — That part of an aerodrome intended to be used for the take-off and landing of aircraft, and for the movement of aircraft associated with take-off and landing, excluding aprons.

MARKERS — Objects of a conventional shape, flags, or painted signs used to indicate specific areas and obstructions.

MARSA — A term used, whereby the military command/pilots involved, assume responsibility for separation of participating aircraft in a formation flight, or indicating that a military agency originating an ALTRV APREQ will assume responsibility for the separation of:

- A. all aircraft operating within the same ALTRV; or

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B. all aircraft operating within ALTRVs that are separated by less than the minima.

MEAN WIND — In OIDS, wind direction and speed as determined from a sample reading every second over the last two minutes. The display value is updated every 5 seconds.

MEDEVAC — A term used to request Air Traffic Service priority handling for a medical evacuation flight, based on a medical emergency in the transport of patients, organ donors, organs or other urgently needed lifesaving medical material. The term is to be used on flight plans and if a pilot determines that a priority is required in radiotelephony communications.

MEDIUM AIRCRAFT — An aircraft certificated for a maximum take-off weight of more than 5,700 kilograms (12,500 pounds), but less than 136,000 kilograms (300,000 pounds).

MINIMUM FUEL — An aircraft declaration that its fuel supply has reached a state where, upon reaching the destination, it can accept little or no delay. This is not an emergency situation but merely indicates an emergency situation is possible should any undue delay occur.

MINIMUM IFR ALTITUDE — The lowest IFR altitude established for use in a specific airspace. Depending on the airspace concerned, the minimum IFR altitude may be a

MOCA, MEA, AMA, minimum sector altitude, minimum vectoring altitude, safe altitude 100 nautical miles, transition altitude or missed approach altitude. The minimum IFR altitude provides obstruction clearance, but may or may not be within controlled airspace.

MINIMUM VECTORING ALTITUDE — The lowest altitude for vectoring aircraft by air traffic control that meets obstruction clearance and radio coverage requirements in the airspace specified.

MISSED APPROACH POINT (MAP) — That point on the final approach track which signifies the termination of the final approach and the commencement of the missed approach. It may be:

- A. the intersection of an electronic glide path with a Decision Height;
- B. a navigational facility located on the aerodrome;
- C. a suitable fix (eg. DME);
- D. specified distance past the NAVAID or final approach fix, not to exceed the distance from that NAVAID or fix to the nearest boundary of the aerodrome.

MISSED APPROACH PROCEDURE — The procedure to be followed if, after an instrument approach, a landing is not effected. This action may be either:

- A. PUBLISHED MISSED APPROACH PROCEDURES — Instructions published on the approach plate or approved company approach plate; or
- B. ALTERNATE MISSED APPROACH INSTRUCTIONS — ATC-originated instructions which take precedence over published missed approach procedures.

MISSED APPROACH SEGMENT — That part of an instrument approach procedure (IAP) between the missed approach point (MAP), the missed approach waypoint (MAWP), or the point of arrival at decision height (DH), and the specified missed approach NAVAID, intersection, fix or waypoint, as appropriate, at the minimum IFR altitude. It is in this part of the approach procedure that the aircraft climbs and returns to the en route structure or is positioned for holding or a subsequent approach. The route of flight and altitudes are depicted on instrument approach charts.

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MISSING AIRCRAFT NOTICE (MANOT) — A message issued by an RCC to Flight Service Stations and ATC units, giving details of a missing aircraft.

MODE (SSR Mode) — Letter or number assigned to a specific pulse spacing of the interrogation signals transmitted by an interrogator.

MOVEMENT AREA — That part of an aerodrome intended to be used for the surface movement of aircraft and includes the manoeuvring area and aprons.

NAVAID — Any visual or electronic device, airborne or on the surface of the earth, that provides point-to-point guidance information or position data to aircraft in flight.

NAVIGATION CHANGEOVER POINT — The geographical point, between two specified NAVAIDs or between a geographical location and a NAVAID, at which a change is made from one navigation reference to another.

NIGHT — Period beginning one half-hour after sunset and ending one half-hour before sunrise and, in respect of any place where the sun does not rise or set daily, the period during which the centre of the sun's disc is more than six degrees below the horizon.

NO TRANSGRESSION ZONE — A corridor of airspace of defined dimensions, located centrally between the two extended runway centrelines, where controller intervention is required to manoeuvre the non-blundering aircraft, when the airspace is penetrated by an aircraft conducting a simultaneous approach to the adjacent parallel or near-parallel instrument runway.

NON-RADAR ROUTE — A route on which an aircraft is able to determine its position, track, and, consequently, the minimum IFR altitude, without the benefit of radar information.

