

# **Part1**

# **Definitions And Abbreviations**

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## PART 1 Definitions and Abbreviations

### 1.1 General Definitions

**Accelerate-stop distance available (ASDA).** The length of the take-off run available plus the length of stopway, if provided

**Accident.** An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

- (a) A person is fatally or seriously injured as a result of:
  - (1) Being in the aircraft;
  - (2) Direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or
  - (3) Direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
- (b) The aircraft sustains damage or structural failure which:
  - (1) Adversely affects the structural strength, performance or flight characteristics of the aircraft, and
  - (2) Would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or
- (c) The aircraft is missing or is completely inaccessible.

Note 1: For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified as a fatal injury.

Note 2: An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

**Accounting management.** An ATN systems management facility to monitor users for use of network resources and to limit the use of those resources

**Accredited medical conclusion.** The conclusion reached by one or more medical experts acceptable to ECAA for the purposes of the case concerned, in consultation with flight operations or other experts as necessary.

**Admission.** The permission granted to a person to enter a State by the public authorities of that State in accordance with its national laws.

**ADS application.** An ATN application that provides ADS data from the aircraft to the ATS unit(s) for surveillance purposes.

**Advance Passenger Information (API) System.** An electronic communications system whereby required data elements are collected and transmitted to border control agencies prior to flight departure or arrival and made available on the primary line at the airport of entry.

**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.

**Aerial work.** An aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying observation and patrol, search and rescue, aerial advertisement, etc.

**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 operating minima.** The limits of usability of an aerodrome for:

- (a) Take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions;
- (b) Landing in 2D instrument approach operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions, and
- (c) Landing in 3D instrument approach operations expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H); as appropriate to the type and/or category of the operation.

**Aerodrome reference point.** The designated geographical location of an aerodrome.

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

**Aeromedical board** means the Egyptian Aeromedical Board.

**Aeronautical administrative communication (AAC).** Communication used by aeronautical operating agencies related to the business aspects of operating their flights and transport services. This communication is used for a variety of purposes, such as flight and ground transportation, bookings, deployment of crew and aircraft or any other logistical purposes that maintain or enhance the efficiency of over-all flight operation.

**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 telecommunication network (AFTN).** A worldwide system of aeronautical fixed circuits provided, as part of the aeronautical fixed service, for the exchange of messages and/or digital data between aeronautical fixed stations having the same or compatible communications characteristics.

**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-satellite (R)\* service (RR S1.36).** An aeronautical mobile-satellite service reserved for communications relating to safety and regularity of flights, primarily along national or international civil air routes.

**Aeronautical mobile service (RR S1.32).** A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies.

**Aeronautical operational control (AOC).** Communication required for the exercise of authority over the initiation, continuation, diversion or termination of flight for safety, regularity and efficiency reasons.

**Aeronautical passenger communication (APC).** Communication relating to the non-safety voice and data services to passengers and crew members for personal communication.

**Aeronautical station (RR S1.81).** 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.

**Aeronautical telecommunication network (ATN).** An internetwork architecture that allows ground, air-ground and avionic data subnetworks to interoperate by adopting common interface services and protocols based on the International Organization for Standardization (ISO) Open Systems Interconnection (OSI) reference model.

**Aeronautical telecommunication station.** A station in the aeronautical telecommunication service.

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

**AIDC application.** An ATN application dedicated to exchanges between ATS units (ATSUs) of air traffic control (ATC) information in support of flight notification, flight coordination, transfer of control, transfer of communication, transfer of surveillance data and transfer of general data.

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

**Aircraft address.** A unique combination of twenty-four bits available for assignment to an aircraft for the purpose of air-ground communications, navigation and surveillance.

**Aircraft earth station (AES).** A mobile earth station in the aeronautical mobile-satellite service located on board an aircraft (see also "GES").

**Aircraft equipment.** Articles, including first-aid and survival equipment and commissary supplies, but not spare parts or stores, for use on board an aircraft during flight.

**Aircraft operator.** A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

**Aircraft operators' documents.** Air waybills/consignment notes, passenger tickets and boarding passes, bank and agent settlement plan documents, excess baggage tickets, miscellaneous charges orders (M.C.O.), damage and irregularity reports, baggage and cargo labels, timetables, and weight and balance documents, for use by aircraft operators.

**Aircraft- type of.** All aircraft of the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics.

**Air defence identification zone (ADIZ).** Special designated airspace of defined dimensions within which aircraft are required to comply with special identification and/or reporting procedures additional to those related to the provision of air traffic services (ATS).

**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.

**Aircraft - category.** Classification of aircraft according to specified basic characteristics, e.g. aeroplane, helicopter, glider, free balloon.

Aircraft shall be classified in accordance with Table 1.

<b>AIRCRAFT</b>	Lighter-than-air aircraft	Non-power-driven	Free balloon	<ul style="list-style-type: none"> <li>Spherical free balloon</li> <li>Non-spherical free balloon</li> </ul>		
			Captive balloon	<ul style="list-style-type: none"> <li>Spherical captive balloon</li> <li>Non-spherical captive balloon<sup>1</sup></li> </ul>		
		Power-driven	Airship	<ul style="list-style-type: none"> <li>Rigid airship</li> <li>Semi-rigid airship</li> <li>Non-rigid airship</li> </ul>		
	Heavier-than-air aircraft	Non-power-driven	Glider Kite <sup>4</sup>	<ul style="list-style-type: none"> <li>Land glide</li> <li>Sea glider<sup>2</sup></li> </ul>		
				Power-driven	Aeroplane	<ul style="list-style-type: none"> <li>Landplane<sup>3</sup></li> <li>Seaplane<sup>2</sup></li> <li>Amphibian</li> </ul>
Rotorcraft		Gyroplane	<ul style="list-style-type: none"> <li>Land gyroplane<sup>3</sup></li> <li>Sea gyroplane<sup>2</sup></li> <li>Amphibian gyroplane<sup>2</sup></li> </ul>			
			Helicopter			<ul style="list-style-type: none"> <li>Land helicopter<sup>3</sup></li> <li>Sea helicopter<sup>2</sup></li> <li>Amphibian helicopter</li> </ul>
Ornithopter		<ul style="list-style-type: none"> <li>Land ornithopter<sup>3</sup></li> <li>Sea ornithopter<sup>2</sup></li> <li>Amphibian ornithopter<sup>2</sup></li> </ul>				

1. Generally designated “kite-balloon”.
2. “Float” or “boat” may be added as appropriate.
3. Includes aircraft equipped with ski-type landing gear (substitute “ski” for “land”).
4. For the purpose of completeness only.

**Table1. Classification of aircraft**

**Note 1 :** An aircraft which is intended to be operated with no pilot on board shall be further classified as unmanned.

**Note 2:** Unmanned aircraft shall include unmanned free balloons and remotely piloted aircraft.

**Airline.** As provided in Article 96 of the Convention, any air transport enterprise offering or operating a scheduled international air service.

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

**Note.** — Details of the AIREP form are given in PANS-ATM (Doc 4444).

**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).

**Air Carrier** means any person who undertakes to engage in commercial air transportation in scheduled and/ or unscheduled service over domestic routes. International routes, or a combination thereof.

**Air carrier operating certificate** means a document issued by the ECAA certifying that the applicant has been found to be properly and adequately equipped and capable of conducting a safe operation under the Egyptian Civil Aviation Supervisory Regulations

**Air navigation** means the operation of aircraft in air space. It includes air transportation operations and all other operational uses of aircraft in flight.

**Air operator certificate (AOC).** A certificate authorizing an operator to carry out specified commercial air transport operations.

**Air taxiway.** A defined path on the surface established for the air taxiing of helicopters.

**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** means a service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

**Air traffic control clearance** means authorization for an aircraft to be protected under conditions specified by an air traffic control unit.

**Air traffic control service.** A service provided for the purpose of:

- (a) Preventing collisions:
  - (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 centre, approach control unit or aerodrome control tower.

**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.

**Air traffic services reporting office.** A unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure.

**Air traffic services unit.** A generic term meaning variously, air traffic control unit, flight information centre or air traffic services reporting office.

**Air transit route.** A defined path on the surface established for the air transiting of helicopters.

**Air transport or air transportation** means the operation of Egyptian registered civil aircraft for the purpose of transporting persons and property.

**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 transponders.

**Aircraft address.** A unique combination of twenty-four bits available for assignment to an aircraft for the purpose of air-ground communications, navigation and surveillance.

**Aircraft approach category** means a grouping of aircraft based on a speed of  $1.3 V_{so}$  (at the maximum certificated landing weight).  $V_{so}$  and the maximum certificated landing weight are those values as established for the aircraft by the certificating authority of the state of manufacture:

- (a) Category A: Speed less than 91 knots;
- (b) Category B: Speed 91 knots or more but less than 121 knots;
- (c) Category C: Speed 121 knots or more but less than 141 knots;
- (d) Category D: Speed 141 knots or more but less than 166 knots; and
- (e) Category E: Speed 166 knots or more.

**Aircraft avionics.** A term designating any electronic device - including its electrical part - for use in an aircraft, including radio, automatic flight control and instrument systems.

