







**Maldives Civil Aviation Authority**  
**Republic of Maldives**

Maldivian Civil Aviation Regulations

# **MCAR-1 Definitions and Abbreviations**

## **Foreword**

Maldives Civil Aviation Authority, in exercise of the powers conferred on it under Articles 5 and 6 of the Maldives Civil Aviation Act 2/2012 has adopted this Regulation.

This Regulation shall be cited as MCAR-1 Definitions and Abbreviations and shall come in to force on 20 February 2022.

This regulation contains the definitions of the terms used in other civil aviation regulations issued by the Maldives Civil Aviation Authority.

Existing definitions and abbreviations in the field of civil aviation as listed in MCAR-1 Definitions and Abbreviations dated 30 September 2020 will be repealed as from 20 February 2022.





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## MCAR-1.1 Abbreviations and Symbols

### A

<b>ACAS</b>	Airborne Collision Avoidance System
<b>AD</b>	Airworthiness Directive
<b>ADFR</b>	Automatic Deployable Flight Recorder
<b>ADIZ</b>	Air Defence Identification Zone
<b>ADS-B</b>	Automatic Dependent Surveillance Broadcast
<b>ADS-C</b>	Automatic Dependent Surveillance Contract
<b>AFM</b>	Aircraft Flight Manual
<b>AFS</b>	Aeronautical Fixed Service
<b>AFTM</b>	Air Traffic Flow Management
<b>AFTN</b>	Aeronautical Fixed Telecommunication Network
<b>AICC</b>	Accident Investigation Coordination Committee
<b>AIM</b>	Aeronautical Information Management
<b>AIP</b>	Aeronautical Information Publication
<b>AIRAC</b>	Aeronautical Information Regulation and Control
<b>AIS</b>	Aeronautical Information Service
<b>AMA</b>	Area Minimum Altitude
<b>AMC</b>	Acceptable Means of Compliance
<b>AMD</b>	Aerodrome Mapping Data
<b>AMDB</b>	Aerodrome Mapping Database
<b>ANSP</b>	Air Navigation Service Provider
<b>AOC</b>	Air Operator Certificate
<b>APU</b>	Auxiliary Power Unit
<b>APV</b>	Approach Procedure with Vertical Guidance
<b>ASDA</b>	Accelerate-Stop Distance Available
<b>ASE</b>	Altimetry System Error
<b>ATC</b>	Air Traffic Control
<b>ATIS</b>	Automatic Terminal Information Service
<b>ATM</b>	Air Traffic Management
<b>ATS</b>	Air Traffic Service

### B

<b>BITD</b>	Basic Instrument Training Device
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### C

<b>CAA</b>	Maldives Civil Aviation Authority
<b>CAD</b>	Civil Aviation Department
<b>CAS</b>	Calibrated Airspeed



<b>CAT<sup>1</sup></b>	Commercial Air Transport
<b>CDFA</b>	Continuous Descent Final Approach
<b>CDL</b>	Configuration Deviation List
<b>CMV</b>	Converted Meteorological Visibility
<b>CPDLC</b>	Controller-Pilot Data Link Communications
<b>CRC</b>	Cyclic Redundancy Check
<b>CS</b>	Certification Specifications
<b>CVS</b>	Combined Vision System

D

<b>DA</b>	Decision Altitude
<b>D-ATIS</b>	Data Link-Automatic Terminal Information Service
<b>DEM</b>	Digital Elevation Model
<b>DH</b>	Decision Height
<b>DOA</b>	Design Organisation Approval
<b>DPATO</b>	Defined Point After Take-Off
<b>DPBL</b>	Defined Point Before Landing

E

<b>EASA</b>	European Aviation Safety Agency
<b>EDTO</b>	Extended Diversion Time Operations
<b>EFB</b>	Electronic Flight Bag
<b>ELT</b>	Emergency Locator Transmitter
<b>ERA</b>	En-Route Alternate
<b>EVS</b>	Enhanced Vision System

F

<b>FAA</b>	Federal Aviation Administration
<b>FAS</b>	Final Approach Segment
<b>FATO</b>	Final Approach and Take-Off Area
<b>FDM</b>	Flight Data Monitoring
<b>FDP</b>	Flight Duty Period
<b>FFS</b>	Full Flight Simulator
<b>FI</b>	Flight Instructor
<b>FNPT</b>	Flight And Navigation Procedures Trainer
<b>FRMS</b>	Fatigue Risk Management System
<b>FSTD</b>	Flight Simulation Training Device
<b>FTD</b>	Flight Training Device

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<sup>1</sup> Different from CAT I, CAT II, CAT IIIA, CAT IIIB.

G

- GLS** GBAS landing system
- GM** Guidance Material

H

- HHO** Helicopter hoist operation
- HoT** Hold-over time
- HUD** Head-up display
- HUDLS** Head-up guidance landing system

I

- IAP** Instrument Approach Procedure
- IAVW** International Airways Volcano Watch
- ICAO** International Civil Aviation Organisation
- IFR** Instrument Flight Rules
- ILS** Instrument Landing System
- IMC** Instrument Meteorological Conditions

J

- JAA** Joint Aviation Authorities
- JRCC** Joint Rescue Coordination Centre

L

- LAPL** Light Aircraft Pilot Licence
- LDA** Landing Distance Available
- LDP** Landing Decision Point
- LVP** Low Visibility Procedures
- LVTO** Low Visibility Take-Off

M

- MAPT** Missed Approach Point
- MCAA** Maldives Civil Aviation Authority
- MCAR** Maldivian Civil Aviation Regulation
- MCC** Multi-Crew Cooperation
- MDA** Minimum Descent Altitude
- MDH** Minimum Descent Height
- MEA** Minimum En-Route Altitude
- MEL** Minimum Equipment List
- MMEL** Master Minimum Equipment List

**MOCA** Minimum Obstacle Clearance Altitude  
**MOPSC** Maximum Operational Passenger Seating Configuration

N

**NDB** Non-directional Beacon  
**NOF** International NOTAM office  
**NPA** Non-precision approach  
**NVG** Night vision goggles  
**NVIS** Night vision imaging system

O

**OCA** Obstacle clearance altitude  
**OCH** Obstacle clearance height  
**OFC** Obstacle Free Zone  
**OTD** Other training device

P

**PBC** Performance-Based Communication  
**PBN** Performance-Based Navigation  
**PBS** Performance-Based Surveillance  
**PF** Pilot Flying  
**PIB** Pre-Flight Information Bulletin  
**PICUS** Pilot-In-Command Under Supervision  
**PIS** Public Interest Site  
**PNF** Pilot Not Flying  
**POA** Production Organisation Approval

Q

**QTG** Qualification test guide

R

**RCC** Rescue Coordination Centre  
**RCP** Required Communication Performance  
**RNAV** Area Navigation  
**RNP** Required Navigation Performance  
**RPA** Remotely Piloted Aircraft  
**RPAS** Remotely Piloted Aircraft System  
**RSC** Rescue Subcentre  
**RSP** Required Surveillance Performance  
**RVR** Runway Visual Range

S

<b>SAP</b>	Stabilized Approach
<b>SB</b>	Service Bulletin
<b>SMS</b>	Safety Management System
<b>SPIC</b>	Student Pilot-In-Command
<b>SRR</b>	Search And Rescue Region
<b>SSP</b>	State Safety Programme
<b>SVS</b>	Synthetic Vision System

T

<b>TAA</b>	Terminal Arrival Altitude
<b>TCAC</b>	Tropical Cyclone Advisory Centre
<b>TDP</b>	Take-Off Decision Point
<b>TI</b>	Technical Instructions
<b>TLOF</b>	Touchdown And Lift-Off Area
<b>TLS</b>	Target Level of Safety
<b>TMG</b>	Touring Motor Glider
<b>TODA</b>	Take-Off Distance Available
<b>TORA</b>	Take-Off Run Available
<b>TSO</b>	Technical Standard Order
<b>TVE</b>	Total Vertical Error

U

<b>ULR</b>	Ultra Long Range Operations
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V

<b>VAAC</b>	Volcanic Ash Advisory Centre
<b>VFR</b>	Visual Flight Rules
<b>VHF</b>	Very High Frequency
<b>VLOS</b>	Visual Line-Of-Sight
<b>VMC</b>	Visual Meteorological Conditions

W

<b>WAFC</b>	World Area Forecast Centre
<b>WAFS</b>	World Area Forecast System
<b>WOCL</b>	Window Of Circadian Low

## MCAR-1.2 General Definitions

<b>Accelerate-stop distance available (ASDA)</b>	The length of the take-off run available plus the length of stopway, if such stopway is declared available by the State of the aerodrome and is capable of bearing the mass of the aeroplane under the prevailing operating conditions
<b>Acceptable means of compliance (AMC)</b>	Non-binding standards adopted by CAA to illustrate means to establish compliance with this Regulation and its Implementing Rules
<b>Acceptance checklist</b>	A document used to assist in carrying out a check on the external appearance of packages of dangerous goods and their associated documents to determine that all appropriate requirements have been met with
<b>Accepted/Acceptable</b>	Not objected to by CAA as suitable for the purpose intended. <i>(Source: Annex III to regulation (EC) No 1899/2006 of the European parliament and of the council of 12 December 2006)</i>
<b>Accepting unit</b>	Air traffic control unit next to take control of an aircraft
<b>Accident</b>	<p>An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:</p> <p>(a) a person is fatally or seriously injured as a result of:</p> <ol style="list-style-type: none"><li>1. being in the aircraft, or</li><li>2. direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or</li><li>3. direct exposure to jet blast,</li></ol> <p>except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to</p>

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 a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windcreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to maintain rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or

(c) the aircraft is missing or is completely inaccessible.

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

**Accident Investigation  
Coordination  
Committee (AICC)**

Appointed by the Minister for Civil Aviation and empowered to conduct an aircraft accident/incident investigation under the control of the investigator-in-charge

**Acclimatised**

That a crew member is considered to be acclimatised to a 2-hour wide time zone surrounding the local time of his/her point of departure. When the local time of the place where a duty commences differs by more than 2 hours from that at the place where a duty ends, the crew member is considered to be acclimatised in accordance with the values in the table below for the calculation of the maximum daily FDP.

Time difference (h) between reference time and local time where the crew member starts the subsequent duty	Time elapsed since reporting at reference time
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	<48	48- 71:59	71- 95:59	96- 119:59	≥20
<4	B	D	D	D	D
≤6	B	X	D	D	D
≤9	B	X	X	D	D
≤12	B	X	X	X	D

'B' means acclimatised to the local time of the departure time zone,

'D' means acclimatised to the local time where the crew member starts his/her subsequent duty, and

'X' means that a crew member is in an unknown state of acclimatisation

**Accommodation**

For the purpose of standby and split duty, a quiet and comfortable place not open to the public with the ability to control light and temperature, equipped with adequate furniture that provides a crew member with a possibility to sleep, with enough capacity to accommodate all crew members present at the same time and with access to food and drink.

**Accredited medical conclusion**

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

**Accredited Representative**

A person designated by a State, on the basis of his or her qualifications, for the purpose of participating in an investigation conducted by another State. The accredited representative would normally be from the State's accident investigation authority.

**Accuracy**

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

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

**Acrobatic flight**

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

**Acts of unlawful interference**

These are acts or attempted acts such as to jeopardize the safety of civil aviation and air transport, i.e.:

- unlawful seizure of aircraft in flight,
- unlawful seizure of aircraft on the ground,
- hostage-taking on board an aircraft or on aerodromes,

- forcible intrusion on board an aircraft, at an airport or on the premises of an aeronautical facility,
- introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes,
- communication of false information as to jeopardize the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public, at an airport or on the premises of a civil aviation facility.

**Adequate aerodrome** An aerodrome on which the aircraft can be operated, taking account of the applicable performance requirements and runway characteristics

**ADS-C agreement** A reporting plan which establishes the conditions of ADS-C data reporting (i.e. data required by the air traffic services unit and frequency of ADS-C reports which have to be agreed to prior to using ADS-C in the provision of air traffic services).

*Note: The terms of the agreement will be exchanged between the ground system and the aircraft by means of a contract, or a series of contracts.*

**Advection** The horizontal transfer of air mass properties by the velocity field of the atmosphere

**Advection fog** Fog which forms in the lower part of a warm moist air mass moving over a colder surface (land or water).

**Adviser** A person appointed by a State, on the basis of his or her qualifications, for the purpose of assisting its accredited representative in an investigation.

**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.



<b>Aerobatic flight</b>	An intentional manoeuvre involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight or for instruction for licences or ratings other than the aerobatic rating
<b>Aerodrome</b>	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.
<b>Aerodrome Beacon</b>	aeronautical beacon used to indicate the location of an aerodrome from the air.
<b>Aerodrome climatological summary</b>	Concise summary of specified meteorological elements at an aerodrome, based on statistical data.
<b>Aerodrome climatological table.</b>	Table providing statistical data on the observed occurrence of one or more meteorological elements at an aerodrome
<b>Aerodrome Certificate</b>	A certificate issued by the appropriate authority under applicable regulations for the operation of an aerodrome.
<b>Aerodrome control service</b>	Air traffic control service for aerodrome traffic.
<b>Aerodrome control tower</b>	A unit established to provide air traffic control service to aerodrome traffic.
<b>Aerodrome elevation.</b>	The elevation of the highest point of the landing area.
<b>Aerodrome identification sign</b>	A sign placed on an aerodrome to aid in identifying the aerodrome from the air.
<b>Aerodrome mapping data (AMD)</b>	Data collected for the purpose of compiling aerodrome mapping information for aeronautical uses.  <i>Note.— Aerodrome mapping data are collected for purposes that include the improvement of the user's situational awareness, surface navigation operations, training, charting and planning.</i>
<b>Aerodrome mapping database (AMDB)</b>	A collection of aerodrome mapping data organized and arranged as a structured data set.
<b>Aerodrome meteorological office</b>	An office designated to provide meteorological service for aerodromes serving international air navigation.