NORMAL OPERATING ZONE — Airspace of defined dimensions, extending to either side of an ILS localizer centreline. Only the inner half of the normal operating zone is taken into account in independent 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.

NOW WIND — In OIDS, wind direction and speed as determined from a sample reading every second and averaged over the last five seconds. The display value is updated every second.

OMNI FACILITY — A VOR, TVOR, VORTAC, or TACAN, which provides azimuth information through 360 degrees, expressed as radials in degrees from the NAVAID.

OPEN RNAV STAR — A STAR that terminates at a Downwind Termination Waypoint (DTW). Normally used for aircraft approaching the airport via the downwind leg to the DTW.

OPERATING IRREGULARITY — A situation which occurs when air traffic services are being provided and when a preliminary investigation indicates that safety may have been jeopardized, less than minimum separation may have existed, or both.

OPERATING POSITION — A position within a sector from which air traffic services are provided. There may be one or more operating positions within a sector.

OVERLAY APPROACH — GPS Overlays are selected NDB, VOR or VOR/DME non-precision approaches that can be flown by GPS equipped aircraft, suffix "G".

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PAR CONTROLLER — Duty controller assigned to a precision radar approach control position.

PIREP — A pilot weather report pertaining to current weather conditions encountered in flight.

POINT OF ACTIVATION — A position, expressed in either 4-letter, 4-digit geographical reference (GEOREF) or 4-digit latitude and longitude, from which an aircraft departs or is estimated to be along its intended track.

POINT-OUT — An action taken by a controller to coordinate the radar identification of an aircraft target with another controller, when radio communication will not be transferred.

PRECISION RADAR APPROACH — An instrument approach in which the final approach is conducted in accordance with directions issued by a controller, referring to a precision approach radar display.

PROCEDURE — A recommended or optional directive or a mode of operation.

PROCEDURE TURN — A manoeuvre in which a turn is made away from a designated track followed by a turn in the opposite direction, both turns being executed so as to permit the aircraft to intercept and proceed along the reciprocal of the designated track. Procedure turns are designated “left” or “right” according to the direction of the initial turn. However, if possible, the procedure turn is designated “left.”

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

A. PRIMARY RADAR — A radar system which uses reflected radio signals.

B. SECONDARY RADAR — A radar system wherein a radio signal transmitted from a radar station initiates the transmission of a radio signal from another station.

RADAR APPROACH — Approach executed by an aircraft under the direction of a radar controller.

RADAR CONTROLLED AIRSPACE — Controlled airspace within which radar control service is provided.

RADAR IDENTIFICATION — The process of ascertaining that a particular target is the radar return from a specific aircraft.

RADAR SERVICE — The term used to indicate a service provided directly by means of radar.

A. RADAR ADVISORY — The provision of advice and information based on radar observations.

B. RADAR CONTROL SERVICE — The control of aircraft through the provision of radar vectors in order to establish required separation and/or desired spacing between aircraft and between aircraft and obstructions.

C. RADAR MONITORING — The use of radar for the purpose of providing aircraft with information and advice relative to significant deviations from their normal flight path.

D. RADAR NAVIGATIONAL ASSISTANCE — The provision of position information, vectors, or track and ground speed checks.

E. RADAR SEPARATION — Radar spacing of aircraft in accordance with established minima, with information derived from radar sources.

RADIAL — A bearing from an OMNI facility, usually designated in degrees magnetic.

RECIPROCAL TRACK — A term used in the application of separation, indicating tracks that converge or diverge at an angle of 136 degrees to 180 degrees inclusive.

REDUCED VERTICAL SEPARATION MINIMUM — The application of 1,000 feet vertical separation at and above FL290 between RVSM certified aircraft operating in designated airspace.

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REPORTING POINT — A specific fix in relation to which the position of an aircraft can be reported.

RESPONSIBLE UNIT — The unit assigned an area of responsibility in the VFR flight planning and alerting service.

RNAV APPROACH — A published IFR approach coded and included in an aircraft's navigation database and published in graphic and textual form to be used by aircraft appropriately equipped to conduct this approach.

RNAV SID — A published IFR standard instrument departure procedure coded and included in an aircraft's navigational database, published in graphic and textual form to be used by aircraft appropriately equipped and authorized to conduct this procedure.

RNAV STAR — A published IFR air traffic control arrival procedure coded and included in an aircraft's navigational database, published in graphic and textual form to be used by aircraft appropriately equipped and authorized to conduct this procedure.

ROLLING TAKE-OFF — One in which an aircraft taxies onto the runway and departs in one continuous motion.

ROTATION POINT — The location, along a runway, where an aircraft is brought to the flying attitude as take-off speed is reached.