**Aircraft certificated for single-pilot operation.** A type of aircraft which the State of Registry has determined, during the certification process, can be operated safely A1 with a minimum crew of one pilot.

**Aircraft engine** means an engine that is used or intended to be used for propelling aircraft. It includes turbo superchargers, appurtenances, and accessories necessary for its functioning.

**Aircraft flight manual** means a document containing the limitations, procedures, information, and data including approved information pertaining to each aircraft of an approved design and models thereof pertinent to the safe operation of that particular aircraft.

**Aircraft operating manual.** A manual, acceptable to the State of the Operator, containing normal, abnormal and emergency procedures, checklists, limitations, performance information, details of the aircraft systems and other material relevant to the operation of the aircraft.

**Aircraft required to be operated with a co-pilot.** A type of aircraft that is required to be operated with a co-pilot, as specified in the flight manual or by the air operator certificate.

**Aircraft stand.** A designated area on an apron intended to be used for parking an aircraft.

**Aircraft tracking.** A process, established by the operator, that maintains and updates, at standardized intervals, a ground-based record of the four dimensional position of individual aircraft in flight.

**Airframe** means the fuselage, booms, nacelles, cowlings, fairing, airfoil surfaces (including rotors but excluding propellers and rotating airfoils of engines), and landing gear of an aircraft and their accessories and controls.

**Airman** means any person who serves in the capacity of pilot in command, or as other pilot, flight engineer, or as other member of the flight crew each having assigned duties to perform aboard that aircraft for its safe operation during flight time: and any person who serves in the capacity of a mechanic performing or supervising the inspection, maintenance, repair or overhaul of aircraft, aircraft engines, aircraft propellers, or aircraft appliances, and any other person who serves in the capacity of a flight instructor, an aircraft dispatcher, or a repairman, performing duties under the provisions and requirements of these regulations.

**Airman certificate** means a document issued by the Chairman of the Civil Aviation Supervisory Authority certifying that he has found the applicant qualified under the Civil Aviation Regulations governing the capacity in which the certificate authorizes the holder to act as an airman.

**Airmanship.** The consistent use of good judgement and well-developed knowledge, skills and attitudes to accomplish flight objectives.

**AIRMET information.** Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified 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.

**Airport traffic area** means, unless otherwise specifically designated by ATC, that airspace within a horizontal radius of 5 nautical miles from a geographical center of any airport at which an operating control tower is located, extending from the surface up to, but not including, on altitude of 3,000 feet above the elevation of the airport.

**Airship.** A power-driven lighter-than-air aircraft.

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

**Airworthy.** The status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation.

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

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

**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.

**Altimetry system error (ASE).** The difference between the altitude indicated by the altimeter display, assuming a correct altimeter barometric setting, and the pressure altitude corresponding to the undisturbed ambient pressure.

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

**Antenna Port :** A point where the received signal power is specified. For an active antenna port is a fictitious point between the antenna elements and the antenna pre-amplifier. For a passive antenna, the antenna port is the output of the antenna itself.

**Appliance** means any instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight, is installed in or attached to the aircraft, and is not part of an airframe, engine, or propeller.

**Application.** The ultimate use of an information system, as distinguished from the system itself.

**Application Entity (AE).** Part of an application process that is concerned with communication within the OSI environment. The aspects of an application process that need to be taken into account for the purposes of OSI are represented by one or more AEs.

**Application information.** Refers to the application names (e.g. AE qualifiers such as ADS and CPC), version numbers, and addresses (the long or short TSAP, as required) of each application.

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**Approach and landing operations using instrument approach procedures.**

Instrument approach and landing operations are classified as follows:

- (a) Non-precision approach and landing operations. An instrument approach and landing which utilizes lateral guidance but does not utilize vertical guidance.
- (b) Approach and landing operations with vertical guidance.
- (c) An instrument approach and landing which utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations.
- (d) Precision approach and landing operations. An instrument approach and landing using precision lateral and vertical guidance with minima as determined by the category of operation.

**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.

**Appropriate ATS authority.** The relevant authority designated by the State responsible for providing air traffic services in the airspace concerned.

**Approved,** unless used with reference to another person, means approved by the Egyptian Civil Aviation Authority.

**Approved design** means a design that meets the specifications, drawings, reports, and documentary evidence for aircraft engines, propellers, appliances, or parts that comply with applicable airworthiness requirements of the State of Manufacture, or other state which has accepted the approved design and has issued Airworthiness Certification Requirements covering that approved design.

**Approved examiner or check airman** means any person who is authorized by the ECAA to conduct a pilot proficiency test or a practical test for an airman license or rating issued under this Part or a person who is authorized to conduct a knowledge test under this Part.

**Approved maintenance organization.** An organization approved by a Contracting State, in accordance with the requirements of Annex 6, Part I, Chapter 8 - Aeroplane Maintenance, to perform maintenance of aircraft or parts thereof and operating under supervision approved by that State.

Note.— Nothing in this definition is intended to preclude that the organization and its supervision be approved by more than one State.

**Approved training.** Training conducted under special curricula and supervision approved by a Contracting State

**Approved training organization.** An organization approved by and operating under the supervision of a Contracting State in accordance with the requirements of Annex 1 to Perform approved training

**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 the movement of aircraft and vehicles on an apron.

**Area control centre.** 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 control areas.

**Area navigation (RNAV).**

A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these.

Note.— Area navigation includes performance-based navigation as well as other operations that do not meet the definition of performance-based navigation.

**ASHTAM.** A special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption and/or volcanic ash cloud that is of significance to aircraft operations.

**ATS Communications (ATSC).** Communication related to air traffic services including air traffic control, aeronautical and meteorological information, position reporting and services related to safety and regularity of flight. This communication involves one or more air traffic service administrations. This term is used for purposes of address administration.

**ATN directory services (DIR).** A service which provides the capability for an application entity or user in the ATN community to query a distributed directory data base and retrieve addressing, security and technical capabilities information relating to other users or entities within the ATN community

**ATN security services.** A set of information security provisions allowing the receiving end system or intermediate system to unambiguously identify (i.e. authenticate) the source of the received information and to verify the integrity of that information.

**ATN systems management (SM).** A collection of facilities to control, coordinate and monitor the resources which allow communications to take place in the ATN environment. These facilities include fault management, accounting management, configuration management, performance management and security management.

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

**ATS surveillance service** Term used to indicate a service provided directly by means of an ATS surveillance system.

**ATS surveillance system.**

A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.

Note.— A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal to or better than monopulse SSR.

**ATSC class.** The ATSC class parameter enables the ATSC user to specify the quality of service expected for the offered data. The ATSC class value is specified in terms of ATN end-to-end transit delay at 95 per cent probability.

**Authorized agent.** A person who represents an aircraft operator and who is authorized by or on behalf of such operator to act on formalities connected with the entry and clearance of the operator's aircraft, crew, passengers, cargo, mail, baggage or stores and includes, where national law permits, a third party authorized to handle cargo on the aircraft.

**Authorized instructor means:**

- (a) A person who holds a valid ground instructor certificate issued under this Part when conducting ground training in accordance with the privileges and limitations of his or her ground instructor certificate;
- (b) A person who holds a current flight instructor rating issued under this Part when conducting ground training or flight training in accordance with the privileges and limitations of his or her flight instructor rating; or

- (c) A person authorized by the ECAA to provide ground training or flight training under Parts 121, 141 or 142 when conducting ground training or flight training in accordance with that authority.

**Authorized representative of the civil aviation authority** means an employee of the Civil Aviation Supervisory Authority (CASA) or any private person, authorized by the Chairman to perform any of the duties of the Chairman as delegated to those employees or as delegated to a designated private person.

**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 dependent surveillance -broadcast (ADS-B).** A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

**Automatic dependent surveillance -contract (ADS-C).** A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports.

Note.— The abbreviated term “ADS contract” is commonly used to refer to ADS event contract, ADS demand contract, ADS periodic contract or an emergency mode

**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.

**Aviation medical examiner** means a licensed physician designated by the Chairman of the Civil Aviation Supervisory Authority to perform required airman medical examinations and to issue or deny medical certificates as prescribed by the Civil Aviation Regulations.

**Axial ratio:** The ratio, expressed in decibels, between the maximum output power and the minimum output power of the antenna to an incident linearly polarized wave as polarization orientation is varied over all direction perpendicular to the direction of propagation.

**Baggage.** Personal property of passengers or crew carried on an aircraft by agreement with the operator.

**Balloon.** A non-power-driven lighter-than-air aircraft.

Note.— this definition applies to free balloons.

**Bare Earth.** Surface of the Earth including bodies of water and permanent ice and snow, and excluding vegetation and man-made objects.

**Border integrity.** The enforcement, by a State, of its laws and/or regulations concerning the movement of goods and/or persons across its borders.

**Cabin Crew Member.** A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.

**Calendar.** Discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day (ISO 19108\*).

**Canopy.** Bare Earth supplemented by vegetation height.

**Cargo.** Any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage.

**Category: Categories of precision approach and landing operations:**

**Category I (CAT I) operation.** A precision instrument approach and landing with:

- (a) A decision height not lower than 60 m (200 ft); and
- (b) With either a visibility not less than 800 m or a runway visual range not less than 550m.