<b>Aerodrome meteorological station</b>	A station designated to make observations and meteorological reports for use in international air navigation.
<b>Aerodrome operating minima</b>	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 precision approach and landing operations, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the category of the operation; (c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H); and (d) landing in non-precision approach and landing operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions.
<b>Aerodrome reference point.</b>	The designated geographical location of an aerodrome.
<b>Aerodrome traffic.</b>	All traffic on the maneuvering area of an aerodrome and all aircraft flying in the vicinity of an aerodrome.  <i>Note: An aircraft is in the vicinity of an aerodrome when it is in, entering or leaving an aerodrome traffic circuit.</i>
<b>Aerodrome traffic density</b>	(a) Light. Where the number of movements in the mean busy hour is not greater than 15 per runway or typically less than 20 total aerodrome movements. (b) Medium. Where the number of movements in the mean busy hour is of the order of 16 to 25 per runway or typically between 20 to 35 total aerodrome movements. (c) Heavy. Where the number of movements in the mean busy hour is of the order of 26 or more per runway or typically more than 35 total aerodrome movements.  <i>Note 1. — The number of movements in the mean busy hour is the arithmetic mean over the year of the number of movements in the daily busiest hour.</i> <i>Note 2. — Either a take-off or a landing constitutes a movement.</i>

<b>Aeronautical beacon</b>	An aeronautical ground light visible at all azimuths, either continuously or intermittently, to designate a particular point on the surface of the earth.
<b>Aeronautical chart</b>	A representation of a portion of the Earth, its culture and relief, specifically designated to meet the requirements of air navigation. Aircraft stand. A designated area on an apron intended to be used for parking an aircraft.
<b>Aeronautical data</b>	A representation of aeronautical facts, concepts or instructions in a formalized manner suitable for communication, interpretation or processing.
<b>Aeronautical fixed service (AFS)</b>	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.
<b>Aeronautical fixed telecommunication network (AFTN)</b>	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.
<b>Aeronautical ground light</b>	Any light specially provided as an aid to air navigation, other than a light displayed on an aircraft.
<b>Aeronautical Information Circular (AIC).</b>	A notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP, but which relates to flight safety, air navigation, technical, administrative or legislative matters.
<b>Aeronautical information management (AIM)</b>	The dynamic, integrated management of aeronautical information through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties.
<b>Aeronautical Information Publication (AIP)</b>	A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.
<b>Aeronautical information Service (AIS)</b>	A service established within the defined area of coverage responsible for the provision of aeronautical data and aeronautical information necessary for the safety, regularity and efficiency of air navigation.

<b>Aeronautical information.</b>	Information resulting from the assembly, analysis and formatting of aeronautical data.
<b>Aeronautical mobile service (RR S1.32)</b>	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.
<b>Aeronautical station (RR S1.81)</b>	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.
<b>Aeronautical telecommunication station</b>	A station in the aeronautical telecommunication service.
<b>Aeroplane</b>	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.
<b>Aeroplane reference field length</b>	<p>The minimum field length required for take-off at maximum certificated take-off mass, sea level, standard atmospheric conditions, still air and zero runway slope, as shown in the appropriate aeroplane flight manual prescribed by the certificating authority or equivalent data from the aeroplane manufacturer. Field length means balanced field length for aeroplanes, if applicable, or take-off distance in other cases.</p> <p><i>Note — Attachment A, Section 2 provides information on the concept of balanced field length and the Airworthiness Manual (Doc 9760) contains detailed guidance on matters related to take-off distance.</i></p>
<b>Aeroplane required to be operated with a co-pilot</b>	A type of aeroplane which is required to be operated with a co-pilot as specified in the flight manual or by the air operator certificate
<b>Aided night vision imaging system (NVIS) flight</b>	In the case of NVIS operations, that portion of a visual flight rules (VFR) flight performed at night when a crew member is using night vision goggles (NVG)
<b>AIP Amendment</b>	Permanent changes to the information contained in the AIP.
<b>AIP Supplement</b>	Temporary changes to the information contained in the AIP which are published by means of special pages.

<b>Aeronautical information regulation and control (AIRAC)</b>	A system aimed at advance notification, based on common effective dates, of circumstances that necessitate significant changes in operating practices.
<b>Airborne</b>	Entirely supported by aerodynamic forces. (Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)
<b>Airborne collision avoidance system (ACAS)</b>	An aircraft system based on secondary surveillance radar (SSR) transponder signals which operate independently of ground based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders.
<b>Aircraft</b>	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.
<b>Aircraft — category</b>	Classification of aircraft according to specified basic characteristics, e.g. aeroplane, helicopter, glider, free balloon
<b>Aircraft classification number (ACN)</b>	A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category. (Applicable until 27 November 2024)  <i>Note — The aircraft classification number is calculated with respect to the center of gravity (CG) position which yields the critical loading on the critical gear. Normally the aftmost CG position appropriate to the maximum gross apron (ramp) mass is used to calculate the ACN. In exceptional cases the forward most CG position may result in the nose gear loading being more critical.</i>
<b>Aircraft classification Rating (ACR)</b>	A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category. (Applicable as of 28 November 2024)  <i>Note. — The aircraft classification rating is calculated with respect to the centre of gravity (CG) position which yields the critical loading on the critical gear. Normally the aftmost CG position appropriate to the maximum gross apron (ramp) mass is used to calculate the ACR. In exceptional cases the forwardmost CG position may result in the nose gear loading being more critical.</i>

<b>Aircraft — type of</b>	All aircraft of the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics.
<b>Aircraft avionics</b>	A term designating any electronic device — including its electrical part — for use in an aircraft, including radio, automatic flight control and instrument systems
<b>Aircraft certificated for single-pilot operation</b>	A type of aircraft which CAA has determined, during the certification process, can be operated safely with a minimum crew of one pilot
<b>Aircraft observation</b>	The evaluation of one or more meteorological elements made from an aircraft in flight.
<b>Aircraft operations manual</b>	A manual, 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
<b>Aircraft required to be operated with a co-pilot</b>	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
<b>Aircraft stand</b>	A designated area on an apron intended to be used for parking an aircraft.
<b>Aircraft tracking</b>	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.
<b>Aircrew</b>	Flight crew and cabin crew
<b>Air defence identification zone (ADIZ)</b>	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).
<b>Air ground communication</b>	Two-way communication between aircraft and stations or locations on the surface of the earth.
<b>Air mass</b>	An extensive body of the atmosphere in which physical properties, particularly temperature and humidity, exhibit only small and continuous differences in the horizontal. It may extend over an

area of several million square kilometres and over a height of several kilometres

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

**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 the PANS-ATM (ICAO Doc 4444).*

**Air taxi operation** For the purpose of flight time and duty time limitations, non-scheduled on demand commercial air transport operations with an aeroplane with a maximum operational passenger seating configuration (MOPSC) of 19 or less

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

*Note: The actual height may vary, and some helicopters may require air-taxiing above 8 m (25 ft) AGL to reduce ground effect turbulence or provide clearance for cargo sling loads.*

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

**Air temperature** (Also termed surface temperature in meteorology). The ambient temperature indicated by a thermometer exposed to the air but sheltered from direct solar radiation. The temperature indicated by a thermometer placed in an instrument shelter 1.5 to two meters above ground.

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

**Air traffic control clearance** Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.

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

*Note 2: The abbreviated term “clearance” may be prefixed by the words “taxi”, “take-off”, “departure”, “en route”, “approach” or “landing” to indicate the particular portion of flight to which the air traffic control clearance relates.*

**Air traffic control service**

A service provided for the purpose of:

- (a) preventing collisions:
  - 1. between aircraft, and
  - 2. on the maneuvering 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 flow management (ATFM)**

A service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

**Air traffic management (ATM)**

The dynamic, integrated management of air traffic and airspace (including air traffic services, airspace management and air traffic flow management) — safely, economically and efficiently — through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions.

**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 airspace.**

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



*Note: ATSairspaces are classified as Class A to G as described in MCAR 11, 2.6.*

**Air traffic services reporting office**

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

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

**Air traffic services unit**

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

**Air traffic**

All aircraft in flight or operating on the maneuvering area of an aerodrome.

**Air transit route**

A defined route for the air transiting of helicopters.

**Airframe**

The fuselage, booms, nacelles, cowlings, fairings, aerofoil surfaces (including rotors but excluding propellers and rotating aerofoils of engines), and landing gear of an aircraft and their accessories and controls.

*(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)*

**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.

**Airmanship**

The consistent use of good judgment 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 duty**

A pre-notified and defined period of time during which a crew member is required by the operator to be at the airport immediately available to receive an assignment for a flight, positioning or other duty

<b>Airship</b>	A power-driven lighter-than-air aircraft
<b>Airway</b>	A control area or portion thereof established in the form of a corridor.
<b>Airworthy</b>	The status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation.
<b>AIS product</b>	Aeronautical data and aeronautical information provided in the form of the elements of the Integrated Aeronautical Information Package (except NOTAM and PIB), including aeronautical charts, or in the form of suitable electronic media.
<b>ALERFA</b>	The code word used to designate an alert phase.
<b>Alert phase</b>	A situation wherein apprehension exists as to the safety of an aircraft and its occupants.
<b>Alerting post</b>	Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue coordination centre or rescue subcentre.
<b>Alerting service</b>	A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.
<b>Alternate Aerodrome</b>	<p>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 where the necessary services and facilities are available, where aircraft performance requirements can be met and which is operational at the expected time of use. Alternate aerodromes include the following:</p> <p><i>Take-of alternate:</i> An alternate aerodrome at which an aircraft would be able to land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure.</p> <p><i>En-route alternate:</i> An alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en route.</p> <p><i>ETOPS en-route alternate:</i> A suitable and appropriate alternate aerodrome at which an aeroplane would be able to land after</p>

experiencing an engine shut-down or other abnormal or emergency condition while en route in an ETOPS operation.

*Destination alternate.* An alternate aerodrome to which an aircraft would be able to land should it become either impossible or inadvisable to land at the aerodrome of intended landing.

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

**Alternate heliport**

A heliport to which a helicopter may proceed when it becomes either impossible or inadvisable to proceed to or to land at the heliport of intended landing where the necessary services and facilities are available, where aircraft performance requirements can be met and which is operational at the expected time of use. Alternate heliports include the following:

*Take-off alternate:* An alternate heliport at which a helicopter would be able to land should this become necessary shortly after take-off and it is not possible to use the heliport of departure.

*En-route alternate:* An alternate heliport at which a helicopter would be able to land in the event that a diversion becomes necessary while en route.

*Destination alternate:* An alternate heliport at which a helicopter would be able to land should it become either impossible or inadvisable to land at the heliport of intended landing.

**Alternative means of compliance**

Those means that propose an alternative to an existing acceptable means of compliance or those that propose new means to establish compliance with civil aviation regulations for which no associated AMC have been adopted by CAA

**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.

- Anemometer** Instrument which measures wind speed or wind speed and direction. Cup anemometer is used to measure the wind speed from the speed of rotation of a windmill which consist of 3 or 4 hemispherical or conical cups, each fixed to the ends of horizontal arms attached to a vertical axis. Byram anemometer is a variety of the cup anemometer. Counting anemometer has cups or a fan whose rotation is transmitted to a technical counter which integrates directly the air movement speed. Hand anemometer is small portable anemometer held at arm's length by an observer making a wind speed measurement. Pressure tube anemometer (Dines anemometer) is an instrument which derives wind speed from measurements of the dynamic wind pressures. Wind blowing into a tube develops a pressure greater than the static pressure, while wind blowing across a tube develops a pressure less than the static. This pressure difference is proportional to the square of the wind speed.
- Aneroid barometer** An instrument for measuring atmospheric pressure. It is constructed on the following principles: an aneroid capsule (Vidie capsule, which is a thin, disk-shaped box or capsule, usually metallic) is partially evacuated of gas, and is restrained from collapsing by an external or internal spring. The deflection of the spring will be nearly proportional to the difference between the internal and external pressures. Magnification of the spring deflection is obtained both by connecting capsules in series and by mechanical linkages.
- Anticipated operating conditions** Those conditions which are known from experience or which can be reasonably envisaged to occur during the operational life of the aircraft taking into account the operations for which the aircraft is made eligible, the conditions so considered being relative to the meteorological state of the atmosphere, to the configuration of terrain, to the functioning of the aircraft, to the efficiency of personnel and to all the factors affecting safety in flight. Anticipated operating conditions do not include:
- (a) those extremes which can be effectively avoided by means of operating procedures; and
  - (b) those extremes which occur so infrequently that to require the Standards to be met in such extremes would give a higher level of airworthiness than experience has shown to be necessary and practical.

<b>Anti-icing</b>	in the case of ground procedures, A procedure that provides protection against the formation of frost or ice and accumulation of snow on treated surfaces of the aircraft for a limited period of time (hold-over time)
<b>Application</b>	Manipulation and processing of data in support of user requirements (ISO 19104*).
<b>Approach and landing phase — helicopters</b>	That part of the flight from 300 m (1 000 ft) above the elevation of the FATO, if the flight is planned to exceed this height, or from the commencement of the descent in the other cases, to landing or to the bailed landing point.
<b>Approach and landing operations using instrument approach procedures</b>	<p>Instrument approach and landing operations are classified as follows:</p> <p>Non-precision approach and landing operations. An instrument approach and landing which utilizes lateral guidance but does not utilize vertical guidance</p> <p>Approach and landing operations with vertical guidance. An instrument approach and landing which utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations.</p> <p>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.</p> <p><i>Note.— Lateral and vertical guidance refers to the guidance provided either by:</i></p> <p><i>(a) a ground-based navigation aid; or</i></p> <p><i>(b) computer generated navigation data.</i></p> <p>Categories of precision approach and landing operations:</p> <p>Category I (CAT I) operation. A precision instrument approach and landing with a decision height not lower than 60 m (200 ft) and with either a visibility not less than 800 m or a runway visual range not less than 550 m.</p>

Category II (CAT II) operation. A precision instrument approach and landing with a decision height lower than 60 m (200 ft), but not lower than 30 m (100 ft), and a runway visual range not less than 350 m.