RULE — A mandatory directive or a condition relating to the application of a separation minimum.

RUNWAY HEADING — The magnetic or true, as applicable, direction that corresponds with the runway centreline; not the painted runway number.

RUNWAY LIGHTS — Lights that are arranged along a runway to indicate the area available for landing and taking off.

SAFETY ALERT — Notification by an air traffic controller to an aircraft that it is at an altitude which, in the controller's judgment, places it in unsafe proximity to terrain, obstructions or other aircraft.

SAME TRACK — A term used in the application of separation, indicating identical tracks or tracks that converge or diverge at an angle of 1 degree to 44 degrees inclusive.

SECTOR — A part of an air traffic control unit that has a designated area of responsibility, in which air traffic services are provided.

SEPARATION — Spacing between aircraft, altitudes, or tracks.

SEPARATION MINIMUM — A statement of the least allowable amount of lateral, longitudinal, or vertical separation to be applied.

SIGMET — A weather advisory issued concerning weather significant to the safety of aircraft. SIGMET advisories include:

- A. active thunderstorm areas or lines of thunderstorms;
- B. hurricanes, tropical storms;
- C. moderate hail;
- D. severe turbulence;
- E. severe icing;
- F. marked mountain waves;
- G. widespread sand or dust storms;
- H. volcanic ash;
- I. severe squall lines;

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- J. low-level wind shear; and
- K. tornadoes or waterspouts.

SIGNIFICANT POINT — The term used to describe a NAVAID, a fix derived from a **NAVAID**, or a geographical location expressed in latitude and longitude.

SIMULATED APPROACH — An instrument approach, conducted in VFR weather conditions by an aircraft not on an IFR clearance.

SPECIAL AVIATION EVENT — An air show, a low level air race, an aerobatic competition, a fly-in or a balloon festival.

SPECIAL VFR FLIGHT (SVFR) — Visual flight authorized by an ATC unit to operate within a control zone under meteorological conditions that are below VFR weather conditions.

STACK — Aircraft holding at a common fix with vertical separation.

STANDARD INSTRUMENT DEPARTURE (SID) — An IFR air traffic control departure procedure, published in the Aeronautical Publication for pilot and controller use. SIDs may be either:

A. Pilot Navigation (Pilot Nav.) SIDs — SIDs where the pilot is required to use the applicable SID chart as reference for navigation to the en route phase; or

B. Vector SIDs — SIDs established where ATC will provide radar navigational guidance to a filed or assigned route, or to a fix depicted on the applicable SID chart. Pilots are expected to use the SID chart as reference for navigation, until radar vectoring is commenced.

STANDARD PRESSURE REGION — The area outside the altimeter setting region.

STANDARD TERMINAL ARRIVAL (STAR) — An IFR air traffic control arrival procedure published in the Aeronautical Publication for pilot and controller use. **STATE AIRCRAFT** — For the purposes of RVSM operations, state aircraft are those aircraft used in military, customs and police services.

STATION — One or more transmitters or receivers, or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radio communication service.

STOP-AND-GO — A procedure in which an aircraft lands, makes a complete stop on the runway, and then commences a take-off from that point.

STRAIGHT-IN APPROACH (IFR) — An instrument approach in which final approach is begun without first having executed a procedure turn.

STRAIGHT-IN APPROACH (VFR) — An approach in which the traffic circuit is entered on the final leg, without having executed any other part of the circuit.

SURVEILLANCE APPROACH — An emergency radar approach intended to assist an aircraft in executing an approach and landing.

TAKE-OFF — In relation to an aircraft, means the act of abandoning a supporting surface and includes the immediately preceding and following acts and, in relation to an airship or balloon, means the act of freeing the airship or balloon from restraint and includes the immediately preceding and following acts.

TAILWIND — For runway operations a tailwind is considered to exist whenever the surface wind exceeds an angle of 90 degrees to the runway in use, thus adding to the ground speed of an aircraft using that particular runway.

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TAILWIND COMPONENT — The wind speed measured in knots at angles from 91 to 179 degrees from the runway in use which would equal the effect of a wind applied at 180 degrees to the runway in use. Components are specified in a component table for a specified permissible tailwind.

TARGET/PPS — The indication on a radar display of a primary radar return or a transponder reply.

TARGET/PPS RESOLUTION — In the application of radar separation, an action to ensure that radar targets do not touch.

TAXIWAY LIGHTS — Lights marking a taxiway.

TERMINAL AREA ENTRY FIX (also called BEDPOST) — A significant point located along the established en route structure over which an aircraft, cleared for a conventional or RNAV STAR, is required to pass prior to entering the terminal airspace.