**Category II (CAT II) operation.** A precision instrument approach and landing with:

- (a) A decision height lower than 60 m (200 ft), but not lower than 30 m (100 ft), and
- (b) A runway visual range not less than 300 m.

**Category IIIA (CAT IIIA) operation.** A precision instrument approach and landing with:

- (a) A decision height lower than 30 m (100 ft) or no decision height; and
- (b) A runway visual range not less than 175 m.

**Category IIIB (CAT IIIB) operation.** A precision instrument approach and landing with:

- (1) A decision height lower than 15 m (50 ft) or no decision height; and
- (2) A runway visual range less than 175 m but not less than 50 m.

**Category IIIC (CAT IIIC) operation.** A precision instrument approach and landing with no decision height and no runway visual range limitations.

Note.— Where decision height (DH) and runway visual range (RVR) fall into different categories of operation, the instrument approach and landing operation would be conducted in accordance with the requirements of the most demanding category (e.g. an operation with a DH in the range of CAT IIIA but with an RVR in the range of CAT IIIB would be considered a CAT IIIB operation or an operation with a DH in the range of CAT II but with an RVR in the range of CAT I would be considered a CAT II operation).

**Category with respect to the certification, ratings, privileges, and limitations of airmen,** means a broad classification of aircraft. Examples include: airplane; rotorcraft; glider; and lighter-than-air.

**Category with respect to the certification of aircraft,** means a grouping of aircraft based upon intended use or operating limitations. Examples include: transport, normal, utility, acrobatic, limited, restricted, and provisional.

**Category with respect to transport category rotorcraft:**

- (a) Category A, means multiengine rotorcraft designed with engine and system isolation features specified in Part 29 and utilizing scheduled takeoff and landing operations under a critical engine failure concept which assures adequate designated surface area and adequate performance capability for continued safe flight in the event of engine failure.
- (b) Category B, means single-engine or multiengine rotorcraft which do not fully meet all Category A standards. Category B rotorcraft have no guaranteed stay-up ability in the event of engine failure and unscheduled landing is assumed.

**Certificate of airworthiness** means the same as a Certificate of Fitness for Flight, and indicates the issuing authority has determined the aircraft meets all requirements for certification at date of issue.

**Certificate of fitness for flight** means the same as Certificate of Airworthiness.

**Certificated:** unless used with reference to another person, means certificated and/or validated by the Egyptian Civil Aviation Supervisory Authority.

**Certify as airworthy (to).** To certify that an aircraft or parts thereof comply with current airworthiness requirements after maintenance has been performed on the aircraft or parts thereof.

**Charter flights and other special services** means any commercial air transport operation other than approved scheduled operations conducted by a certificated Egyptian air carrier or air taxi.

Note: Charter Flights and other special services shall be conducted under the rules of that regulation applicable to ECAR 121 operators or as otherwise authorized by the ECAA.

**Civil aviation inspector.** A civil aviation inspector is an individual, designated by a Contracting State, who is charged with the inspection of the safety, security or related aspects of air transport operations as directed by the appropriate authority.

Note.— Examples of civil aviation inspectors include inspectors responsible for airworthiness, flight operations and other safety-related aspects, and security-related aspects, of air transport operations.

**Class:**

(a) As used with respect to the certification, ratings, privileges, and limitations of airmen, means a classification of aircraft having similar operating characteristics. Examples include, single engine, multiengine, land, sea, helicopter, and free balloon; and

(b) As used with respect to the certification of aircraft, means a broad grouping of aircraft having similar characteristics of propulsion, flight, or landing. Examples include: airplane, rotorcraft, glider, landplane, seaplane, and balloon.

**Class I:** As used with regard to airman medical certification means a medical certificate issued by an ECAA designated Aviation Medical Examiner in accordance with standards prescribed for the ICAO Class I medical assessment in chapter 6 on Annex 1 to the Convention of International Civil Aviation.

**Class II:** As used with regard to airman medical certification means a medical certificate issued by a CAA designated Aviation Medical Examiner in accordance with standards prescribed for the ICAO Class II medical assessment in chapter 6 of Annex 1 to the Convention of International Civil Aviation.

**Clearance of goods.** The accomplishment of the customs formalities necessary to allow goods to enter home use, to be exported or to be placed under another customs procedure.

**Clearway** means, for turbine engine powered airplanes, and area beyond the runway, not less than 500 feet wide, centrally located about the extended centerline of the runway, and under the control of the airport authorities. The clearway is expressed in terms of a clearway plane extending from the end of the runway with an upward slope not exceeding 1.25 percent, above which no object nor any terrain protrudes. However, threshold lights may protrude above the plane if their height above the end of the runway is 26 inches or less and if they are located at each side of the runway.

**Co-pilot.** A licensed pilot serving in any piloting capacity other than as pilot-in-command but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction.

**Cockpit crewmember** means a pilot, flight engineer, or other airman assigned for duty in an aircraft during flight time in accordance with the Civil Aviation Regulations.

**Commercial air transport operation.** An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.

**COMAT.** Operator material carried on an operator's aircraft for the operator's own purposes.

**Combined vision system (CVS).** A system to display images from a combination of an enhanced vision system (EVS) and a synthetic vision system (SVS).

**Commercial air transportation** means the operation of Egyptian registered aircraft for the purpose of the carriage of persons or property for compensation or hire.

**Commencement of journey.** The point at which the person began his journey, without taking into account any airport at which he stopped in direct transit, either on a through-flight or a connecting flight, if he did not leave the direct transit area of the airport in question.

**Common reference systems Configuration** (as applied to the aeroplane). A particular combination of the positions of the moveable elements, such as wing flaps and landing gear, etc., that affect the aerodynamic characteristics of the aeroplane.

**Commissary supplies.** Items, either disposable or intended for multiple use, that are used by the aircraft operator for provision of services during flights, in particular for catering, and for the comfort of passengers.

**Competency.** A combination of skills, knowledge and attitudes required to perform a task to the prescribed standard.

**Competency element.** An action that constitutes a task that has a triggering event and a terminating event that clearly defines its limits, and an observable outcome.

**Competency unit.** A discrete function consisting of a number of competency elements.

**Configuration management.** An ATN systems management facility for managers to change the configuration of remote elements.

**Configuration deviation list (CDL).** A list established by the organization responsible for the type design with the approval of the State of Design which identifies any external parts of an aircraft type which may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction.

**Congested area.** In relation to a city, town or settlement, any area which is substantially used for residential, commercial or recreational purposes.

**Contaminated runway.** A runway is contaminated when a significant portion of the runway surface area (whether in isolated areas or not) within the length and width being used is covered by one or more of the substances listed in the runway surface condition descriptors.

Note.— Further information on runway surface condition descriptors can be found in the Annex 14, Volume I, Definitions.

**Continuous descent final approach (CDFA).** A technique, consistent with stabilized approach procedures, for flying the final approach segment of a non-precision instrument approach procedure as a continuous descent, without level-off, from an altitude/height at or above the final approach fix altitude/height to a point approximately 15 m (50 ft) above the landing runway threshold or the point where the flare manoeuvre should begin for the type of aircraft flown.

**Control area.** A controlled airspace extending upwards from a specified limit above the earth.

**Control zone** means a controlled airspace extending upwards from the surface of the earth to a specified upper limit.

**Context management (CM) application.** An ATN application that provides a log-on service allowing initial aircraft introduction into the ATN and a directory of all other data link applications on the aircraft. It also includes functionality to forward addresses between ATS units.

**Context management (CM) server.** An ATS facility that is capable of providing application information relating to other ATSU to requesting aircraft or ATSU.

**Continuing airworthiness.** The set of processes by which all aircraft comply with the applicable airworthiness requirements and remain in a condition for safe operation throughout their operating life.

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

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

**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

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

**Controller pilot data link communication (CPDLC).** A means of communication between controller and pilot, using data link for ATC communications.

**Corporate aviation operation.** The non-commercial operation or use of aircraft by a company for the carriage of passengers or goods as an aid to the conduct of company business, flown by a professional pilot(s) employed to fly the aircraft.

**Crewmember** means a person assigned to perform duty in an aircraft during flight time.

**Credit.** Recognition of alternative means or prior qualifications.

**Critical engine** means the engine whose failure would most adversely affect the performance or handling qualities of an aircraft.

**Critical power-unit(s).** The power-unit(s) failure of which gives the most adverse effect on the aircraft characteristics relative to the case under consideration.

**Cross-country.** A flight between a point of departure and a point of arrival following a pre-planned route using standard navigation procedures.

**Cruise relief pilot.** A flight crew member who is assigned to perform pilot tasks during cruise flight, to allow the pilot-in-command or a co-pilot to obtain planned rest.

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

**Culture.** All man-made features constructed on the surface of the Earth by man, such as cities, railways, and canals.

**Cyclic Redundancy Check (CRC).** A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.

Horizontal reference system

World Geodetic System - 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system. Reported aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.

**Dangerous goods.** Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

**Data link communications.** A form of communication intended for the exchange of messages via a data link.

**Data link-automatic terminal information service (D-ATIS).** The provision of ATIS via data link.

**Data link-automatic terminal Danger area.** An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.

**Data product.** Data set or data set series that conforms to a data product specification (ISO 19131\*).

**Data product specification.** Detailed description of a data set or data set series together with additional information that will enable it to be created, supplied to and used by another party (ISO 19131\*).