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

- (a) decision height lower than 30 m (100 ft) or no decision height; and
- (b) a runway visual range not less than 200 m.

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

- (a) a decision height lower than 15 m (50 ft) or no decision height; and
- (b) a runway visual range less than 200 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).*

**Approach control service**

Air traffic control service for arriving or departing controlled flights.

**Approach control unit**

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

**Approach procedure with vertical guidance (APV) operation**

an instrument approach which utilises lateral and vertical guidance, but does not meet the requirements established for precision approach and landing operations, with a decision height (DH) not lower than 250 ft and a runway visual range (RVR) of not less than 600 m

*(Source: European Commission Regulation (EU) No. 800/2013 dated 14 August 2013)*

<b>Appropriate ATS authority</b>	The relevant authority designated by the State responsible for providing air traffic services in the airspace concerned.
<b>Appropriate authority</b>	(a) Regarding flight over the high seas: The relevant authority of the State of Registry. (b) Regarding flight other than over the high seas: The relevant authority of the State having sovereignty over the territory being overflown.
<b>Approved (by CAA)</b>	Documented (by CAA) as suitable for the purpose intended. <i>(Source: Annex III to regulation (EC) No 1899/2006 of the European parliament and of the council of 12 December 2006)</i>
<b>Approved training</b>	Training conducted under special curricula and supervision approved by CAA.
<b>Approved training organization</b>	An organization approved by CAA to conduct approved training
<b>Apron</b>	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.
<b>Apron management service</b>	A service provided to regulate the activities and the movement of aircraft and vehicles on an apron.
<b>Area control centre</b>	A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.
<b>Area control service</b>	Air traffic control service for controlled flights in control areas.
<b>Area Minimum Altitude (AMA)</b>	The minimum altitude to be used under instrument meteorological conditions (IMC) that will provide a minimum obstacle clearance within a specified area, normally formed by parallels and meridians.
<b>Area navigation (RNAV)</b>	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.*

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

**Arresting system** A system designed to decelerate an aeroplane overrunning the runway.

**Arrival routes** Routes identified in an instrument approach procedure by which aircraft may proceed from the en-route phase of flight to an initial approach fix.

**Assemble** A process of merging data from multiple sources into a database and establishing a baseline for subsequent processing.

*Note.— The assemble phase includes checking the data and ensuring that detected errors and omissions are rectified.*

**Assessment** The conclusion on the medical fitness of a person based on the evaluation of the person’s medical history and/or aero-medical examinations as required in this Part and further examinations as necessary, and/or medical tests such as, but not limited to, ECG, blood pressure measurement, blood testing, X-ray

**Assessment** In the context of management system performance monitoring, continuous improvement and oversight, refers to a planned and documented activity performed by competent personnel to evaluate and analyse the achieved level of performance and maturity in relation to the organisation’s policy and objectives.

Note: An assessment focuses on desirable outcomes and the overall performance, looking at the organisation as a whole. The main objective of the assessment is to identify the strengths and weaknesses to drive continual improvement.

Remark: For ‘risk assessment’, please refer to the definition below.

*(Source: Annex VII to EASA Executive Director Decision 2020/002/R of 13 March 2020)*



<b>Atmosphere</b>	The envelope of air surrounding the Earth and bound to it more or less permanently by virtue of the Earth's gravitational attraction; the system whose chemical properties, dynamic motions, and physical processes constitute the subject matter of meteorology.
<b>Atmosphere, International Standard</b>	The atmosphere defined in ICAO Document 7488/2. <i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i>
<b>Atmospheric Pressure</b>	Pressure (force per unit area) exerted by the atmosphere on any surface by virtue of its weight; it is equivalent to the weight of a vertical column of air extending above a surface of unit area to the outer limit of the atmosphere.
<b>Atmospheric radiation</b>	Longwave (infrared) radiation emitted by or being propagated through the atmosphere.
<b>ATSroute</b>	A specified route designed for channeling the flow of traffic as necessary for the provision of air traffic services.  <i>Note 1: The term “ATS route” is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.</i>  <i>Note 2: An ATSroute is defined by route specifications which include an ATS route designator, the track to or from significant points (waypoints), distance between significant points, reporting requirements and, as determined by the appropriate ATS authority, the lowest safe altitude.</i>
<b>ATSsurveillance service</b>	A term used to indicate a service provided directly by means of an ATS surveillance system
<b>ATSsurveillance system</b>	A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.  <i>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</i>
<b>Audit</b>	refers to a systematic, independent, and documented process for

obtaining evidence, and evaluating it objectively to determine the extent to which requirements are complied with.

Note: Audits may include inspections.

*(Source: Annex VII to EASA Executive Director Decision 2020/002/R of 13 March 2020)*

**Augmented flight crew** A flight crew which comprises more than the minimum number required to operate the aircraft, allowing each flight crew member to leave his/her assigned post and be replaced by another appropriately qualified flight crew member for the purpose of in-flight rest

**Authorised Person** A person authorised by CAA, either generally or specifically, to have access to any aircraft involved in an accident or incident.

**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 ADSevent contract, ADSdemand contract, ADSperiodic 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:

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

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

<b>Autonomous runway incursion warning system (ARIWS)</b>	A system which provides autonomous detection of a potential incursion or of the occupancy of an active runway and a direct warning to a flight crew or a vehicle operator.
<b>Auxiliary Power Unit (APU)</b>	Any gas turbine-powered unit delivering rotating shaft power, compressor air, or both which is not intended for direct propulsion of an aircraft.  <i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i>
<b>Balloon</b>	A non-power-driven lighter-than-air aircraft
<b>Balloon empty mass</b>	The mass determined by weighing the balloon with all the installed equipment as specified in the AFM.  <i>(Source: European Commission Regulation (EU) No. 379/2014 dated 24 April 2014)</i>
<b>Balked landing</b>	a landing manoeuvre that is unexpectedly discontinued at any point below the obstacle clearance altitude/height (OCA/H).
<b>Bare Earth</b>	Surface of the Earth including bodies of water and permanent ice and snow, and excluding vegetation and man-made objects.
<b>Barrette</b>	Three or more aeronautical ground lights closely spaced in a transverse line so that from a distance they appear as a short bar of light.
<b>Barograph</b>	A recording barometer. Either daily or weekly barographs are used.
<b>Barometer</b>	An instrument for measuring atmospheric pressure. There are two types of barometers which are commonly used in meteorology: the mercury barometer and the aneroid barometer
<b>Base turn</b>	A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. The tracks are not reciprocal.  <i>Note: Base turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.</i>
<b>Basic instrument training device model (BITD model)</b>	A defined hardware and software combination, which has obtained a BITD qualification

<b>Break</b>	A period of time within an FDP, shorter than a rest period, counting as duty and during which a crew member is free of all tasks
<b>Briefing</b>	Oral commentary on existing and/or expected meteorological conditions.
<b>Bypass ratio</b>	The ratio of the air mass flow through the bypass ducts of a gas turbine engine to the air mass flow through the combustion chambers calculated at maximum thrust when the engine is stationary in an international standard atmosphere at sea level.
<b>Cabin crew member</b>	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
<b>Combined vision system (CVS)</b>	A system to display images from a combination of an enhanced vision system (EVS) and a synthetic vision system (SVS).
<b>Calendar</b>	Discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day (ISO 19108*).
<b>Canopy</b>	Bare Earth supplemented by vegetation height.
<b>Cargo aircraft</b>	Any aircraft, other than a passenger aircraft, which is carrying goods or property.
<b>Category I (CAT I) approach operation</b>	<p>A precision instrument approach and landing using an instrument landing system (ILS), microwave landing system (MLS), GLS (ground-based augmented global navigation satellite system (GNSS/GBAS) landing system), precision approach radar (PAR) or GNSS using a satellite-based augmentation system (SBAS) with a decision height (DH) not lower than 200 ft and with a runway visual range (RVR) not less than 550 m for aeroplanes and 500 m for helicopters</p> <p><i>(Source: European Commission Regulation (EU) No. 965/2012 dated 25 October 2012)</i></p>
<b>Category II (CAT II) operation</b>	<p>a precision instrument approach and landing operation using ILS or MLS with:</p> <p>(a) DH below 200 ft but not lower than 100 ft; and</p> <p>(b) RVR of not less than 300 m.</p> <p><i>(Source: European Commission Regulation (EU) No. 965/2012 dated 25 October 2012)</i></p>

<b>Category IIIA (CAT IIIA) operation</b>	<p>a precision instrument approach and landing operation using ILS or MLS with:</p> <ul style="list-style-type: none"><li>(a) DH lower than 100 ft; and</li><li>(b) RVR not less than 200 m.</li></ul> <p><i>(Source: European Commission Regulation (EU) No. 965/2012 dated 25 October 2012)</i></p>
<b>Category IIIB (CAT IIIB) operation</b>	<p>a precision instrument approach and landing operation using ILS or MLS with:</p> <ul style="list-style-type: none"><li>(a) DH lower than 100 ft, or no DH; and</li><li>(b) RVR lower than 200 m but not less than 75 m.</li></ul> <p><i>(Source: European Commission Regulation (EU) No. 965/2012 dated 25 October 2012)</i></p>
<b>Category A</b>	<p>With respect to helicopters. A multi-engined helicopter designed with engine and system isolation features specified in the applicable airworthiness codes and capable of operations using take-off and landing data scheduled under a critical engine failure concept that assures adequate designated surface area and adequate performance capability for continued safe flight or safe rejected take-off in the event of engine failure;</p>
<b>Category B</b>	<p>With respect to helicopters. A single-engined or multi-engined helicopter that does not meet category A standards. Category B helicopters have no guaranteed capability to continue safe flight in the event of an engine failure, and unscheduled landing is assumed</p>
<b>Causes</b>	<p>Actions, omissions, events, conditions, or a combination thereof, which led to the accident or incident.</p>
<b>Ceiling</b>	<p>The height above the ground or water of the base of the lowest layer of cloud below 6 000 metres (20 000 feet) covering more than half the sky.</p>
<b>Certificate</b>	<p>Any approval, licence or other document issued as the result of certification.</p> <p><i>(Source: Regulation (EC) No 216/2008 of the European parliament and of the council of 20 February 2008)</i></p>
<b>Certification</b>	<p>Any form of recognition that a product, part or appliance, organisation or person complies with the applicable requirements,</p>

as well as the issuance of the relevant certificate attesting such compliance.

*(Source: Regulation (EC) No 216/2008 of the European parliament and of the council of 20 February 2008)*

**Certification specifications (CS)**

Technical standards adopted by CAA indicating means to show compliance with civil aviation regulations and which can be used by an organisation for the purpose of certification

**Certified Aerodrome**

An aerodrome whose operator has been granted an aerodrome certificate.

**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.

**Certifying Staff**

Personnel responsible for the release of an aircraft or a component after maintenance.

*(Source: Commission regulation (EU) No 1321/2014 of 26 November 2014)*

**Change-over point**

The point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omni-directional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft.

*Note: Change-over points are established to provide the optimum balance in respect of signal strength and quality between facilities at all levels to be used and to ensure a common source of azimuth guidance for all aircraft operating along the same portion of a route segment.*

**Chicago Convention**

The Convention on International Civil Aviation and its Annexes, signed in Chicago on 7 December 1944.

*(Source: (EC) No 216/2008 of the European parliament and of the council of 20 February 2008)*

**Circling**

The visual phase of an instrument approach to bring an aircraft into position for landing on a runway/FATO that is not suitably located for a straight-in approach

**Cirrocumulus (CC)**

A principal high-level cloud type (cloud genus), appearing as a thin, white patch or layer of cloud without shading, composed of very

small elements in the form of grains, ripples, etc., merged or separated, and more or less regularly arranged; most of the elements have an apparent width of less than one degree.

- Cirrostratus (CS)** A principal high-level cloud type (cloud genus), appearing as a transparent, whitish cloud veil of fibrous (hair-like) or smooth appearance, totally or partially covering the sky, and often producing halo phenomena, either partial or complete.
- Cirrus (CI)** A principal high-level cloud type (cloud genus), appearing as a detached clouds in the form of white, delicate filaments or white or mostly white patches or narrow bands. These clouds have a fibrous (hair-like) appearance, or a silky sheen, or both. Because cirrus elements are too narrow, they do not produce a complete circular halo.
- Civil Aircraft** Any aircraft on the civil register of a State, other than those which that State treats as being in the service of the State, either permanently or temporarily.
- Clear sky** Sky with a total cloud cover of less than one okta (or one-tenth in the United States).
- Clearance limit** The point to which an aircraft is granted an air traffic control clearance.
- Clearway** A defined rectangular area on the ground or water under the control of the respective aerodrome operator, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.
- Climate** Synthesis of weather conditions in a given area, characterized by long-term statistics (mean values, variances, probabilities of extreme values, etc.) of the meteorological elements in that area. Polar climate (arctic climate) is generally the climate of a geographical polar region, most commonly taken to be a climate which is too cold to support the growth of trees.
- Cloud** A hydrometeor consisting of a visible aggregate of minute particles of liquid water or ice, or both, suspended in the free air and usually not touching the Earth's surface. It may also include larger particles of liquid water or ice (precipitation particles) and non-aqueous liquid or solid particles such as those present in fumes,

smoke and dust (aerosols). Cloudiness is the same as cloud cover; but usually it is used in a very general sense.