TERMINAL CONTROL SERVICE — Control service provided to aircraft operating in the vicinity of a selected airport by:

- A. a TCU;
- B. a dedicated Terminal Control function (specialty/sub-unit) within an ACC;
- C. an en route sector of an ACC adjacent to a terminal control unit/specialty/sub-unit to permit the transition from 3 miles radar separation to 5 miles radar separation.

TERMINAL CONTROLLER — Duty controller assigned to the terminal control position.

THRESHOLD LIGHTS — Lights placed across the ends of a runway or landing strip to indicate its usable limits.

TIME OF ACTIVATION — The time, expressed in Coordinated Universal Time (UTC), at which an aircraft departs from, or is estimated to arrive over, a specified point of activation.

TOUCH-AND-GO — A procedure in which an aircraft lands and then commences a take-off, without stopping.

TOWER RADAR AREA — An area of defined dimensions surrounding an airport within which radar service is provided.

TOWER RADAR PLAN — A plan containing the rules and procedures applicable in a Tower Radar Area.

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 ALERT AND COLLISION AVOIDANCE SYSTEM — Type of airborne collision avoidance system (ACAS) based on a family of airborne equipment that functions independently of the ground-based ATC system to detect potential conflicting aircraft that are equipped with secondary surveillance radar (SSR) transponders. There are three different versions: TCAS I provides traffic advisories; TCAS II provides traffic advisories and vertical resolution advisories; and TCAS III, when developed, will provide traffic advisories and vertical and horizontal resolution advisories.

TRAFFIC INFORMATION — Information issued to advise pilots of known or observed air traffic, which may be in such proximity to their position or intended route of flight, to warrant their attention.

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TRANSITION — A published procedure used to connect the basic SID to one or more en route airways, or to connect one or more en route airways to the basic STAR. More than one transition may be published in the associated SID/STAR.

TRANSPONDER — The SSR receiver/transmitter installed in an aircraft.

UNINTERRUPTIBLE POWER SUPPLY — A power system that is not subjected to any interruption when a break occurs in the normal power supply.

URGENT PIREP — A pilot report containing weather information significant to the safety of flight. An urgent PIREP includes information on the following:

- D. volcanic ash;
- E. tornado, funnel cloud, waterspout;
- F. severe turbulence;
- G. severe icing;
- H. hail;
- I. low-level wind shear; and
- J. any other reported weather phenomena considered to be hazardous or potentially hazardous to flight operations.

VECTOR —

- A. A heading issued to an aircraft, for the purpose of providing navigational guidance by means of radar.
- B. To issue headings to an aircraft, for the purpose of providing navigational guidance by means of radar.

VERTICAL SEPARATION — The vertical spacing of aircraft.

VFR AIRCRAFT — An aircraft operating in accordance with the visual flight rules.

VFR FLIGHT — A flight conducted in accordance with the visual flight rules.

VISIBILITY — The distance at which prominent unlighted objects may be identified by day and prominent lighted objects may be identified by night.

VISUAL APPROACH — A procedure wherein an aircraft on an IFR flight plan, operating in VFR weather conditions under the control of an air traffic control facility and having an air traffic control authorization, may proceed to the airport of destination in Visual Meteorological Conditions.

VISUAL FLIGHT RULES (VFR) — Rules that govern the procedures for conducting flight under visual meteorological conditions.

VISUAL METEOROLOGICAL CONDITIONS — Meteorological conditions, expressed in terms of visibility, and distance from cloud, equal to or greater than the minima.

VISUAL SEPARATION — A means employed by controllers to separate aircraft operating in VMC.

A. VFR — The controller having determined that a potential conflict exists, issues clearances, instructions or information, as necessary in order to either aid aircraft in establishing visual contact with each other or to assist aircraft in avoiding other aircraft.

B. IFR or CVFR — Following a pilot's report that the traffic is in sight, the controller issues the clearance and instructs the aircraft to provide its own separation by manoeuvring the aircraft as necessary to avoid or follow the traffic.

WAKE TURBULENCE — The turbulent air behind an aircraft caused by any of the following:

- A. Wing-tip vortices.

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- B. Rotor-tip vortices.
- C. Jet-engine thrust stream.
- D. Rotor downwash.
- E. Prop wash.

WAYPOINT - A specified geographical location, defined by longitude and latitude used for defining routes, terminal segments, and progress reporting purposes.

WET RUNWAY — A wet runway is covered with sufficient moisture to cause it to be reflective, but is not "contaminated".

WIND DIRECTION INDICATOR — The actuated device to indicate visually to aircraft the direction of the surface wind.

WIND SHEAR — Change in wind speed and/ or wind direction in a short distance. It can exist in a horizontal or vertical direction and occasionally in both.

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