Note.— A data product specification provides a description of the universe of discourse and a specification for mapping the universe of discourse to a data set. It may be used for production, sales, end-use or other purpose.

**Data set.** Identifiable collection of data (ISO 19101\*).

**Data set series.** Collection of data sets sharing the same product specification (ISO 19115\*).

**Data quality.** A degree or level of confidence that the data provided meet the requirements of the data user in terms of accuracy, resolution and integrity.

**Data integrity.** The probability that data has not been altered or destroyed.

**D-METAR.** The symbol used to designate data link aviation weather report service.

**Datum.** Any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities (ISO 19104\*).

**Decision altitude (DA) or decision height (DH).** A specified altitude or height in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established

**Decision height with respect to the operation of aircraft,** means the height at which a decision must be made during a precision instrument approach, to either continue the approach or to execute a missed approach.

**Declarant.** Any person who makes a goods declaration or in whose name such a declaration is made.

**Discrete source damage.** Structural damage of the aeroplane that is likely to result from: impact with a bird, uncontained fan blade failure, uncontained engine failure, uncontained high-energy rotating machinery failure or similar causes.

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

**Deportation order.** A written order, issued by the competent authorities of a State and served upon a deportee, directing him to leave that State.

**Deportee.** A person who had legally been admitted to a State by its authorities or who had entered a State illegally, and who at some later time is formally ordered by the competent authorities to leave that State.

**Direct transit area.** A special area established in an international airport, approved by the public authorities concerned and under their direct supervision or control, where passengers can stay during transit or transfer without applying for entry to the State.

**Digital Elevation Model (DEM).** The representation of terrain surface by continuous elevation values at all intersections of a defined grid, referenced to common datum.

Note.—Digital Terrain Model (DTM) is sometimes referred to as DEM.

**Disembarkation.** The leaving of an aircraft after a landing, except by crew or passengers continuing on the next stage of the same through-flight.

**Disinfection.** The procedure whereby health measures are taken to control or kill infectious agents on a human or animal body, in or on affected parts of aircraft, baggage, cargo, goods or containers, as required, by direct exposure to chemical or physical agents.

**Disinsection.** The procedure whereby health measures are taken to control or kill insects present in aircraft, baggage, cargo, containers, goods and mail.

**Displaced threshold.** A threshold not located at the extremity of a runway.

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

**Dry runway.** A runway is considered dry if its surface is free of visible moisture and not contaminated within the area intended to be used.

**Dual instruction time.** Flight time during which a person is receiving flight instruction from a properly authorized pilot on board the aircraft.

**Duplex.** A method in which telecommunication between two stations can take place in both directions simultaneously.

**Duty period.** A period which starts when a flight or cabin crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties.

**Duty.** Any task that flight or cabin crew members are required by the operator to perform including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue.

**EDTO critical fuel.** The fuel quantity necessary to fly to an en-route alternate aerodrome considering, at the most critical point on the route, the most limiting system failure.

**EDTO significant system.** An aeroplane system whose failure or degradation could adversely affect the safety particular to an EDTO flight, or whose continued functioning is specifically important to the safe flight and landing of an aeroplane during an EDTO diversion.

**Electronic flight bag (EFB).** An electronic information system, comprised of equipment and applications for flight crew, which allows for the storing, updating, displaying and processing of EFB functions to support flight operations or duties.

**Elevated heliport.** A heliport located on a raised structure on land.

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

**Ellipsoid height (Geodetic height).** The height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.

**Embarkation.** The boarding of an aircraft for the purpose of commencing a flight, except by such crew or passengers as have embarked on a previous stage of the same through-flight.

**Emergency locator transmitter (ELT).** A generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated. An ELT may be any of the following:

- (a) Automatic fixed ELT (ELT(AF)). An automatically activated ELT which is permanently attached to an aircraft.
- (b) Automatic portable ELT (ELT(AP)). An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft.
- (c) Automatic deployable ELT (ELT(AD)). An ELT which is rigidly attached to an aircraft and which is automatically deployed and activated by impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided.
- (d) Survival ELT (ELT(S)). An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors.

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

**EMRTD. An MRTD** (passport, visa or card) that has a contactless integrated circuit embedded in it and the capability of being used for biometric identification of the MRTD holder in accordance with the standards specified in the relevant Part of Doc 9303 — Machine Readable Travel Documents.

**End system (ES).** A system that contains the OSI seven layers and contains one or more end user application processes.

**End-to-end.** Pertaining or relating to an entire communication path, typically from (1) the interface between the information source and the communication system at the transmitting end to (2) the interface between the communication system and the information user or processor or application at the receiving end.

**Engine.** A unit used or intended to be used for aircraft propulsion. It consists of at least those components and equipment necessary for functioning and control, but excludes the propeller/rotors (if applicable).

**Enhanced vision system (EVS).** A system to display electronic real-time images of the external scene achieved through the use of image sensors.

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

**Error.** An action or inaction by an operational person that leads to deviations from organizational or the operational person's intentions or expectations.

*Note.*— See Chapter 1 of Annex 19 — Safety Management for a definition of operational personnel.

**Error management.** The process of detecting and responding to errors with countermeasures that reduce or eliminate the consequences of errors and mitigate the probability of further errors or undesired states.

*Note.*— See Attachment C to Chapter 3 of the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868) and Circular 314 — Threat and Error Management (TEM) in Air Traffic Control for a description of undesired states.

**EDTO en-route alternate.** A suitable and appropriate alternate aerodrome at which an aeroplane would be able to land after experiencing an engine shut-down or other abnormal or emergency condition while en route in an EDTO operation.

**Extended diversion time operations (EDTO).** Any operation by an aeroplane with two or more turbine engines where the diversion time to an en-route alternate aerodrome is greater than the threshold time established by the State of the Operator.

**Extended flight over water.** A flight operated over water at a distance of more than 93 km (50 NM), or 30 minutes at normal cruising speed, whichever is the lesser, away from land suitable for making an emergency landing.

**Exemption.** An authorization issued by the Minister of Egyptian Civil Aviation providing relief from the provisions of this ECAR.

**Fatigue.** A physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety-related operational duties.

**Fatigue Risk Management System (FRMS).** A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.

**Fault management.** An ATN systems management facility to detect, isolate and correct problems.

**Feature.** Abstraction of real world phenomena (ISO 19101\*).

**Feature attribute.** Characteristic of a feature (ISO 19101\*).

Note.— A feature attribute has a name, a data type and a value domain associated with it.

**Feature operation.** Operation that every instance of a feature type may perform (ISO 19110\*).

Note.— An operation upon the feature type dam is to raise the dam. The result of this operation is to raise the level of water in the reservoir

**Feature relationship.** Relationship that links instances of one feature type with instances of the same or a different feature type (ISO 19101\*).

**Feature type.** Class of real world phenomena with common properties (ISO 19110\*).

Note.— In a feature catalogue, the basic level of classification is the feature type

**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 rejected take-off area available.

**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 racetrack 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 segment (FAS).** That segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

**FIS application.** An ATN application that provides to aircraft information and advice useful for the safe and efficient conduct of flights.

**Fireproof.** The capability to withstand the application of heat by a flame for a period of 15 minutes.

**Fire resistant:** The capability to withstand the application of heat by a flame for a period of 5 minutes.

**Note:** The Characteristics of an acceptable flame can be found in ISO 2685.

**Flammable with respect to a fluid or gas** means susceptible to igniting or to exploding.

**Flash resistant** means not susceptible to burning violently when ignited.

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

**Flight Data Analysis.** A process of analysing recorded flight data in order to improve the safety of flight operations.

**Flight duty period.** The total time from the moment a flight crew member commences duty, immediately subsequent to a rest period and prior to making a flight or a series of flights, to the moment the flight crew member is relieved of all duties having completed such flight or series of flights.

**Flight information centre.** A unit established to provide flight information service and alerting service.

**Flight information region.** 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.** A surface of constant atmospheric pressure which is related to a specific pressure datum, 1 013.2 hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals.

**Flight manual.** A manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft.

**Flight operations officer/flight dispatcher.** A person designated by the operator to engage in the control and supervision of flight operations, whether licensed or not, suitably qualified in accordance with Annex 1, who supports, briefs and/or assists the pilot-in-command in the safe conduct of the flight.

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

**Flight procedures trainer.** See Flight simulation training device.

**Flight recorder.** Any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation.

**Automatic deployable flight recorder (ADFR).** A combination flight recorder installed on the aircraft which is capable of automatically deploying from the aircraft.

**Flight safety documents system.** A set of inter-related documentation established by the operator, compiling and organizing information necessary for flight and ground

operations, and comprising, as a minimum, the operations manual and the operator's maintenance control manual.

**Flight simulation training device.** Any one of the following three types of apparatus in which flight conditions are simulated on the ground:

- 1) A **flight simulator**, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;
- 2) A **flight procedures trainer**, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;
- 3) A **basic instrument flight trainer**, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.