<b>Cloud amount (cover)</b>	That portion of the sky cover which is attributed to clouds. The unit of measurement is the okta or tenths (meaning one-eighth or one-tenth) of the sky dome as seen by the observer.
<b>Cloud base</b>	The height of the base of the lowest observed or forecast cloud element in the vicinity of an aerodrome or operating site or within a specified area of operations, normally measured above aerodrome elevation or, in the case of offshore operations, above mean sea level
<b>Cloud of operational significance</b>	A cloud with the height of cloud base below 1500 m (5000 ft) or below the highest minimum sector altitude, whichever is greater, or a cumulonimbus cloud or a towering cumulus cloud at any height.
<b>Code share</b>	An arrangement under which an operator places its designator code on a flight operated by another operator, and sells and issues tickets for that flight
<b>Colour safe</b>	The ability of an applicant to readily distinguish the colours used in air navigation and correctly identify aviation coloured lights
<b>COMAT</b>	Operator material carried on an operator's aircraft for the operator's own purposes.
<b>Combined vision system (CVS)</b>	A system to display images from a combination of an enhanced vision system (EVS) and a synthetic vision system (SVS).
<b>Command and control (C2) link.</b>	The data link between the remotely piloted aircraft and the remote pilot station for the purposes of managing the flight.
<b>Commander</b>	As used with respect to aircraft operations, is defined in MCAR-OPS 1. <i>(Source: AR-1)</i>
<b>Commercial air transport (CAT) operation</b>	An aircraft operation to transport passengers, cargo or mail for remuneration or other valuable consideration
<b>Commercial operation</b>	Any operation of an aircraft, in return for remuneration or other valuable consideration, which is available to the public or, when not made available to the public, which is performed under a



contract between an operator and a customer, where the latter has no control over the operator.

*(Source: (EC) No 216/2008 of the European parliament and of the council of 20 February 2008)*

**Competency**

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

**Competency-based training and assessment**

Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards.

**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

**Complex motor-powered aircraft**

- (a) an aeroplane:
  - with a maximum certificated take-off mass exceeding 5 700 kg, or
  - certificated for a maximum passenger seating configuration of more than nineteen, or
  - certificated for operation with a minimum crew of at least two pilots, or
  - equipped with (a) turbojet engine(s) or more than one turboprop engine, or
- (b) a helicopter certificated:
  - for a maximum take-off mass exceeding 3 175 kg, or
  - for a maximum passenger seating configuration of more than nine, or
  - for operation with a minimum crew of at least two pilots, or
- (c) a tilt rotor aircraft

*(Source: (EC) No 216/2008 of the European parliament and of the council of 20 February 2008)*

**Component**

Any engine, propeller, part or appliance.

*(Source: Commission regulation (EU) No 2015/1536 of 25 August 2016)*

**Condensation**

The physical process by which a vapour becomes a liquid or solid; the opposite to evaporation. In meteorological usage, this term is

applied only to transformation from vapour to liquid; any process in which a solid forms directly from its vapour is termed sublimation, as is the reverse process.

**Conference communications**

Communication facilities whereby direct speech conversation may be conducted between three or more locations simultaneously.

**Confidence level**

The probability that the true value of a parameter is within a certain interval around the estimate of its value.

*Note.— The interval is usually referred to as the accuracy of the estimate.*

**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

**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

**Congested hostile environment**

A hostile environment within a congested area.

**Consultation (in the context of meteorology)**

Discussion with a meteorologist or another qualified person of existing and/or expected meteorological conditions relating to flight operations; a discussion includes answers to questions.

**Contingency fuel.**

The fuel required to compensate for unforeseen factors that could have an influence on the fuel consumption to the destination aerodrome

**Continuing airworthiness**

All the processes ensuring that, at any time in its operating life, the aircraft complies with the airworthiness requirements in force and is in a condition for safe operation.

*(Source: Commission regulation (EU) No 1321/2014 of 26 November 2014)*

<b>Continuing oversight</b>	<p>The tasks to be conducted to verify that the conditions under which a certificate has been granted continue to be fulfilled at any time during its period of validity, as well as the taking of any safeguard measure.</p> <p><i>(Source: Regulation (EC) No 216/2008 of the European parliament and of the council of 20 February 2008)</i></p>
<b>Continuous descent final approach (CDFA)</b>	<p>A technique, consistent with stabilised 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 shall begin for the type of aircraft flown.</p>
<b>Contour line</b>	<p>A line on a map or chart connecting points of equal elevation.</p>
<b>Control area</b>	<p>A controlled airspace extending upwards from a specified limit above the earth.</p>
<b>Control zone</b>	<p>A controlled airspace extending upwards from the surface of the earth to a specified upper limit.</p>
<b>Controlled aerodrome</b>	<p>An aerodrome at which air traffic control service is provided to aerodrome traffic.</p> <p><i>Note: The term “controlled aerodrome” indicates that air traffic control service is provided to aerodrome traffic but does not necessarily imply that a control zone exists.</i></p>
<b>Controlled airspace</b>	<p>An airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.</p> <p><i>Note: Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E as described in MCAR 11, 2.6.</i></p>
<b>Controlled flight</b>	<p>Any flight which is subject to an air traffic control clearance.</p>
<b>Controller-pilot data link communications (CPDLC)</b>	<p>A means of communication between controller and pilot, using data link for ATC communications.</p>

<b>Convection</b>	Atmospheric motions that are predominantly vertical, resulting in vertical transport and mixing of atmospheric properties; distinguished from advection
<b>Convection cloud</b>	Cumuliform cloud which forms in the atmosphere as a result of convection. Such clouds are also called clouds of vertical development. A cloud that has its base in the low height range but extends upward into the middle or high altitudes.
<b>Conversion report</b>	A report on the basis of which a licence may be converted into a Part-FCL/MCAR-66 licence
<b>Converted meteorological visibility (CMV)</b>	A value, equivalent to an RVR, which is derived from the reported meteorological visibility. <i>(Source: European Commission Regulation (EU) No. 965/2012 dated 25 October 2012)</i>
<b>Corporate aviation operation</b>	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.
<b>Correction</b>	is the action to eliminate a detected non-compliance.  <i>(Source: Annex VII to EASA Executive Director Decision 2020/002/R of 13 March 2020)</i>
<b>Corrective action</b>	is the action to eliminate or mitigate the root cause(s) and prevent the recurrence of an existing detected non-compliance, or other undesirable conditions or situations. Proper determination of the root cause(s) is crucial for defining effective corrective actions to prevent reoccurrence.  <i>(Source: Annex VII to EASA Executive Director Decision 2020/002/R of 13 March 2020)</i>
<b>Co-pilot</b>	A pilot operating other than as pilot-in-command, on an aircraft for which more than one pilot is required, but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction for a licence or rating.
<b>Credit</b>	Recognition of alternative means or prior qualifications

<b>Credit report</b>	A report on the basis of which prior experience or qualifications may be recognised
<b>Crew member</b>	A person assigned by an operator to duty on an aircraft during a flight duty period.
<b>Critical Engine</b>	<p>The engine whose failure would most adversely affect the performance or handling qualities of an aircraft.</p> <p><i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i></p>
<b>Critical maintenance task</b>	<p>A maintenance task that involves the assembly or any disturbance of a system or any part on an aircraft, engine or propeller that, if an error occurred during its performance, could directly endanger the flight safety.</p> <p><i>(Source: European Commission Regulation (EU) No. 2015/1536 dated 25 August 2016)</i></p>
<b>Critical phases of flight</b>	<p>In the case of aeroplanes means the take-off run, the take-off flight path, the final approach, the missed approach, the landing, including the landing roll, and any other phases of flight as determined by the pilot-in-command or commander</p> <p>In the case of helicopters means taxiing, hovering, take-off, final approach, missed approach, the landing and any other phases of flight as determined by the pilot-in-command or commander</p>
<b>Cross-country</b>	A flight between a point of departure and a point of arrival following a pre-planned route using standard navigation procedures.
<b>Cruise climb</b>	An aeroplane cruising technique resulting in a net increase in altitude as the aeroplane mass decreases.
<b>Cruise relief pilot</b>	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
<b>Cruising level</b>	A level maintained during a significant portion of a flight.
<b>Culture</b>	All man-made features constructed on the surface of the Earth, such as cities, railways and canals.

<b>Cumulonimbus (CB)</b>	A principal cloud type (cloud genus) of vertical development. Exceptionally dense and vertically developed clouds, occurring either as isolated clouds or as a line or wall of clouds with separated upper portions. These clouds appear as mountains or huge towers, at least a part of the upper portions of which are usually smooth, fibrous, or striated, and almost flattened. This part often spreads out in the form of anvil (incus) or vast plume. Under the base of cumulonimbus, which is very dark, there frequently exists virga, precipitation, and low, ragged clouds, either merged with it or not. Its precipitation is often heavy and always of a showery nature.
<b>Cumulus</b>	A principal low-level cloud type (cloud genus) in the form of individual, detached elements which are generally dense and possess sharp non-fibrous outlines. These elements develop vertically, appearing as rising mounds, domes, or towers, the upper parts of which often resembles a cauliflower. The sunlit parts of these clouds are mostly brilliant white; their bases are relatively dark and nearly horizontal. Near the horizon the vertical development of cumulus often causes the individual clouds to appear merged. If precipitation occurs, it is usually of a showery nature.
<b>Current flight plan</b>	The flight plan, including changes, if any, brought about by subsequent clearances.
<b>Cyclic redundancy check (CRC)</b>	A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.
<b>Cyclone (Depression, low, low pressure area)</b>	Area in the atmosphere, wherein the pressures are lower than those of the surrounding region at the same level. It is represented on a synoptic chart by a system of isobars at a specified altitude level (or a system of contours at a specified pressure level) which enclose relatively low values of pressure (or altitude). In its development a cyclone usually has the following phases. A wave (young) cyclone forms and moves along a front. Mature cyclone has well-developed warm sectors and both cold and warm fronts. Occluded cyclone is that within which there has developed an occluded front.
<b>Cyclonic circulation</b>	Atmospheric circulation associated with a cyclone (depression, low pressure area). It is counter clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.

<b>Damp lease</b>	<p>A lease arrangement whereby a lessor provides an aircraft with partial crew to the lessee.</p> <p><i>(Source: Singapore CAA Advisory Circular ACAOC-8(2))</i></p>
<b>Damp runway</b>	<p>A runway where the surface is not dry, but when the moisture on it does not give it a shiny appearance;</p>
<b>Danger area</b>	<p>An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.</p>
<b>Dangerous goods</b>	<p>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.</p> <p><i>Note — Dangerous goods are classified in ICAO Annex 18, Chapter 3</i></p>
<b>Dangerous goods accident</b>	<p>An occurrence associated with and related to the transport of dangerous goods by air which results in fatal or serious injury to a person or major property damage.</p>
<b>Dangerous goods incident</b>	<p>(a) an occurrence other than a dangerous goods accident associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained.</p> <p>(b) Any occurrence relating to the transport of dangerous goods which seriously jeopardizes an aircraft or its occupants.</p>
<b>Data accuracy</b>	<p>A degree of conformance between the estimated or measured value and true value.</p>
<b>Data integrity (assurance level)</b>	<p>A degree of assurance that an aeronautical data and its value has not been lost or altered since the origination or authorized amendment.</p>
<b>Data link communications</b>	<p>A form of communication intended for the exchange of messages via a data link.</p>
<b>Data link-automatic terminal information service (D-ATIS)</b>	<p>The provision of ATIS via data link.</p>

**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 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 (or equivalent assurance level), traceability, timeliness, completeness and format.

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

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

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

**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..

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

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



*Note 3 — For convenience where both expressions are used they may be written in the form “decision altitude/ height” and abbreviated “DA/H”.*

<b>Declared capacity</b>	A measure of the ability of the ATC system or any of its subsystems or operating positions to provide service to aircraft during normal activities. It is expressed as the number of aircraft entering a specified portion of airspace in a given period of time, taking due account of weather, ATC unit configuration, staff and equipment available, and any other factors that may affect the workload of the controller responsible for the airspace.
<b>Declared distances</b>	<ul style="list-style-type: none"><li>(a) Take-off run available (TORA). The length of runway declared available and suitable for the ground run of an aeroplane taking off.</li><li>(b) Take-off distance available (TODA). The length of the take-off run available plus the length of the clearway, if provided.</li><li>(c) Accelerate-stop distance available (ASDA). The length of the take-off run available plus the length of the stopway, if provided.</li><li>(d) Landing distance available (LDA). The length of runway which is declared available and suitable for the ground run of an aeroplane landing.</li></ul>
<b>Defined point after take-off (DPATO)</b>	The point, within the take-off and initial climb phase, before which the helicopter’s ability to continue the flight safely, with the critical engine inoperative, is not assured and a forced landing may be required
<b>Defined point before landing (DPBL)</b>	The point within the approach and landing phase, after which the helicopter’s ability to continue the flight safely, with the critical engine inoperative, is not assured and a forced landing may be required
<b>De-icing</b>	in the case of ground procedures. A procedure by which frost, ice, snow or slush is removed from an aircraft in order to provide uncontaminated surfaces
<b>Delayed reporting</b>	The postponement of a scheduled FDP by the operator before a crew member has left his/her place of rest

<b>Dependent parallel approaches</b>	Simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway centre lines are prescribed.
<b>Depression</b>	The same as cyclone.
<b>Design landing mass</b>	The maximum mass of the aircraft at which, for structural design purposes, it is assumed that it will be planned to land.
<b>Design take-off mass</b>	The maximum mass at which the aircraft, for structural design purposes, is assumed to be planned to be at the start of the take-off run
<b>Design taxiing mass</b>	The maximum mass of the aircraft at which structural provision is made for load liable to occur during use of the aircraft on the ground prior to the start of take-off
<b>Designated postal operator</b>	Any governmental or non-governmental entity officially designated by a Universal Postal Union (UPU) member country to operate postal services and to fulfil the related obligations arising from the acts of the UPU Convention on its territory.
<b>Detect and avoid</b>	The capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action.
<b>DETRESFA</b>	The code word used to designate a distress phase.
<b>Dew point (Dew-point temperature)</b>	The temperature to which a given parcel of air must be cooled at constant pressure and constant water-vapour content in order for saturation to occur. When this temperature is below 0 °C, it is called the frost point.
<b>Digital Elevation Model (DEM)</b>	The representation of terrain surface by continuous elevation values at all intersections of a defined grid, referenced to common datum.  <i>Note.— Digital Terrain Model (DTM) is sometimes referred to as DEM.</i>
<b>Direct transit arrangements</b>	Special arrangements approved by the public authorities concerned by which traffic which is pausing briefly in its passage through the Contracting State may remain under their direct control.
<b>Discrete source damage</b>	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.

**Displaced Threshold**

A threshold not located at the extremity of a runway

**Disruptive schedule**

A crew member's roster comprising an FDP or a combination of FDPs starting, finishing during or encroaching any portion of the day or of the night where a crew member is acclimatised which disrupts the sleep opportunity during the optimal sleep time window. A schedule may be disruptive due to early starts, late finishes and night duties.

(a) 'Early type' of disruptive schedule means:

1. for 'early start' a duty period starting in the period between 05:00 and 05:59 in the time zone to which a crew member is acclimatised; and
2. for 'late finish' a duty period finishing in the period between 23:00 and 01:59 in the time zone to which a crew member is acclimatised.

(b) 'Late type' of disruptive schedule means:

1. for 'early start' a duty period starting in the period between 05:00 and 06:59 in the time zone to which a crew member is acclimatised; and
2. for 'late finish' a duty period finishing in the period between 00:00 and 01:59 in the time zone to which a crew member is acclimatised.

(c) 'Night duty' means a duty period encroaching any portion of the period between 02:00 and 04:59 in the time zone to which the crew is acclimatised

**Distance DR**

The horizontal distance that the helicopter has travelled from the end of the take-off distance available

**Distress phase**

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

**Ditching**

The forced landing of an aircraft on water.

**Downstream clearance**

A clearance issued to an aircraft by an air traffic control unit that is not the current controlling authority of that aircraft.

<b>Dry lease agreement</b>	An agreement between undertakings pursuant to which the aircraft is operated under the air operator certificate (AOC) of the lessee
<b>Dry operating mass</b>	The total mass of the aircraft ready for a specific type of operation, excluding usable fuel and traffic load
<b>Dry runway</b>	A runway is considered dry if its surface is free of visible moisture and not contaminated within the area intended to be used.
<b>Dual instruction time</b>	Flight time during which a person is receiving flight instruction from a properly authorized pilot on board the aircraft
<b>Duty</b>	Any task that a crew member performs for the operator, including flight duty, administrative work, giving or receiving training and checking, positioning, and some elements of standby
<b>Duty period</b>	A period which starts when a crew member is required by an operator to report for or to commence a duty and ends when that person is free of all duties
<b>Eastward-Westward and Westward-Eastward transition</b>	The transition at home base between a rotation crossing 6 or more time zones in one direction and a rotation crossing 4 or more time zones in the opposite direction
<b>EDTO critical fuel</b>	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.
<b>EDTO significant system</b>	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.
<b>Effective intensity</b>	The effective intensity of a flashing light is equal to the intensity of a fixed light of the same colour which will produce the same visual range under identical conditions of observation.
<b>ELA1 aircraft</b>	means the following manned light aircraft:  (a) an aeroplane with a maximum take-off mass (MTOM) of 1200 kg or less that is not classified as complex motor-powered aircraft; (b) a sailplane or powered sailplane of 1200 kg MTOM or less;

- (c) a balloon with a maximum design lifting gas or hot air volume of not more than 3400 m<sup>3</sup> for hot air balloons, 1050 m<sup>3</sup> for gas balloons, 300 m<sup>3</sup> for tethered gas balloons;
- (d) an airship designed for not more than four occupants and a maximum design lifting gas or hot air volume of not more than 3400 m<sup>3</sup> for hot air airships and 1000 m<sup>3</sup> for gas airships.

*(Source: European Commission Regulation (EU) No 2015/1536 of 25 August 2016)*

**ELA2 aircraft**

means the following manned light aircraft

- (a) an aeroplane with a Maximum Take-off Mass (MTOM) of 2000 kg or less that is not classified as complex motor-powered aircraft;
- (b) a sailplane or powered sailplane of 2 000 kg MTOM or less;
- (c) a balloon;
- (d) a hot air ship;
- (e) a gas airship complying with all of the following characteristics:
  - 3% maximum static heaviness,
  - non-vectored thrust (except reverse thrust),
  - conventional and simple design of structure, control system and ballonnet system, and
  - non-power assisted controls;
- (f) a Very Light Rotorcraft;

*(Source: European Commission Regulation (EU) No. 2015/1536 dated 25 August 2016)*

**Electronic Aeronautical Chart Display**

An electronic device by which flight crews are enabled to execute, in a convenient and timely manner, route planning, route monitoring and navigation by displaying required information.

**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.

**Elevated final approach and take-off area (elevated FATO)**

A FATO that is at least 3 m above the surrounding surface;

**Elevation**

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

<b>Ellipsoid Height (GEODETTIC HEIGHT)</b>	The height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.
<b>Emergency locator transmitter (ELT)</b>	<p>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:</p> <p>Automatic fixed ELT (ELT (AF)). An automatically activated ELT which is permanently attached to an aircraft.</p> <p>Automatic portable ELT (ELT (AP)). An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft.</p> <p>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.</p> <p>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.</p>
<b>Emergency phase</b>	A generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.
<b>En-route alternate (ERA) aerodrome</b>	<p>An adequate aerodrome along the route, which may be required at the planning stage.</p> <p><i>(Source: European Commission Regulation (EU) No. 965/2012 dated 25 October 2012)</i></p>
<b>Engine</b>	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 (if applicable).
<b>Enhanced vision system (EVS)</b>	A system to display electronic real-time images of the external scene achieved through the use of imaging sensors
<b>En-route phase</b>	That part of the flight from the end of the take-off and initial climb phase to the commencement of the approach and landing phase.

<b>European Part Approval (EPA)</b>	<p>European Part Approval of an article means the article has been produced in accordance with approved design data not belonging to the type-certificate holder of the related product, except for ETSO articles</p> <p><i>(Source: European Commission Regulation (EU) No. 748/2012 of 3 August 2012)</i></p>
<b>Error</b>	<p>An action or inaction by an operational person that leads to deviations from organizational or the operational person's intentions or expectations.</p> <p><i>Note — See Attachment E of ICAO Annex 13 — Aircraft Accident and Incident Investigation for a description of operational personnel.</i></p>
<b>Error management</b>	<p>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.</p> <p><i>Note — See Attachment C to Chapter 3 of the ICAO 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.</i></p>
<b>Estimated off-block time.</b>	<p>The estimated time at which the aircraft will commence movement associated with departure.</p>
<b>Estimated time of arrival</b>	<p>For IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome.</p> <p>For VFR flights, the time at which it is estimated that the aircraft will arrive over the aerodrome.</p>
<b>European Technical Standard Order (ETSO)</b>	<p>The European Technical Standard Order is a detailed airworthiness specification issued by the European Aviation Safety Agency to ensure compliance with the requirements of European Commission Regulation (EU) No. 748/2012 as a minimum performance standard for specified articles</p>

*(Source: European Commission Regulation (EU) No. 748/2012 of 3 August 2012)*

<b>Examination</b>	An inspection, palpation, percussion, auscultation or other means of investigation especially for diagnosing disease
<b>Expected approach time</b>	The time at which ATC expects that an arriving aircraft, following a delay, will leave the holding fix to complete its approach for a landing.  <i>Note – The actual time of leaving the holding fix will depend upon the approach clearance.</i>
<b>Extended diversion time operations (EDTO)</b>	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.
<b>Extended flight over water</b>	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.
<b>Extended range operation</b>	Any flight by an aeroplane with two turbine engines where the flight time at the one engine inoperative cruise speed (in ISA and still air conditions), from a point on the route to an adequate alternate aerodrome, is greater than the threshold time approved by the State of the Operator.
<b>External equipment (helicopter)</b>	Any instrument, mechanism, part, apparatus, appurtenance, or accessory that is attached to or extends from the helicopter exterior but is not used nor is intended to be used for operating or controlling a helicopter in flight and is not part of an airframe or engine.
<b>Eye specialist</b>	An ophthalmologist or a vision care specialist qualified in optometry and trained to recognise pathological conditions,
<b>Factor of safety</b>	A design factor used to provide for the possibility of loads greater than those assumed, and for uncertainties in design and fabrication.
<b>Final approach segment (FAS)</b>	That segment of an instrument approach procedure in which alignment and descent for landing are accomplished.



<b>Fatal Injury</b>	means any injury which results in death within 30 days of the accident.
<b>Fatigue</b>	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.
<b>Fatigue Risk Management System (FRMS)</b>	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.
<b>Feature</b>	Abstraction of real world phenomena (ISO 19101).
<b>Feature attribute</b>	Characteristic of a feature (ISO 19101).  <i>Note:- A feature attribute has a name, a data type and a value domain associated with it.</i>
<b>Feature operation</b>	Operation that every instance of a feature type may perform (ISO 19110* ).  <i>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.</i>
<b>Feature relationship</b>	Relationship that links instances of one feature type with instances of the same or a different feature type (ISO 19101* ).
<b>Feature type</b>	Class of real world phenomena with common properties (ISO 19110* ).  <i>Note. — In a feature catalogue, the basic level of classification is the feature type.</i>
<b>Filed flight plan.</b>	The flight plan as filed with an ATS unit by the pilot or a designated representative, without any subsequent changes.
<b>Final approach</b>	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 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 segment (FAS)**

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

**Final Approach Fix or Point**

That fix or point of an instrument approach procedure where the final approach segment commences.

**Final approach segment**

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

**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.*

**Fireproof**

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

*Note — The characteristics of an acceptable flame can be found in ISO 2685.*

**Fireproof material**

A material capable of withstanding heat as well as or better than steel when the dimensions in both cases are appropriate for the specific purpose

**First aid oxygen**

The additional oxygen provided for the use of passengers, who do not satisfactorily recover following subjection to excessive cabin altitudes, during which they had been provided with supplemental oxygen.

*(Source: AR-1)*

<b>Fixed light</b>	A light having constant luminous intensity when observed from a fixed point.
<b>Flammable</b>	With respect to a fluid or gas, means susceptible to igniting readily or exploding.  <i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i>
<b>Flight and Navigation Procedures Trainer' (FNPT)</b>	A training device which represents the flight deck or cockpit environment, including the assemblage of equipment and computer programmes necessary to represent an aircraft type or class in flight operations to the extent that the systems appear to function as in an aircraft
<b>Flight crew member</b>	A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.
<b>Flight data analysis</b>	A process of analysing recorded flight data in order to improve the safety of flight operations.
<b>Flight data monitoring (FDM)</b>	The proactive and non-punitive use of digital flight data from routine operations to improve aviation safety
<b>Flight documentation.</b>	Written or printed documents, including charts or forms, containing meteorological information for a flight.
<b>Flight duty period (FDP)</b>	A period that commences when a crew member is required to report for duty, which may include a flight or a series of flights, and finishes when the aircraft finally comes to rest and the engines are shut down, at the end of the last flight on which he/she acts as an operating crew member
<b>Flight Information Centre</b>	A unit established to provide flight information service and alerting service.
<b>Flight Information Region</b>	An airspace of defined dimensions within which flight information service and alerting service are provided.
<b>Flight Information Service</b>	A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

<b>Flight instructor (FI)</b>	An instructor with the privileges to provide training in an aircraft, in accordance with Part-FCL
<b>Flight level</b>	<p>A surface of constant atmospheric pressure which is related to a specific pressure datum, 1013.2 hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals.</p> <p><i>Note 1: A pressure type altimeter calibrated in accordance with the Standard Atmosphere:</i></p> <p><i>(a) when set to a QNH altimeter setting, will indicate altitude;</i> <i>(b) when set to a QFE altimeter setting, will indicate height above the QFE reference datum;</i> <i>(c) when set to a pressure of 1 013.2 hPa, may be used to indicate flight levels.</i></p> <p><i>Note 2: The terms “height” and “altitude”, used in Note 1 above, indicate altimetric rather than geometric heights and altitudes.</i></p>
<b>Flight Manual</b>	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.
<b>Flight operations officer/flight dispatcher</b>	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 the applicable requirements, who supports, briefs and/or assists the pilot-in-command in the safe conduct of the flight
<b>Flight plan</b>	Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.
<b>Flight procedures trainer</b>	See flight simulation training device.
<b>Flight recorder</b>	Any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation.
<b>Automatic deployable flight recorder (ADFR)</b>	A combination flight recorder installed on the aircraft which is capable of automatically deploying from the aircraft.
<b>Flight safety documents system.</b>	A set of interrelated 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 continuing airworthiness management exposition.

**Flight simulation training device (FSTD).**

A training device which is:

- (a) in the case of aeroplanes, a full flight simulator (FFS), a flight training device (FTD), a flight and navigation procedures trainer (FNPT), or a basic instrument training device (BITD);
- (b) in the case of helicopters, a full flight simulator (FFS), a flight training device (FTD) or a flight and navigation procedures trainer (FNPT)

*(Source: Regulation (EC) No 216/2008 of the European parliament and of the council of 20 February 2008)*

**Flight simulator**

See flight simulation training device.

**Flight time**

**for aeroplanes, touring motor gliders and powered-lift**, it means the total time from the moment an aircraft first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight;

**for helicopters**, it means 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;

**for airships**, it means the total time from the moment an airship is released from the mast for the purpose of taking off until the moment the airship finally comes to rest at the end of the flight, and is secured on the mast;

**for sailplanes**, it means the total time from the moment the sailplane commences the ground run in the process of taking off until the moment the sailplane finally comes to a rest at the end of flight;

**for balloons**, it means the total time from the moment the basket leaves the ground for the purpose of taking off until the moment it finally comes to a rest at the end of the flight.