**Flight simulator.** See Simulation Training device.

**Flight time - aeroplanes.** The total time from the moment an aeroplane first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight. Note.— Flight time as here defined is synonymous with the term “block to block” time or “chock to chock” time in general usage which is measured from the time an aeroplane first moves for the purpose of taking off until it finally stops at the end of the flight.

**Flight time - helicopters.** The total time from the moment a helicopter's rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped.

**Flight time** means the time from the moment the aircraft first moves for the purpose of flight until the moment it comes to rest at the next point of landing commonly called "block-to-block" time.

**Flight training** means that training, other than ground training, received from an authorized instructor in flight in an aircraft.

**Flight training device** means a device that:

- (a) Is a full-size replica of the instruments, equipment, panels, and controls of an aircraft, or set of aircraft, in an open flight deck area or in an enclosed cockpit, including the hardware and software for the systems installed, that is necessary to simulate the aircraft in ground and flight operations;
- (b) Need not have a force (motion) cueing or visual system; and
- (c) Has been evaluated, qualified, and approved by the ECAA.

**Flying over water** when flying over water and at a distance of more than 93 km (50 NM) away from the shore .

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

**Frequency channel.** A continuous portion of the frequency spectrum appropriate for a transmission utilizing a specified class of emission.

Note.— The classification of emissions and information relevant to the portion of the frequency spectrum appropriate for a given type of transmission (bandwidths) is specified in the ITU Radio Regulations, Article S2 and Appendix S1.

Note : the classification of emission and information relevant to the portion of the frequency spectrum appropriate for a given type of transmission (bandwidths) are specified in the radio regulations, Article 2 and Appendix 1.

**Free zone.** A part of the territory of a Contracting State where any goods introduced are generally regarded, insofar as import duties and taxes are concerned, as being outside the customs territory.

**General aviation operation.** An aircraft operation other than a commercial air transport operation or an aerial work operation.

**Geodesic distance.** The shortest distance between any two points on a mathematically defined ellipsoidal surface.

**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.

**Geoid undulation.** The distance of the geoid above (positive) or below (negative) the mathematical reference ellipsoid.

**Geoid.** The equipotential surface in the gravity field of the Earth which coincides with the undisturbed mean sea level (MSL) extended continuously through the continents.

**Glider flight time.** The total time occupied in flight, whether being towed or not, from the moment the glider first moves for the purpose of taking off until the moment it comes to rest at the end of the flight.

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

**Gregorian calendar.** Calendar in general use; first introduced in 1582 to define a year that more closely approximates the tropical year than the Julian calendar (ISO 19108\*).

**Ground equipment.** Articles of a specialized nature for use in the maintenance, repair and servicing of an aircraft on the ground, including testing equipment and cargo- and passenger-handling equipment.

**Ground handling.** Services necessary for an aircraft's arrival at, and departure from, an airport, other than air traffic services.

**Ground training** means that training, other than flight training, received from an authorized instructor.

**Head-up display (HUD).** A display system that presents flight information into the pilot's forward external field of view.

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

**Helicopter.** A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes.

**Helicopter stand.** An aircraft stand which provides for parking a helicopter and, where air taxiing operations are contemplated, the helicopter touchdown and lift-off.

**Helideck.** A heliport located on a floating or fixed off-shore structure.

**Heliport.** An aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters.

**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.

**ICAO Public Key Directory (ICAO PKD).** The central database serving as the repository of Document Signer Certificates (CDS) (containing Document Signer Public Keys), CSCA Master List (MLCSCA), Country Signing CA Link Certificates (ICCSCA) and Certificate Revocation Lists issued by Participants, together with a system for their distribution worldwide, maintained by ICAO on behalf of Participants in order to facilitate the validation of data in eMRTDs.

**IFR (Instrument flight rules) operation** means flight in reference to the rules which apply when weather conditions are less than the established visibility and ceiling minimum required for flight when visual reference to the earth is possible.

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

**IMC.** The symbol used to designate instrument meteorological conditions.

**Immigration control.** Measures adopted by States to control the entry into, transit through and departure from their territories of persons travelling by air.

**Import duties and taxes.** Customs duties and all other duties, taxes or charges, which are collected on or in connection with the importation of goods. Not included are any charges which are limited in amount to the approximate cost of services rendered or collected by the customs on behalf of another national authority.

**Improperly documented person.** A person who travels, or attempts to travel: (a) with an expired travel document or an invalid visa; (b) with a counterfeit, forged or altered travel document or visa; (c) with someone else's travel document or visa; (d) without a travel document; or (e) without a visa, if required.

**Inadmissible person.** A person who is or will be refused admission to a State by its authorities.

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

**Industry codes of practice.** Guidance material developed by an industry body, for a particular sector of the aviation industry to comply with the requirements of the International Civil Aviation Organization's Standards and Recommended Practices, other aviation safety requirements and the best practices deemed appropriate.

Note.— Some States accept and reference industry codes of practice in the development of regulations to meet the requirements of Annex 6, Part II, and make available, for the industry codes of practice, their sources and how they may be obtained.

**Information service (D-ATIS).** The provision of ATIS via data link.

**International airport.** Any airport designated by the Contracting State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, animal and plant quarantine and similar procedures are carried out.

**Instrument approach operations.** An approach and landing using instruments for navigation guidance based on an instrument approach procedure. There are two methods for executing instrument approach operations:

- (a) A two-dimensional (2D) instrument approach operation, using lateral navigation guidance only; and
- (b) A three-dimensional (3D) instrument approach operation, using both lateral and vertical navigation guidance.

Note.— Lateral and vertical navigation guidance refers to the guidance provided either by:

- (a) A ground-based radio navigation aid; or
- (b) Computer-generated navigation data from ground-based, space-based, self-contained navigation aids or a combination of these.

**Instrument approach procedure (IAP).** 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 approach procedures are classified as follows:

- Non-precision approach (NPA) procedure. An instrument approach procedure designed for 2D instrument approach operations Type A.

Note. — Non-precision approach procedures may be flown using a continuous descent final approach technique (CDFA). CDFA with advisory VNAV guidance calculated by on-board equipment (see PANS-OPS (Doc 8168), Volume I, Part I, Section 4, Chapter 1, paragraph 1.8.1) are considered 3D instrument approach operations. CDFA with manual calculation of the required rate of descent are considered 2D instrument approach operations. For more information on CDFA refer to PANS-OPS (Doc 8168), Volume I, Section 1.7 and 1.8.

- Approach procedure with vertical guidance (APV). A performance-based navigation (PBN) instrument approach procedure designed for 3D instrument approach operations Type A.
- Precision approach (PA) procedure. An instrument approach procedure based on navigation systems (ILS, MLS, GLS and SBAS Cat I) designed for 3D instrument approach operations Type A or B.

| Note.— Refer to 121.578 for instrument approach operation types.

**Instrument landing system (ILS)** means a precision instrument approach system which normally consists of the following electronic components and visual aids:

- (a) Localizer;
- (b) Glide slope;
- (c) Outer marker;
- (d) Middle marker; and
- (e) Approach lights.

**Inoperative** means a condition in which equipment is malfunctioning to the event that it does not accomplish its intended purpose or is not consistently functioning within its design operating limits or tolerances.

**Inspector** means an employee of the Civil Aviation Authority authorized by the ECAA to perform assigned inspection functions.

**Instrument flight time.** Time during which a pilot is piloting an aircraft solely by reference to instruments and without external reference points.

**Instrument ground time.** Time during which a pilot is practising, on the ground, simulated instrument flight in a synthetic flight trainer approved by the Licensing Authority.

**Instrument meteorological conditions (IMC)** means meteorological conditions expressed in terms of visibility distance from cloud, and ceiling, less than the minimal specified for visual meteorological conditions.

**Instrument time.** Instrument flight time or instrument ground time.

**Instrument training** means that time in which instrument training is received from an authorized instructor under actual or simulated instrument conditions.

**Integrity (aeronautical data).** A degree of assurance that an aeronautical data and its value has not been lost nor altered since the data origination or authorized amendment.

**International NOTAM office (NOF).** An office designated by a State for the exchange of NOTAM internationally.

**Isolated aerodrome.** A destination aerodrome for which there is no destination alternate aerodrome suitable for a given aeroplane type.

**Knowledge test** means a test on the aeronautical knowledge areas required for an airman license or rating that can be administered in written form or by a computer.

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

**Loading.** The placing of cargo, mail, baggage or stores on board an aircraft to be carried on a flight.

**Landing direction indicator.** A device to indicate visually the direction currently designated for landing and for take-off.

**Landing distance available (LDA).** The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

**Large aircraft** means aircraft of more than 12,500 pounds (5,700 kg) maximum certificated gross weight.

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

**Large aeroplane.** An aeroplane of a maximum certificated take-off mass of over 5 700 kg.

**Lighter-than-air aircraft** means aircraft that can rise and remain suspended by using contained gas weighing less than the air that is displaced by the gas.