<b>Flight time — helicopters</b>	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.
<b>Flight time — remotely piloted aircraft systems</b>	The total time from the moment a command and control (C2) link is established between the remote pilot station (RPS) and the remotely piloted aircraft (RPA) for the purpose of taking off or from the moment the remote pilot receives control following a handover until the moment the remote pilot completes a handover or the C2 link between the RPS and the RPA is terminated at the end of the flight.
<b>Flight time under Instrument Flight Rules (IFR)</b>	All flight time during which the aircraft is being operated under the Instrument Flight Rules.
<b>Flight Training Device (FTD)</b>	A full size replica of a specific aircraft type's instruments, equipment, panels and controls in an open flight deck area or an enclosed aircraft flight deck, including the assemblage of equipment and computer software programmes necessary to represent the aircraft in ground and flight conditions to the extent of the systems installed in the device. It does not require a force cueing motion or visual system, except in the case of helicopter FTD levels 2 and 3, where visual systems are required.
<b>Flight visibility</b>	The visibility forward from the cockpit of an aircraft in flight.
<b>Fog</b>	A hydrometeor consisting of a visible aggregate of minute water droplets (or ice crystals), suspended in the atmosphere near the Earth's surface. According to international definition, fog reduces visibility below one kilometer. Fog differs from cloud only in that the base of fog is at the Earth's surface while clouds are above the surface. When composed of ice crystals, it is termed ice fog.
<b>Forecast</b>	A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.
<b>Foreign object debris (FOD)</b>	An inanimate object within the movement area which has no operational or aeronautical function and which has the potential to be a hazard to aircraft operations.
<b>Frangible object</b>	An object of low mass designed to break, distort or yield on impact so as to present the minimum hazard to aircraft.

*Note — Guidance on design for frangibility is contained in the Aerodrome Design Manual (Doc 9157), Part 6*

<b>Front</b>	In meteorology, generally, the interface or transition zone between two air masses of different density. Since the temperature distribution is the most important regulator of the atmosphere density, a front almost invariably separates air masses of different temperature. When warmer air replaces the colder, it is a warm front, and a front is a cold one when the opposite occurs.
<b>Frost</b>	The condition which exists when the temperature near the Earth's surface and Earth-bound objects falls below freezing (0 °C or 32 °F).
<b>Frost point</b>	The highest temperature at which atmospheric moisture will sublimate in the form of hoarfrost on a cooled surface. It is analogous to the dew point.
<b>FSTD qualification</b>	The level of technical ability of an FSTD as defined in the compliance document
<b>FSTD user</b>	The organisation or person requesting training, checking or testing through the use of an FSTD to an ATO
<b>Fuel ERA aerodrome</b>	An ERA aerodrome selected for the purpose of reducing contingency fuel
<b>Full Flight Simulator (FFS)</b>	A full size replica of a specific type or make, model and series aircraft flight deck, including the assemblage of all equipment and computer programmes necessary to represent the aircraft in ground and flight operations, a visual system providing an out-of-the-flight deck view, and a force cueing motion system
<b>GAMET area forecast</b>	An area forecast in abbreviated plain language for low-level flights for a flight information region or sub-area thereof, prepared by the meteorological office designated by the MMS and exchanged with meteorological offices in adjacent flight information regions, as agreed between the meteorological authorities concerned.
<b>GBAS landing system (GLS)</b>	An approach landing system using ground based augmented global navigation satellite system (GNSS/GBAS) information to provide guidance to the aircraft based on its lateral and vertical GNSS position. It uses geometric altitude reference for its final approach slope

<b>General aviation operation</b>	An aircraft operation other than a commercial air transport operation or an aerial work operation.
<b>General circulation</b>	(global circulation, planetary circulation) of the atmosphere. Complete statistical description of atmospheric motions over the Earth.
<b>Geodesic distance</b>	The shortest distance between any two points on a mathematically defined ellipsoidal surface.
<b>Geodetic datum</b>	A minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system/frame.
<b>Geoid</b>	<p>The equipotential surface in the gravity field of the Earth which coincides with the undisturbed mean sea level (MSL) extended continuously through the continents.</p> <p><i>Note:- The geoid is irregular in shape because of local gravitational disturbances (wind tides, salinity, current, etc.) and the direction of gravity is perpendicular to the geoid at every point.</i></p>
<b>Geoid undulation</b>	<p>The distance of the geoid above (positive) or below (negative) the mathematical reference ellipsoid.</p> <p><i>Note:- In respect to the World Geodetic System — 1984 (WGS-84) defined ellipsoid, the difference between the WGS-84 ellipsoidal height and orthometric height represents WGS-84 geoid undulation.</i></p>
<b>Glide path</b>	A descent profile determined for vertical guidance during a final approach.
<b>Glider</b>	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
<b>Glider flight time</b>	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.
<b>Gregorian calendar</b>	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* ).



*Note – In the Gregorian calendar, common years have 365 days and leap years 366 days divided into twelve sequential months.*

**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 19 108).

*Note:- In the Gregorian calendar, common years have 365 days and leap years 366 days divided into twelve sequential months.*

**Grid point data in digital form** Computer processed meteorological data for a set of regularly spaced points on a chart, for transmission from a meteorological computer to computer in a code form suitable for automated use.

*Note:- In most cases, such data are transmitted on medium- or high-speed telecommunications channels.*

**Ground emergency service personnel** Any ground emergency service personnel (such as policemen, firemen, etc.) involved with helicopter emergency medical services (HEMSs) and whose tasks are to any extent pertinent to helicopter operations

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

**Ground visibility** The visibility at an aerodrome as reported by an accredited observer or by automatic systems.

**Grounding** The formal prohibition of an aircraft to take-off and the taking of such steps as are necessary to detain it

**Group of balloons** A categorisation of balloons, taking into account the size or capacity of the envelope

**Guidance Material (GM)** Non-binding material developed by the CAA that helps to illustrate the meaning of a requirement or specification and is used to support the interpretation of civil aviation regulations and AMC

**Gyroplane** A heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors which rotate freely on substantially vertical axes

<b>Harness</b>	<p>The equipment, consisting of two shoulder straps and a lap belt, which is provided to restrain a member of the flight crew against inertia loads occurring in emergency conditions.</p> <p><i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i></p>
<b>Hazard</b>	<p>A condition or an object with the potential to cause or contribute to an aircraft incident or accident.</p>
<b>Hazard beacon</b>	<p>An aeronautical beacon used to designate a danger to air navigation.</p>
<b>Haze</b>	<p>Fine dust or salt particles dispersed through a portion of the atmosphere; a type of lithometeor. The particles are so small that they cannot be felt or individually seen with the naked eye, but they diminish horizontal visibility and give the atmosphere a characteristic opalescent appearance that subdues all colours.</p>
<b>Heading</b>	<p>The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid).</p>
<b>Head-up display (HUD)</b>	<p>A display system which presents flight information to the pilot's forward external field of view and which does not significantly restrict the external view</p>
<b>Head-up guidance landing system (HUDLS)</b>	<p>The total airborne system that provides head-up guidance to the pilot during the approach and landing and/or missed approach procedure. It includes all sensors, computers, power supplies, indications and controls</p>
<b>Heavier-than-air aircraft</b>	<p>Any aircraft deriving its lift in flight chiefly from aerodynamic forces.</p>
<b>Height</b>	<p>The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.</p>
<b>Helicopter</b>	<p>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.</p>
<b>Helicopter hoist operation (HHO) crew member</b>	<p>A technical crew member who performs assigned duties relating to the operation of a hoist</p>

<b>Helicopter stand</b>	A defined area intended to accommodate a helicopter for purposes of: loading or unloading passengers, mail or cargo; fuelling, parking or maintenance; and, where air taxiing operations are contemplated, the TLOF.
<b>Helideck</b>	A FATO located on a floating or fixed offshore structure;
<b>Heliport</b>	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.
<b>Heliport operating minima</b>	The limits of usability of a heliport 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.
<b>Heliport Reference Point (HRP)</b>	The designated location of a heliport or a landing location.
<b>HEMScrew member</b>	A technical crew member who is assigned to a HEMS flight for the purpose of attending to any person in need of medical assistance carried in the helicopter and assisting the pilot during the mission
<b>HEMSflight</b>	A flight by a helicopter operating under a HEMS approval, the purpose of which is to facilitate emergency medical assistance, where immediate and rapid transportation is essential, by carrying:  (a) medical personnel; (b) medical supplies (equipment, blood, organs, drugs); or (c) ill or injured persons and other persons directly involved.
<b>HEMSoperating base</b>	An aerodrome at which the HEMS crew members and the HEMS helicopter may be on stand-by for HEMS operations
<b>HEMSoperating site</b>	A site selected by the commander during a HEMS flight for helicopter hoist operations, landing and take-off.

<b>HHO flight</b>	A flight by a helicopter operating under an HHO approval, the purpose of which is to facilitate the transfer of persons and/or cargo by means of a helicopter hoist
<b>HHO offshore</b>	A flight by a helicopter operating under an HHO approval, the purpose of which is to facilitate the transfer of persons and/or cargo by means of a helicopter hoist from or to a vessel or structure in a sea area or to the sea itself
<b>HHO passenger</b>	A person who is to be transferred by means of a helicopter hoist
<b>HHO site</b>	A specified area at which a helicopter performs a hoist transfer
<b>High-level clouds</b>	Cirrus, Cirrocumulus and Cirrostratus are high-level clouds.
<b>Holding procedure</b>	A predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance.
<b>Hold-over time (HoT)</b>	The estimated time the anti-icing fluid will prevent the formation of ice and frost and the accumulation of snow on the protected (treated) surfaces of an aeroplane
<b>Home base</b>	The location, assigned by the operator to the crew member, from where the crew member normally starts and ends a duty period or a series of duty periods and where, under normal circumstances, the operator is not responsible for the accommodation of the crew member concerned
<b>Hostile environment</b>	<p>(a) an environment in which:</p> <ol style="list-style-type: none"><li>1. a safe forced landing cannot be accomplished because the surface is inadequate;</li><li>2. the helicopter occupants cannot be adequately protected from the elements;</li><li>3. search and rescue response/capability is not provided consistent with anticipated exposure; or</li><li>4. there is an unacceptable risk of endangering persons or property on the ground;</li></ol> <p>(b) in any case, the following areas:</p> <ol style="list-style-type: none"><li>1. for overwater operations, the open sea areas north of 45N and south of 45S designated by the authority of the State concerned;</li><li>2. those parts of a congested area without adequate safe</li></ol>

forced landing areas.

<b>Hot spot</b>	A location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.
<b>Human Factors principles</b>	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.
<b>Human performance</b>	Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.
<b>Humidity</b>	<ol style="list-style-type: none"><li>1. Water vapor content of the air.</li><li>2. Some measure of the water-content of air.</li></ol>
<b>Hypsometric tints</b>	A succession of shades or colour gradations used to depict ranges of elevation.
<b>ICAO meteorological information exchange model (IWXXM)</b>	A data model for representing aeronautical meteorological information.
<b>Icing</b>	In general, any deposit or coating of ice on an object, caused by the impingement and freezing of liquid (usually super-cooled) hydrometeors. The two basic types of icing are rime and glaze
<b>Identification beacon</b>	An aeronautical beacon emitting a coded signal by means of which a particular point of reference can be identified.
<b>IFR</b>	The symbol used to designate the instrument flight rules.
<b>IFR conditions</b>	Weather conditions below the minimum for flight under visual flight rules. <i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i>
<b>IFR flight</b>	A flight conducted in accordance with the instrument flight rules.
<b>IMC</b>	The symbol used to designate instrument meteorological conditions.
<b>INCERFA</b>	The code word used to designate an uncertainty phase.

<b>Incident</b>	An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.
<b>Independent parallel approaches</b>	Simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway centre lines are not prescribed.
<b>Independent parallel departures</b>	Simultaneous departures from parallel or near-parallel instrument runways.
<b>Industry codes of practice</b>	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.
<b>Infrared radiation</b>	Electromagnetic radiation of wavelengths approximately between 0.75 and 1000 mm. See atmospheric radiation, terrestrial radiation, long wave radiation.
<b>Initial Approach Segment</b>	That segment of an instrument approach procedure between the initial approach fix and the intermediate approach fix or, where applicable, the final approach fixes or point.
<b>Inspection</b>	<p>In the context of compliance monitoring and oversight, refers to an independent documented conformity evaluation by observation and judgement accompanied, as appropriate, by measurement, testing or gauging, in order to verify compliance with applicable requirements.</p> <p>Note: Inspection may be part of an audit (e.g. product audit), but may also be conducted outside the normal audit plan; for example, to verify closure of a particular finding.</p> <p><i>(Source: Annex VII to EASA Executive Director Decision 2020/002/R of 13 March 2020)</i></p>
<b>Instrument</b>	A device using an internal mechanism to show visually or aurally the attitude, altitude, or operation of an aircraft or aircraft part. It includes electronic devices for automatically controlling an aircraft in flight.

*(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)*

**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:

(c) a ground-based radio navigation aid; or

(d) 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 which utilizes lateral guidance but does not utilize vertical guidance.

**Approach procedure with vertical guidance (APV):** An instrument approach procedure which utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations.

**Precision approach (PA) procedure:** An instrument approach procedure using precision lateral and vertical guidance with minima as determined by the category of operation.

*Note – Lateral and vertical guidance refers to the guidance provided either by:*

- a. a ground-based navigation aid; or*
- b. computer-generated navigation data.*

**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 flight simulation training device approved by CAA.

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

*Note — The specified minima for visual meteorological conditions are contained in Chapter 4 of MCAR2.*

**Instrument runway** One of the following types of runways intended for the operation of aircraft using instrument approach procedures:

- (a) Non-precision approach runway means a runway served by visual aids and a non-visual aid intended for landing operations following an instrument approach operation type A and a visibility not less than 1 000 m.
- (b) Precision approach runway, category I means a runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) not lower than 60 m (200 ft) and either a visibility not less than 800 m or a runway visual range not less than 550 m.
- (c) Precision approach runway, category II means a runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) lower than 60 m (200 ft) but not lower than 30 m (100 ft) and a runway visual range not less than 300 m.
- (d) Precision approach runway, category III means a runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) lower than 30 m (100 ft), or no



decision height and a runway visual range less than 300 m, or no runway visual range limitations.

*Note 1. — Visual aids need not necessarily be matched to the scale of non-visual aids provided. The criterion for the selection of visual aids is the conditions in which operations are intended to be conducted.*

*Note 2.— Refer to Annex 6 — Operation of Aircraft for instrument approach operation types.*

<b>Instrument time</b>	Instrument flight time or instrument ground time.
<b>Integrated Aeronautical Information Package</b>	<p>A package in paper, or electronic media which consists of the following elements:</p> <ul style="list-style-type: none"><li>— AIP, including amendment service;</li><li>— Supplements to the AIP;</li><li>— NOTAM and PIB;</li><li>— AIC; and</li><li>— checklists and lists of valid NOTAM.</li></ul>
<b>Integrated survival suit</b>	A survival suit which meets the combined requirements of the survival suit and life jacket.
<b>Integrity (aeronautical data)</b>	A degree of assurance that an aeronautical data and its value has not been lost or altered since the data origination or authorized amendment.
<b>Integrity (aeronautical data)</b>	A degree of assurance that an aeronautical data and its value has not been lost nor altered since the data origination or authorized amendment.
<b>Integrity classification (aeronautical data)</b>	<p>Classification based upon the potential risk resulting from the use of corrupted data. Aeronautical data are classified as:</p> <ul style="list-style-type: none"><li>(a) routine data: there is a very low probability when using corrupted routine data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe;</li><li>(b) essential data: there is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe; and</li></ul>

- (c) critical data: there is a high probability when using corrupted critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

**Integrity classification (aeronautical data)**

Classification based upon the potential risk resulting from the use of corrupted data. Aeronautical data is classified as:

- (a) routine data: there is a very low probability when using corrupted routine data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe;
- (b) essential data: there is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe; and
- (c) critical data: there is a high probability when using corrupted critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

**Intermediate Approach Segment**

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

**Intermediate holding position**

A designated position intended for traffic control at which taxiing aircraft and vehicles shall stop and hold until further cleared to proceed, when so instructed by the aerodrome control tower.

**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.

**International Airways Volcano Watch (IAVW)**

International arrangements for monitoring and providing warnings to aircraft of volcanic ash in the atmosphere.

*Note:- The IAVW is based on the cooperation of aviation and non-aviation operational units using information derived from observing sources and networks that are provided by States. The watch is*

*coordinated by ICAO with the cooperation of other concerned international organizations.*

<b>International NOTAM office</b>	An office designated by a State for the exchange of NOTAM internationally.
<b>International NOTAM office (NOF)</b>	An office designated by a State for the exchange of NOTAM internationally.
<b>International operating agency</b>	An agency of the kind contemplated in Article 77 of the Chicago Convention.
<b>Inversion</b>	In meteorology, a departure from usual (normal) decrease or increase with altitude of the value of an atmospheric property; also, the layer through which this departure occurs (the inversion layer). This term almost always refers to a temperature inversion.
<b>Investigation</b>	A process conducted for the purpose of accident and incident prevention, which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and, when appropriate, the making of safety recommendations.
<b>Investigator-in-charge</b>	A person charged, on the basis of his or her qualifications, with the responsibility for the organisation, conduct and control of an investigation. This person shall be designated by CAA to direct the investigative activity of the Investigation Committee and over whose signature any required report is issued.
<b>Isobar</b>	A line of equal or constant pressure. It most often refers to a line drawn through all points of equal atmospheric pressure.
<b>Isogonal</b>	A line on a map or chart on which all points have the same magnetic variation for a specified epoch.
<b>Isogriv</b>	A line on a map or chart which joins points of equal angular difference between the North of the navigation grid and Magnetic North.
<b>Isotherm</b>	A line of equal or constant temperature.
<b>Isolated aerodrome</b>	A destination aerodrome for which there is no destination alternate aerodrome suitable for a given aeroplane type.

<b>Jet stream</b>	Relatively strong winds concentrated within a narrow stream in the atmosphere. Generally refers to a quasi-horizontal jet stream of maximum winds embedded in the mid latitude westerly's, and concentrated in the high troposphere.
<b>Joint rescue coordination centre (JRCC)</b>	A rescue coordination centre responsible for both aeronautical and maritime search and rescue operations.
<b>Landing area</b>	That part of a movement area intended for the landing or take-off of aircraft.
<b>Landing decision point (LDP)</b>	The point used in determining landing performance from which, an engine failure having been recognised at this point, the landing may be safely continued or a bailed landing initiated
<b>Landing direction indicator</b>	A device to indicate visually the direction currently designated for landing and for take-off.
<b>Landing distance available (LDA)</b>	The length of the runway which is declared available by the State of the aerodrome and suitable for the ground run of an aeroplane landing
<b>Landing surface</b>	That part of the surface of an aerodrome which the aerodrome authority has declared available for the normal ground or water run of aircraft landing in a particular direction.
<b>Landplane</b>	A fixed wing aircraft which is designed for taking off and landing on land and includes amphibians operated as landplanes
<b>Lapse rate</b>	The rate of change of any meteorological element with height.
<b>Large Aircraft (Large aeroplane)</b>	An aircraft, classified as an aeroplane with a maximum take-off mass of more than 5700 kg, or a multi-engined helicopter. <i>(Source: Commission regulation (EC) No 2042/2003 of 20 November 2003)</i>
<b>Laser-beam critical flight zone (LCFZ)</b>	Airspace in the proximity of an aerodrome but beyond the LFFZ where the irradiance is restricted to a level unlikely to cause glare effects.
<b>Laser-beam free flight zone (LFFZ)</b>	Airspace in the immediate proximity to the aerodrome where the irradiance is restricted to a level unlikely to cause any visual disruption.

<b>Laser-beam sensitive flight zone (LSFZ)</b>	Airspace outside, and not necessarily contiguous with, the LFFZ and LCFZ where the irradiance is restricted to a level unlikely to cause flash-blindness or after-image effects.
<b>Level (flight)</b>	A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.
<b>Licensing authority</b>	The competent authority that issued the licence, or to which a person applies for the issue of a licence, or, when a person has not yet applied for the issue of a licence, the competent authority in accordance with civil aviation regulations.
<b>Light aircraft pilot licence (LAPL)</b>	The leisure pilot licence
<b>Lighter-than-air aircraft</b>	Any aircraft supported chiefly by its buoyancy in the air.
<b>Lighting system reliability</b>	The probability that the complete installation operates within the specified tolerances and that the system is operationally usable.
<b>Likely</b>	In the context of the medical provisions, likely means with a probability of occurring that is unacceptable to the medical assessor.
<b>Limit loads</b>	The maximum loads assumed to occur in the anticipated operating conditions.
<b>Limitation</b>	A condition placed on the medical certificate, licence or cabin crew medical report that shall be complied with whilst exercising the privileges of the licence, or cabin crew licence
<b>Load factor</b>	The ratio of a specified load to the total weight of the aircraft. The specified load is expressed in terms of any of the following: aerodynamic forces, inertia forces, or ground or water reactions. <i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i>
<b>Local day</b>	A 24-hour period commencing at 00:00 local time
<b>Local helicopter operation</b>	A commercial air transport operation of helicopters with a maximum certified take-off mass (MCTOM) over 3175 kg and a maximum operational passenger seating configuration (MOPSC) of nine or less, by day, over routes navigated by reference to visual

landmarks, conducted within a local and defined geographical area specified in the operations manual.

**Local night**

A period of 8 hours falling between 22:00 and 08:00 local time

**Logon address**

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

**Low visibility procedures (LVP)**

Procedures applied at an aerodrome for the purpose of ensuring safe operations during lower than standard category I, other than standard category II, category II and III approaches and low visibility take-offs.

**Low visibility take-off (LVTO)**

A take-off with an RVR lower than 400 m but not less than 75 m.

**Lower than standard category I (LTSCAT I) operation**

A category I instrument approach and landing operation using category I DH, with an RVR lower than would normally be associated with the applicable DH but not lower than 400 m

**Low-level clouds**

Stratus (ST), Stratocumulus (SC), and in some degree, Nimbostratus (NS) are low clouds.

**LSA aircraft**

means a light sport aeroplane which has all of the following characteristics:

- (a) a Maximum Take-off Mass (MTOM) of not more than 600 kg;
- (b) a maximum stalling speed in the landing configuration (VS0) of not more than 45 knots Calibrated Airspeed (CAS) at the aircraft's maximum certificated take-off mass and most critical centre of gravity;
- (c) a maximum seating capacity of no more than two persons, including the pilot;
- (d) a single, non-turbine engine fitted with a propeller;
- (e) a non-pressurised cabin.

*(Source: European Commission Regulation (EU) No 2015/1536 of 25 August 2016)*

**Magnetic variation**

The angular difference between True North and Magnetic North.

*Note:- The value given indicates whether the angular difference is East or West of True North.*

**Maintenance**

The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of

overhaul, repair, inspection, replacement, modification or defect rectification of an aircraft or component, with the exception of pre-flight inspection.

*(Source: Commission regulation (EU) No 2015/1536 of 25 August 2016)*

**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.

**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.

**Manoeuvring area**

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

**Marker**

An object displayed above ground level in order to indicate an obstacle or delineate a boundary.

**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 master list (including a preamble) appropriate to an aircraft type which determines those instruments, items of equipment or functions that, while maintaining the level of safety intended in the applicable airworthiness certification specifications, may temporarily be inoperative either due to the inherent redundancy of the design, and/or due to specified operational and maintenance procedures, conditions and limitations, and in accordance with the applicable procedures for continued airworthiness.

*(Source: Annex III to regulation (EC) No 1899/2006 of the European parliament and of the council of 12 December 2006)*

<b>Maximum diversion time</b>	Maximum allowable range, expressed in time, from a point on a route to an en-route alternate aerodrome.
<b>Maximum mass</b>	Maximum certificated take-off mass.
<b>Maximum operational passenger seating configuration (MOPSC)</b>	The maximum passenger seating capacity of an individual aircraft, excluding crew seats, established for operational purposes and specified in the operations manual. Taking as a baseline the maximum passenger seating configuration established during the certification process conducted for the type certificate (TC), supplemental type certificate (STC) or change to the TC or STC as relevant to the individual aircraft, the MOPSC may establish an equal or lower number of seats, depending on the operational constraints
<b>MCAR</b>	Maldivian Civil Aviation Regulations adopted by the CAA.
<b>Medical Assessment</b>	The evidence issued by a Contracting State that the licence holder meets specific requirements of medical fitness.
<b>Medical assessor</b>	A physician qualified and experienced in the practice of aviation medicine who evaluates medical reports submitted to CAA by medical examiners.
<b>Medical examiner</b>	A physician with training in aviation medicine and practical knowledge and experience of the aviation environment, who is designated by CAA to conduct medical examinations of fitness of applicants for licences or ratings for which medical requirements are prescribed.
<b>Medical passenger</b>	A medical person carried in a helicopter during a HEMS flight, including but not limited to doctors, nurses and paramedics
<b>Metadata</b>	Data about data (ISO 19115).  <i>Note:- Data that describes and documents data.</i>
<b>Meteorological authority</b>	The authority providing or arranging for the provision of meteorological service for air navigation on behalf of a Contracting State.
<b>Meteorological bulletin</b>	A text comprising meteorological information preceded by an appropriate heading.



<b>Meteorological element</b>	Any one of the properties or conditions of the atmosphere which together specify the weather at a given place for any particular time (for example, air temperature, pressure, wind, humidity, thunderstorm and fog).
<b>Meteorological information</b>	Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.
<b>Meteorological office</b>	An office designated to provide meteorological service for international air navigation.
<b>Meteorological report</b>	A statement of observed meteorological conditions related to a specified time and location.
<b>Meteorological satellite</b>	An artificial Earth satellite making meteorological observations and transmitting these observations to Earth.
<b>Meteorological watch office (MWO)</b>	An office designated to provide information concerning the occurrence or expected occurrence of specified en-route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations within its specified area of responsibility.
<b>Microlight</b>	<p>An aeroplane having no more than two seats, <math>V_{so}</math> not exceeding 35 knots (65 KM/h) CAS, and a maximum take-off mass of no more than:</p> <ul style="list-style-type: none"><li>— 300 kg for a landplane, single seater; or</li><li>— 450 kg for a landplane, two-seater; or</li><li>— 330 kg for an amphibian or floatplane, single seater; or</li><li>— 495 kg for an amphibian or floatplane, two-seater, provided that a microlight capable of operating as both a floatplane and a landplane falls below both MTOM limits, as appropriate.</li></ul> <p><i>Note: Foot-launched aircraft are excluded from this definition.</i> <i>(Source: AR-1)</i></p>
<b>Middle-level clouds</b>	Alto cumulus (AC) and Altostratus (AS) are the middle-level clouds.
<b>Minimum descent altitude (MDA) or minimum descent height (MDH)</b>	A specified altitude or height in a 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 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 Equipment List (MEL)**

A list (including a preamble) which provides for the operation of aircraft, under specified conditions, with particular instruments, items of equipment or functions inoperative at the commencement of flight. This list is prepared by the operator for his own particular aircraft taking account of their aircraft definition and the relevant operational and maintenance conditions in accordance with a procedure approved by CAA.

*(Source: Annex III to regulation (EC) No 1899/2006 of the European parliament and of the council of 12 December 2006)*

**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 an area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.

**Missed Approach Point (MAPT)**

That point in an instrument approach procedure at or before which the prescribed missed approach procedure must be

initiated in order to ensure that the minimum obstacle clearance is not infringed.

**Missed approach procedure**

The procedure to be followed if the approach cannot be continued.

**Mixed precipitation (Rain and snow)**

Mixed precipitation (rain and snow) Precipitation consisting of a mixture of rain and wet snow. It usually occurs when the temperature of the air layer near the ground is slightly above freezing. The British term for this mixture is sleet (which has a different meaning in the United States).

**Modification (of a product)**

A change to the type design of an aircraft, engine or propeller.