**Licensing Authority.** The Authority designated by a Contracting State as responsible for the licensing of personnel.

Note.— The Licensing Authority is deemed to have been given the following responsibilities by the Contracting State:

- a) Assessment of an applicant's qualifications to hold a licence or rating;
- b) Issue and endorsement of licences and ratings;
- c) Designation and authorization of approved persons;
- d) Approval of training courses;
- e) Approval of the use of flight simulation training devices and authorization for their use in gaining the experience or in demonstrating the skill required for the issue of a licence or rating; and
- f) Validation of licences issued by other Contracting States.

**Likely.** In the context of the medical provisions, **likely** means with a probability of occurring that is unacceptable to the medical assessor.

**Logon address.** A specified code used for data link logon to an ATS unit

**Mail.** Dispatches of correspondence and other items tendered by and intended for delivery to postal services in accordance with the rules of the Universal Postal Union (UPU).

**Maintenance.** The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.

**Maintenance programme.** A document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of those aircraft to which it applies.

**Maintenance release.** A document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner, either in accordance with the approved data and the procedures described in the maintenance organization's procedures manual or under an equivalent system.

**Maintenance organization's procedures manual.** A document endorsed by the head of the maintenance organization which details the maintenance organization's structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems.

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

**Marking.** A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.

**Master minimum equipment list (MMEL).** A list established for a particular aircraft type by the organization responsible for the type design with the approval of the State of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures.

**Maximum diversion time.** Maximum allowable range, expressed in time, from a point on a route to an en-route alternate aerodrome.

**Maximum mass.** Maximum certificated take-off mass.

**Medical Assessment.** The evidence issued by a Contracting State that the licence holder meets specific requirements of medical fitness.

**Medical certificate** means a document showing acceptable evidence of physical fitness as prescribed for airmen by the Chairman of the Civil Aviation Authority.

**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.

**Minimum descent altitude (MDA) or minimum descent height (MDH).** A specified altitude or height in 2D instrument approach operation or circling approach operation 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 the 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 a 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 descent altitude** means the lowest altitude to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glide slope is provided.

**Minimum equipment list (MEL).** A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.

**Minimum en-route altitude (MEA).** The altitude for an en-route segment that provides adequate reception of relevant navigation facilities and ATS communications, complies with the airspace structure and provides the required obstacle clearance.

**Minimum obstacle clearance altitude (MOCA).** The minimum altitude for a defined segment of flight that provides the required obstacle clearance.

**Minimum sector altitude.** The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in the area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.

**Minor alteration** means an alteration other than a major alteration.

**Minor repair** means a repair other than a major repair.

**Mishandled baggage.** Baggage involuntarily, or inadvertently, separated from passengers or crew.

**Mode S subnetwork.** A means of performing an interchange of digital data through the use of secondary surveillance radar (SSR) Mode S interrogators and transponders in accordance with defined protocols.

**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 the apron(s).

**Navigable airspace** means airspace at and above the minimum flight altitude as prescribed by the authority thereof including airspace needs for safe takeoff and landing.

**Navigation of aircraft** means the piloting of aircraft.

### **Navigation Specifications.**

A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications:

- Required Navigation Performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, esignated by the prefix RNP, e.g. RNP 4, RNP APCH.
- Area Navigation RNAV specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.

Note 1.— The Performance-based Navigation Manual (Doc 9613), Volume II contains detailed guidance on navigation specifications.

Note 2.— The term RNP, previously defined as “a statement of the navigation performance necessary for operation within a defined airspace”, has been removed from this Annex as the concept of RNP has been overtaken by the concept of PBN.

The term RNP in this Annex is now solely used in the context of navigation specifications that require performance monitoring and alerting, e.g. RNP 4 refers to the aircraft and operating requirements, including a 4 NM lateral performance with on-board performance monitoring and alerting that are detailed in Doc 9613.

**Narcotics control.** Measures to control the illicit movement of narcotics and psychotropic substances by air.

**Night.** The hours between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise, as may be prescribed by the appropriate authority.

Note.— Civil twilight ends in the evening when the centre of the sun's disc is 6 degrees below the horizon and begins in the morning when the centre of the sun's disc is 6 degrees below the horizon.

**Night (for all operations in Egypt)** means the time from 30 minutes after sunset to 30 minutes before sunrise. For all operations conducted outside of Egypt, "Night" shall mean the time between the end of evening civil twilight and the beginning of morning civil twilight.

**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.

**Operations specifications.**

The authorizations, conditions and limitations associated with the Air Operator Certificate and subject to the conditions in the operations manual.

**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 approach procedures 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 procedure 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".

**Obstacle free zone (OFZ).** The airspace above the inner approach surface, inner transitional surfaces, and balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangibly mounted one required for air navigation purposes.

**Obstacle.** All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.

**Obstacle/terrain data collection surface.** A defined surface intended for the purpose of collecting obstacle/terrain data.

**Offset frequency simplex.** A variation of single channel simplex wherein telecommunication between two stations is effected by using in each direction frequencies that are intentionally slightly different but contained within a portion of the spectrum allotted for the operation.

**Operate aircraft or operation of aircraft** means the use of aircraft for the purpose of air navigation. Any person who causes or authorizes the operation of aircraft, whether with or without the right of legal control (in the capacity of owner, lessee, or otherwise) of the aircraft, shall be deemed to be engaged in the operation of aircraft.

**Operational control communications.** Communications required for 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 a flight.

Note. — Such communications are normally required for the exchange of messages between aircraft and aircraftoperating agencies.

**Operational control. (which respect to a flight)** 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.

**Operational flight plan.** The operator's plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned.

**Operations manual.** A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

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

**Operating base.** The location from which operational control is exercised.

Note.— An operating base is normally the location where personnel involved in the operation of the aeroplane work and the records associated with the operation are located. An operating base has a degree of permanency beyond that of a regular point of call.

**Operator's maintenance control manual.** A document which describes the operator's procedures necessary to ensure that all scheduled and unscheduled maintenance is performed on the operator's aircraft on time and in a controlled and satisfactory manner.

**Organization responsible for the typen design.** The organization that holds the type certificate, or equivalent document, for an aircraft, engine or propeller type, issued by a Contracting State.

**Orthometric height.** Height of a point related to the geoid, generally presented as an MSL elevation.

**Parachute** means a device used or intended to be used to retard the fall of a body or object through the air.

**Passenger amenities.** Facilities provided for passengers which are not essential for passenger processing.

**Performance-based communication (PBC).** Communication based on performance specifications applied to the provision of air traffic services.

Note.— An RCP specification includes communication performance requirements that are allocated to system components in terms of the communication to be provided and associated transaction time, continuity, availability, integrity, safety and functionality needed for the proposed operation in the context of a particular airspace concept.

**Performance-based navigation (PBN).**

Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designatedairspace.

Note.— Performance requirements are expressed in navigation specifications (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.

**Performance-based surveillance (PBS).** Surveillance based on performance specifications applied to the provision of air traffic services.

Note.— An RSP specification includes surveillance performance requirements that are allocated to system components in terms of the surveillance to be provided and

associated data delivery time, continuity, availability, integrity, accuracy of the surveillance data, safety and functionality needed for the proposed operation in the context of a particular airspace concept.

**Performance Criteria.** Simple, evaluative statements on the required outcome of the competency element and a description of the criteria used to judge whether the required level of performance has been achieved.

**Person** means any individual, firm, partnership, corporation, company, association, joint-stock association or political body and includes trustee, receiver, assignee or other representative thereof.

**Person with disabilities.** Any person whose mobility is reduced due to a physical incapacity (sensory or locomotor), an intellectual deficiency, age, illness or any other cause of disability when using transport and whose situation needs special attention and the adaptation to the person's needs of the services made available to all passengers.

**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.

**Pilot-in-command under supervision.** Co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command, in accordance with a method of supervision acceptable to the Licensing Authority.

**Pilot (to).** To manipulate the flight controls of an aircraft during flight time.

**Pilotage** means air navigation by visual reference to landmarks.

**Pilot time** means that time in which a person:

- (a) Serves as a required cockpit crewmember;
- (b) Receives training from an authorized instructor in an aircraft, flight simulator, or flight training device; or
- (c) Gives training as an authorized instructor in an aircraft, flight simulator, or flight training device.

**Pitch setting** means the propeller blade setting as determined by the blade angle measured in a manner, and at a radius, specified by the instruction manual for the propeller.

**Point of no return.** The last possible geographic point at which an aircraft can proceed to the destination aerodrome as well as to an available en-route alternate aerodrome for a given flight.

**Portrayal.** Presentation of information to humans (ISO 19117\*).

**Position (geographical).** Set of coordinates (latitude and longitude) referenced to the mathematical reference ellipsoid which define the position of a point on the surface of the Earth.

**Post spacing.** Angular or linear distance between two adjacent elevation points.

**Powered-lift.** A heavier-than-air aircraft capable of vertical take-off, vertical landing, and low-speed flight, which depends principally on engine-driven lift devices or engine thrust for the lift during these flight regimes and on non-rotating aerofoil(s) for lift during horizontal flight.

**Practical test** means a test on the areas of operations for an airman license, rating, or authorization that is conducted by having the applicant respond to questions and demonstrate maneuvers in flight, in a flight simulator, or in a flight training device.

**Precision.** The smallest difference that can be reliably distinguished by a measurement process.

Note.— In reference to geodetic surveys, precision is a degree of refinement in performance of an operation or a degree of perfection in the instruments and methods used when taking measurements

**Precision approach procedure** means a standard instrument approach procedure for which an electronic glide slope is provided.

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

**Problematic use of substances.**

The use of one or more psychoactive substances by aviation personnel in a way that:

- (a) Constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or
- (b) Causes or worsens an occupational, social, mental or physical problem or disorder.

**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.

**Propeller** means a device for propelling an aircraft that has an engine-driven shaft and that, when rotated, produces by its action on the air, a thrust approximately perpendicular to its plane of rotation. It includes control components normally supplied by its manufacturer, but does not include main and auxiliary rotors or rotating airfoils of engines.

**Psychoactive substances.** Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

**Public authorities.** The agencies or officials of a Contracting State responsible for the application and enforcement of the particular laws and regulations of that State which relate to any aspect of these Standards and Recommended Practices.

**Public health emergency of international concern.** An extraordinary event which is determined, as provided in the International Health Regulations (2005) of the World Health Organization: (i) to constitute a public health risk to other States through the international spread of disease and (ii) to potentially require a coordinated international response.

**Public health risk.** A likelihood of an event that may affect adversely the health of human populations, with an emphasis on one which may spread internationally or may present a serious and direct danger.

**Quality system.** Documented organizational procedures and policies; internal audit of those policies and procedures; management review and recommendation for quality improvement.

**Radiotelephony.** A form of radiocommunication primarily intended for the exchange of information in the form of speech.

**Radio navigation service.** A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids.

**Rated air traffic controller.** An air traffic controller holding a licence and valid ratings appropriate to the privileges to be exercised.

**Rating.** An authorization entered on or associated with a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence.

**Release of goods.** The action by the customs authorities to permit goods undergoing clearance to be placed at the disposal of the persons concerned.

**Relief flights.** Flights operated for humanitarian purposes which carry relief personnel and relief supplies such as food, clothing, shelter, medical and other items during or after an emergency and/or disaster and/or are used to evacuate persons from a place where their life or health is threatened by such emergency and/or disaster to a safe haven in the same State or another State willing to receive such persons.

**Relief.** The inequalities in elevation of the surface of the Earth represented on the aeronautical charts by contours, hypsometric tints, shading or spot elevations.

**Removal of a person.** Action by the public authorities of a State, in accordance with its laws, to direct a person to leave that State.

**Removal order.** A written order served by a State on the operator on whose flight an inadmissible person travelled into that State, directing the operator to remove that person from its territory.

**Rendering (a licence) valid.** The action taken by a Contracting State, as an alternative to issuing its own licence, in accepting a licence issued by any other Contracting State as the equivalent of its own licence.

**Repair.** The restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the type certificate for the respective aircraft type, after it has been damaged or subjected to wear.

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

**Rescue coordination centre (RCC).** 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.

**Required communication performance (RCP).** A statement of the performance requirements for operational communication in support of specific ATM functions.

**Required surveillance performance (RSP) specification.** A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance.

**Requirement.** Need or expectation that is stated, generally implied or obligatory (ISO9000\*).

Note 1.— “Generally implied” means that it is custom or common practice for the organization, its customers and other interested parties, that the need or expectation under consideration is implied.

Note 2.— A qualifier can be used to denote a specific type of requirement, e.g. product requirement, quality management requirement, customer requirement.

Note 3.— A specified requirement is one which is stated, for example, in a document.

Note 4.— Requirements can be generated by different interested parties.

**Resolution.** A number of units or digits to which a measured or calculated value is expressed and used.

**Rest period.** A continuous and defined period of time, subsequent to and/or prior to duty, during which flight or cabin crew members are free of all duties.

**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.

**Risk assessment.** An assessment by a departing State of a deportee's suitability for escorted or unescorted removal via commercial air services. The assessment should take into account all pertinent factors, including medical, mental and physical fitness for carriage on a commercial flight, willingness or unwillingness to travel, behavioural patterns and any history of violence.

**Risk management.** The systematic application of management procedures and practices which provide border inspection agencies with the necessary information to address movements or consignments which represent a risk.

**Rotorcraft** means a heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors.

**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 surface, 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 strip.** A defined area including the runway and stopway, if provided, intended  
(a) To reduce the risk of damage to aircraft running off a runway; and  
(b) To protect aircraft flying over it during take-off or landing operations.

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

**Safe forced landing.** Unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface.

**Safety management system (SMS).** A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

**Satisfactory evidence.** A set of documents or activities that ECAA accepts as sufficient to show compliance with an airworthiness requirement.

**Search and rescue aircraft.** An aircraft provided with specialized equipment suitable for the efficient conduct of search and rescue missions.

**Secondary surveillance radar (SSR).** A surveillance radar system which uses transmitters/receivers (interrogators) and transponders.

**Serious injury.** An injury which is sustained by a person in an accident and which:  
(a) Requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or  
(b) Results in a fracture of any bone (except simple fractures of fingers, toes or nose);  
or

- (c) Involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or
- (d) Involves injury to any internal organ; or
- (e) Involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
- (f) Involves verified exposure to infectious substances or injurious radiation.

**Security equipment.** Devices of a specialized nature for use, individually or as part of a system, in the prevention or detection of acts of unlawful interference with civil aviation and its facilities.

**Set of aircraft** means aircraft that share similar performance characteristics, such as similar airspeed and altitude operating envelopes, similar handling characteristics, and the same number and type of propulsion systems.

**Shoulder.** An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.

**Show** unless the context otherwise requires, means to show or prove to the satisfaction of the ECAA.

**Sign a maintenance release (to).** To certify that maintenance work has been completed satisfactorily in accordance with the applicable Standards of airworthiness, by issuing the maintenance release referred to in Annex 6.

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

**Significant.** In the context of the medical provisions, **significant** means to a degree or of a nature that is likely to jeopardize flight safety.

**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.

**Simplex.** A method in which telecommunication between two stations takes place in one direction at a time.

Note: in application to the aeronautical mobile service, this method may be subdivided as follows :

- 1- Single channel simplex
- 2- Double channel simplex
- 3- Offset channel simplex

**Small aeroplane.** An aeroplane of a maximum certificated take-off mass of 5 700 kg or less.

**SNOWTAM.** A special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area, by means of a specific format.

**Solo flight time. Flight** time during which a student pilot is the sole occupant of an aircraft.

**Spare parts.** Articles, including engines and propellers, of a repair or replacement nature for incorporation in an aircraft.

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

**Standard atmosphere** means the atmosphere defined in U.S. Standard Atmosphere, 1962 (Geopotential altitude tables).

**State aircraft** means aircraft used exclusively in the service of the state, military, and police, in accordance with special agreement between ECAA and appropriate State, military, or police authority.

**State of Design.** The State having jurisdiction over the organization responsible for the type design.

**State of Manufacture.** The State having jurisdiction over the organization responsible for the final assembly of the aircraft, engine or propeller.

**State of Registry.** The State on whose register the aircraft is entered.

Note.— In the case of the registration of aircraft of an international operating agency on other than a national basis, the States constituting the agency are jointly and severally bound to assume the obligations which, under the Chicago Convention, attach to a State of Registry. See, in this regard, the Council Resolution of 14 December 1967 on Nationality and Registration of Aircraft Operated by International Operating Agencies which can be found in Policy and Guidance Material on the Economic Regulation of International Air Transport (Doc 9587).

**State of the Aerodrome.** The State in whose territory the aerodrome is located

Note.— State of the Aerodrome includes heliports and landing locations.

**State of the Operator.** The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

**State safety programme (SSP).** An integrated set of regulations and activities aimed at improving safety.

**Station declination.** An alignment variation between the zero degree radial of a VOR and true north, determined at the time the VOR station is calibrated.

**Stopway** means an area beyond the takeoff runway, no less wide than the runway and is centered upon the extended centerline of the runway, able to support the airplane during a rejected takeoff, without causing structural damage to the airplane, and designed by the airport authorities for use in decelerating the airplane during a rejected takeoff.

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

**Stores (Supplies).**

- (a) Stores (supplies) for consumption; and
- (b) Stores (supplies) to be taken away.

**Stores (Supplies) for consumption.** Goods, whether or not sold, intended for consumption by the passengers and the crew on board aircraft, and goods necessary for the operation and maintenance of aircraft, including fuel and lubricants.

**Stores (Supplies) to be taken away.** Goods for sale to the passengers and the crew of aircraft with a view to being landed.

**Subnetwork.** An actual implementation of a data network that employs a homogeneous protocol and addressing plan and is under control of a single authority.

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

**Survival ELT (ELT(S)).** An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated

**Synthetic flight trainer.** Any one of the following three types of apparatus in which flight conditions are simulated on the ground:

- (a) A flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;
- (b) A flight procedures trainer, which provides realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class; and
- (c) A basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.

**Synthetic vision system (SVS).** A system to display data-derived synthetic images of the external scene from the perspective of the flight deck.

**System level requirement.** The system level requirement is a high-level technical requirement that has been derived from operational requirements, technological constraints and regulatory constraints (administrative and institutional). The system level requirements are the basis for the functional requirements and lower-level requirements.

**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.

**Target level of safety (TLS).** A generic term representing the level of risk which is considered acceptable in particular circumstances.

**Threat.** Events or errors that occur beyond the influence of an operational person, increase operational complexity and must be managed to maintain the margin of safety.

**Threat management.** The process of detecting and responding to threats with countermeasures that reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired states.

*Note.*— See *Attachment C to Chapter 3 of the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868) and Circular 314 — Threat and Error Management (TEM) in Air Traffic Control for a description of undesired states.*

**Temporary admission.** The customs procedure under which certain goods can be brought into a customs territory conditionally relieved totally or partially from payment of import duties and taxes; such goods must be imported for a specific purpose and must be intended for re-exportation within a specified period and without having undergone any change except normal depreciation due to the use made of them.

**Through-flight.** A particular operation of aircraft, identified by the operator by the use throughout of the same symbol, from point of origin via any intermediate points to point of destination.

**Travel document.** A passport or other official document of identity issued by a State or organization, which may be used by the rightful holder for international travel.

**Threshold time.** The range, expressed in time, established by the State of the Operator, to an en-route alternate aerodrome, whereby any time beyond requires an EDTO approval from the State of the Operator.

**Tilt-rotor.** A powered-lift capable of vertical take-off, vertical landing, and sustained low-speed flight, which depends principally on engine-driven rotors mounted on tiltable

nacelles for the lift during these flight regimes and on non-rotating aerofoil(s) for lift during high-speed flight.

**Time in service with respect to maintenance time records** means the time from the moment an aircraft leaves the surface of the earth until it touches it at the next point of landing.

**Total vertical error (TVE).** The vertical geometric difference between the actual pressure altitude flown by an aircraft and its assigned pressure altitude (flight level).

**Training center** means an organization governed by the applicable requirements of Parts 141, 142, and 147 that provides training, testing, and checking under contract or other arrangement to certificate holders subject to the requirements of the ECARs.

**Training time** means training received:

- (a) In flight from an authorized instructor;
- (b) On the ground from an authorized instructor; or
- (c) In a flight simulator or flight training device from an authorized instructor.

**Type as used with respect to the certification, ratings, privileges and limitations of airmen** means a specific make and basic model of aircraft, including modifications thereto that do not change its handling or flight characteristics.

**Type Certificate.** A document issued by a Contracting State to define the design of an aircraft, engine or propeller type and to certify that this design meets the appropriate airworthiness requirements of that State.

Note.— In some Contracting States a document equivalent to a type certificate may be issued for an engine or propeller type.

**Type design.** The set of data and information necessary to define an aircraft, engine or propeller type for the purpose of airworthiness determination.

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

**Unaccompanied baggage.** Baggage that is transported as cargo and may or may not be carried on the same aircraft with the person to whom it belongs.

**Unclaimed baggage.** Baggage that arrives at an airport and is not picked up or claimed by a passenger.

**Unidentified baggage.** Baggage at an airport, with or without a baggage tag, which is not picked up by or identified with a passenger.

**Unlading.** The removal of cargo, mail, baggage or stores from an aircraft after a landing.

**VFR (visual flight rules)** means flight in reference to the rules, which apply when weather conditions are equal to or better than the established visibility, distance from cloud, and ceiling minimums.

**VHF digital link (VDL).** A constituent mobile subnetwork of the aeronautical telecommunication network (ATN), operating in the aeronautical mobile VHF frequency band. In addition, the VDL may provide non-ATN functions such as, for instance, digitized voice.

**Visitor.** Any person who disembarks and enters the territory of a Contracting State other than that in which that person normally resides; remains there lawfully as prescribed by that Contracting State for legitimate non-immigrant purposes, such as touring, recreation, sports, health, family reasons, religious pilgrimages, or business; and does not take up any gainful occupation during his stay in the territory visited.

**Visual meteorological conditions (VMC)** means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling equal to or better than specified minimums.

**Voice-automatic terminal information service (Voice-ATIS).** The provision of ATIS by means of continuous and repetitive voice broadcasts.

**Wet runway.** The runway surface is covered by any visible dampness or water up to and including 3 mm deep within the intended area of use.

### 1.3 Abbreviations and symbols

ALS	means approach light system.
ASR	means airport surveillance radar.
ATC	means air traffic control.
CAA	means Civil Aviation Authority
CAS	means calibrated airspeed.
DH	means decision height.
DME	means distance measuring equipment.
EAC	means “ Egyptian advisory circular ”
EAC	For ECAR’s 170 , 171 , 172 , 173 , 174 , 303 and 311 means “ Egyptian Air Navigation Circular “
EAS	means equivalent airspeed
ECAA	means Egyptian Civil Aviation Authority.
EDTO	means Extended Diversion Time Operations
FM	means fan marker.
GS	means glide slope.
HECAA	means Head of Egyptian Civil Aviation Authority
HIRL	means high-intensity runway light system.
IAS	means indicated airspeed.
ICAO	means International Civil Aviation Organization.
IFR	means instrument flight rules.
ILS	means instrument landing system.
IM	means ILS inner marker.
INT	means intersection.
LDA	means localizer-type directional aid.
LMM	means compass locator at middle marker.
LOC	means ILS localizer.
LOM	means compass locator at other marker.
M	means mach number.
MAA	means maximum authorized IFR altitude.
MALS	means medium-intensity approach light system.
MALSR	means medium-intensity approach light system with runway alignment indicator lights.
MCA	means minimum crossing altitude.
MDA	means minimum descent altitude.
MEA	means minimum en route IFR altitude.
MM	means ILS middle marker.
MOCA	means minimum obstruction clearance altitude.
MRA	means minimum reception altitude.
MSL	means mean sea level.
NDB (ADF)	means nondirectional beacon (automatic direction finder )
NOPT	means no procedure turn required.
OM	means ILS outer marker.
PAR	means precision approach radar.
PBC	Performance-based communication
PBN	Performance-based navigation
PBS	Performance-based surveillance
RAIL	means runway alignment indicator light system.
RBN	means radio beacon.
RCIM	means runway centerline marking.

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RCLS	means runway centerline line system.
RCP	Required communication performance
REIL	means runway end identification lights.
RNAV	Area navigation
RNP	Required navigation performance
RSP	Required surveillance performance
RVR	means runway visual range as measured in the touchdown zone area
SALS	means short approach light system.
SQAMS	means Safety and Quality Assurance Management System
SSALS	means simplified short approach light system.
SSALSR	means simplified short approach light system with runway alignment indicator lights.
TACAN	means ultra-high frequency tactical air navigation aid.
TAS	means true airspeed.
TDZL	means touchdown zone lights.
TVOR	means very high frequency terminal omnirange station.
V <sub>a</sub>	means design-maneuvering speed.
V <sub>c</sub>	means design cruising speed.
V <sub>d</sub>	means design diving speed.
V <sub>df</sub> /M <sub>df</sub>	means demonstrated flight diving speed.
V <sub>f</sub>	means design flap speed.
V <sub>fc</sub> /M <sub>fc</sub>	means maximum speed for stability characteristics.
V <sub>fe</sub>	means maximum flap extended speed.
VFR	means visual flight rules.
V <sub>c</sub>	means maximum speed in level flight with maximum continuous power.
VHF	means very high frequency.
V <sub>le</sub>	means maximum landing gear extended speed
V <sub>lo</sub>	means maximum landing gear operation speed.
V <sub>tof</sub>	means lift-off speed.
V <sub>mc</sub>	means minimum control speed with the critical engine inoperative.
V <sub>mo</sub> /M <sub>mo</sub>	means maximum operating limit speed.
V <sub>mu</sub>	means minimum unstick speed.
V <sub>ne</sub>	means never-exceed speed.
VOR	means very high frequency omnirange station.
V <sub>r</sub>	means rotation speed.
V <sub>s</sub>	means the stalling speed or the minimum steady flight speed at which the airplane is controllable.
V <sub>so</sub>	means the stalling speed or the minimum steady flight speed obtained in landing configuration.
V <sub>s1</sub>	means the stalling speed or the steady flight speed obtained in specified configuration.
V <sub>x</sub>	means speed for best angle of climb.
V <sub>y</sub>	means speed for best rate of climb.
V <sub>1</sub>	means critical-engine-failure speed.
V <sub>2</sub>	means takeoff safety speed.
V <sub>2min</sub>	means minimum takeoff safety speed.

#### 1.4 Rules of construction.

- (a) In all ECAR Parts, unless the context requires otherwise:
- (1) Words importing the singular include the plural;
  - (2) Words importing the plural include the singular; and
  - (3) Words importing the masculine gender include the feminine.
- (b) In all ECAR Parts, the word:
- (1) "Shall" or "Must" or (يجب) are considered mandatory as of the date of effectiveness of the revised Parts;
  - (2) In the event of non compliance with a requirement of the revised Parts that include the operative verb "should" or any other words, the applicant or certificate holder shall submit a relevant compliance plan with all those

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requirements, at the date of effectiveness of the revised Parts to be reviewed and approved by ECAA prior to certification or renewal of certification;

- (2) The words "no person may \* \* \*" or "a person may not \* \* " mean that no person is required, authorized, or permitted to do the act prescribed; and
- (3) "Includes" means "includes but is not limited to".