**Movement area**

That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the maneuvering area and the apron.

**Multi-crew cooperation (MCC)**

The functioning of the flight crew as a team of cooperating members led by the pilot-in-command.

**Multi-pilot aircraft**

for aeroplanes, it means aeroplanes certificated for operation with a minimum crew of at least two pilots;

for helicopters, airships and powered-lift aircraft, it means the type of aircraft which is required to be operated with a co-pilot as specified in the flight manual or by the air operator certificate or equivalent document

**Multi-pilot operation**

for aeroplanes, it means an operation requiring at least 2 pilots using multi-crew cooperation in either multi-pilot or single-pilot aeroplanes;

for helicopters, it means an operation requiring at least 2 pilots using multi-crew cooperation on multi-pilot helicopters

**Navigation specification**

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, designated 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 (PBN) 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 MCAR as the concept of RNP has been overtaken by the concept of PBN. The term RNP in this MCAR 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.*

**Near-parallel runways** non-intersecting runways whose extended centre lines have an angle of convergence/divergence of 15 degrees or less.

**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 vision goggles (NVG)** A head-mounted, binocular, light intensification appliance that enhances the ability to maintain visual surface references at night

**Night vision imaging system (NVIS)** The integration of all elements required to successfully and safely use NVGs while operating a helicopter. The system includes as a minimum: NVGs, NVIS lighting, helicopter components, training and continuing airworthiness.

<b>Nimbostratus (NS)</b>	A principal cloud type (cloud genus), grey coloured and often dark, rendered diffuse by more or less continuously falling rain, snow, sleet, etc. of the ordinary varieties and not accompanied by lightning, thunder, or hail. Precipitation in most cases reaches the ground. Low, ragged clouds frequently occur below the layer, with which they may or may not merge
<b>Non-congested hostile environment</b>	A hostile environment outside a congested area.
<b>Non-hostile environment</b>	<p>An environment in which:</p> <ul style="list-style-type: none"><li>(a) a safe forced landing can be accomplished;</li><li>(b) the helicopter occupants can be protected from the elements; and</li><li>(c) search and rescue response/capability is provided consistent with the anticipated exposure.</li></ul> <p>In any case, those parts of a congested area with adequate safe forced landing areas shall be considered non-hostile.</p>
<b>Non-instrument runway</b>	<p>A runway intended for the operation of aircraft using visual approach procedure to a point beyond which the approach may continue in visual meteorological conditions.</p> <p><i>Note. — Visual meteorological conditions (VMC) are described in Chapter 3 of MCAR2 — Rules of the Air.</i></p>
<b>Non-precision approach (NPA) operation</b>	An instrument approach with a minimum descent height (MDH), or DH when flying a CDFFA technique, not lower than 250 ft and an RVR/CMV of not less than 750 m for aeroplanes and 600 m for helicopters
<b>NOTAM</b>	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.
<b>Normal flight zone (NFZ)</b>	Airspace not defined as LFFZ, LCFZ or LSFZ but which must be protected from laser radiation capable of causing biological damage to the eye.
<b>NVIScrew member</b>	A technical crew member assigned to an NVIS flight

**NVISflight** A flight under night visual meteorological conditions (VMC) with the flight crew using NVGs in a helicopter operating under an NVIS approval

**Observation (Meteorological)** The evaluation of one or more meteorological elements.

**Obstacle** All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that:

- (a) are located on an area intended for the surface movement of aircraft; or
- (b) extend above a defined surface intended to protect aircraft in flight; or
- (c) stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.

*Note:- The term obstacle is used in MCAR4 is solely for the purpose of specifying the charting of objects that are considered a potential hazard to the safe passage of aircraft in the type of operation for which the individual chart series is designed.*

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

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

*Note 2. — For convenience when both expressions are used they may be written in the form “obstacle clearance altitude/ height” and abbreviated “OCA/H”.*

*Note 3.— See Procedures for Air Navigation Services — Aircraft Operations (Doc 8168), Volume I, Part I, Section 4, Chapter 1, 1.5, and Volume II, Part I, Section 4, Chapter 5, 5.4, for specific applications of this definition.*

<b>Obstacle Free Zone (OFZ)</b>	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.
<b>Obstacle/terrain data collection surface</b>	A defined surface intended for the purpose of collecting obstacle/terrain data.
<b>Offshore operations</b>	Operations which routinely have a substantial proportion of the flight conducted over sea areas to or from offshore locations
<b>Operating base</b>	The location from which operational control is exercised.
<b>Operating crew member</b>	A crew member carrying out his/her duties in an aircraft during a flight
<b>Operating site</b>	A site, other than an aerodrome, selected by the operator or pilot-in-command or commander for landing, take-off and/or external load operations
<b>Operation</b>	An activity or group of activities which are subject to the same or similar hazards and which require a set of equipment to be specified, or the achievement and maintenance of a set of pilot competencies, to eliminate or mitigate the risk of such hazards.
<b>Operation in performance class 1</b>	An operation that, in the event of failure of the critical engine, the helicopter is able to land within the rejected take-off distance available or safely continue the flight to an appropriate landing area, depending on when the failure occurs
<b>Operation in performance class 2</b>	An operation that, in the event of failure of the critical engine, performance is available to enable the helicopter to safely continue the flight, except when the failure occurs early during the take-off manoeuvre or late in the landing manoeuvre, in which cases a forced landing may be required
<b>Operation in performance class 3</b>	An operation that, in the event of an engine failure at any time during the flight, a forced landing may be required in a multi-engined helicopter and will be required in a single-engined helicopter

<b>Operational control</b>	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.
<b>Operational flight plan</b>	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.
<b>Operational personnel</b>	Personnel involved in aviation activities who are in a position to report safety information.
<b>Operational planning</b>	The planning of flight operations by an operator.
<b>Operational Suitability Data (OSD)</b>	<p>OSD means data, which are part of an aircraft type-certificate, restricted type- certificate or supplemental type-certificate, consisting of all of the following:</p> <ul style="list-style-type: none"><li>(i) the minimum syllabus of pilot type rating training, including determination of type rating;</li><li>(ii) the definition of scope of the aircraft validation source data to support the objective qualification of simulators or the provisional data to support their interim qualification;</li><li>(iii) the minimum syllabus of maintenance certifying staff type rating training, including determination of type rating;</li><li>(iv) determination of type or variant for cabin crew and type specific data for cabin crew;</li><li>(v) the master minimum equipment list.</li></ul> <p><i>(Source: European Commission Regulation (EU) No. 748/2012 of 3 August 2012)</i></p>
<b>Operations manual</b>	A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.
<b>Operations specifications</b>	The authorizations, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual.



<b>Operator</b>	The person, organization or enterprise engaged in or offering to engage in an aircraft operation.
<b>Operator's maintenance control manual</b>	The document referred to in MCAR-M.A.704, 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.
<b>Organization responsible for the type design</b>	The organization that holds the type certificate, or equivalent document, for an aircraft, engine or propeller type, issued by a Contracting State.
<b>Ornithopter</b>	A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on planes to which a flapping motion is imparted.
<b>Orthometric height</b>	Height of a point related to the geoid, generally presented as an MSL elevation.
<b>Orphan aircraft type</b>	An aircraft which has its Type Certificate revoked by the State of Design, and no longer has a designated State of Design in accordance with Annex 8. These aircraft do not meet the Standards of Annex 8.
<b>Other than standard category II (OTSCAT II) operation.</b>	A precision instrument approach and landing operation using ILS or MLS where some or all of the elements of the precision approach category II light system are not available, and with:  (a) DH below 200 ft but not lower than 100 ft; and (b) RVR of not less than 350 m.
<b>Other training device (OTD)</b>	An aid used for pilot training other than an FSTD that provides for training where a complete flight deck or cockpit environment is not necessary
<b>Outer main gear wheel span (OMGWS)</b>	the distance between the outside edges of the main gear wheels.
<b>Packaging</b>	Receptacles and any other components or materials necessary for the receptacle to perform its containment function.
<b>Passenger aircraft</b>	An aircraft that carries any person other than a crew member, an operator's employee in an official capacity, an authorized representative of an appropriate national authority or a person accompanying a consignment or other cargo.

<b>Part-FCL licence</b>	A flight crew licence which complies with the requirements of MCAR-Aircrew
<b>Parts and Appliances</b>	<p>Any instrument, equipment, mechanism, part, apparatus, appurtenance or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight and is installed in or attached to the aircraft. It includes parts of an airframe, engine or propeller.</p> <p><i>(Source: Regulation (EC) No 216/2008 of the European parliament and of the council of 20 February 2008)</i></p>
<b>Passenger classification</b>	<p>Passenger classification, for the purpose of:</p> <p>(a) 'adult' means a person of an age of 12 years and above; (b) 'child/children' means persons who are of an age of two years and above but who are less than 12 years of age; (c) 'infant' means a person under the age of two years</p>
<b>Past weather</b>	Predominant characteristic of the weather which had existed at an observing station during a given period of time (during the preceding hour or six hours), specified in the international SYNOP code.
<b>Pavement classification number (PCN)</b>	A number expressing the bearing strength of a pavement for unrestricted operations. (Applicable until 27 November 2024)
<b>Pavement classification rating (PCR)</b>	A number expressing the bearing strength of a pavement for unrestricted operations. (Applicable as of 28 November 2024)
<b>Performance-based communication (PBC)</b>	<p>Communication based on performance specifications applied to the provision of air traffic services.</p> <p>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.</p>
<b>Performance-based surveillance (PBS)</b>	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-based navigation (PBN)**

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

*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 class A aeroplanes**

Multi-engined aeroplanes powered by turbo-propeller engines with a maximum operational passenger seating configuration (MOPSC) of more than nine or a maximum take-off mass exceeding 5 700 kg, and all multi-engined turbo-jet powered aeroplanes

**Performance class B aeroplanes**

Aeroplanes powered by propeller engines with an MOPSC of nine or less and a maximum take-off mass of 5 700 kg or less

**Performance class C aeroplanes**

Aeroplanes powered by reciprocating engines with an MOPSC of more than nine or a maximum take-off mass exceeding 5 700 kg

**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.

**Pilot (to)**

To manipulate the flight controls of an aircraft during flight time.

**Pilot flying (PF)**

The pilot whose primary task is to control and manage the flight path. The secondary tasks of the PF are to perform non-flight path related actions (radio communications, aircraft systems, other operational activities, etc.) and to monitor other crew members.

**Pilot monitoring (PM)**

The pilot whose primary task is to monitor the flight path and its management by the PF. The secondary tasks of the PM are to perform non-flight path related actions (radio communications,

aircraft systems, other operational activities, etc.) and to monitor other crew members.

<b>Pilot not flying (PNF)</b>	The pilot who is assisting the Pilot flying in accordance with the multi-crew co-operation concept, when the required flight crew is more than one.  <i>(Source: AR-1)</i>
<b>Pilot-in-command</b>	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.
<b>Pilot-in-command under supervision (PICUS)</b>	A co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command.
<b>Pilot (to)</b>	To manipulate the flight controls of an aircraft during flight time.
<b>Point light</b>	A luminous signal appearing without perceptible length.
<b>Point of no return</b>	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.
<b>Portrayal</b>	Presentation of information to humans (ISO 19117).
<b>Position (Geographical)</b>	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.
<b>Positioning</b>	The transferring of a non-operating crew member from one place to another, at the behest of the operator, excluding the time from home to the designated reporting place at home base and vice versa, as well as the time for local transfer from a place of rest to the commencement of duty and vice versa
<b>Post spacing</b>	Angular or linear distance between two adjacent elevation points.
<b>Powered sailplane</b>	An aircraft equipped with one or more engines having, with engines inoperative, the characteristics of a sailplane
<b>Powered-lift</b>	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.

<b>Powered-lift aircraft</b>	Any aircraft deriving vertical lift and in flight propulsion/lift from variable geometry rotors or engines/propulsive devices attached to or contained within the fuselage or wings.
<b>Powerplant</b>	The system consisting of all the engines, drive system components (if applicable), and propellers (if installed), their accessories, ancillary parts, and fuel and oil systems installed on an aircraft but excluding the rotors for a helicopter.
<b>Power-unit</b>	A system of one or more engines and ancillary parts which are together necessary to provide thrust, independently of the continued operation of any other power unit(s), but not including short period thrust-producing devices.
<b>Precipitation</b>	Any of all of the forms of water particles, whether liquid or solid, that fall from the atmosphere and reach the ground. The forms of precipitation are: rain, drizzle, snow, snow grains, snow pellets, diamond dust, hail, and ice pellets. See also acid precipitation.
<b>Primary runway(s)</b>	runway(s) used in preference to others whenever conditions permit.
<b>Precision</b>	The smallest difference that can be reliably distinguished by a measurement process. <i>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.</i>
<b>Precision approach procedure</b>	see Instrument runway.
<b>Pre-flight information bulletin (PIB)</b>	A presentation of current NOTAM information of operational significance, prepared prior to flight.
<b>Pre-flight Inspection</b>	The inspection carried out before flight to ensure that the aircraft is fit for the intended flight. <i>(Source: Commission regulation (EU) No 2015/1536 of 25 August 2016)</i>
<b>Preliminary Report</b>	The communication used for the prompt dissemination of data obtained during the early stages of the investigation.
<b>Present weather</b>	Weather at a station at the time of observation.

<b>Pressure</b>	A type of stress characterized by uniformity in all directions. In dynamics, it is that part of the stress tensor that is independent of viscosity and depends only upon the molecular motion appropriate to the local temperature and density. It is the negative of the mean of the three normal stresses, and is, therefore, a scalar quantity expressed in units of force per unit area. In meteorology, commonly used for atmospheric pressure.
<b>Pressure-altitude</b>	An atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.
<b>Prevailing visibility</b>	<p>The greatest visibility value, observed in accordance with the definition of “visibility”, which is reached within at least half the horizon circle or within at least half of the surface of the aerodrome. These areas could comprise contiguous or non-contiguous sectors.</p> <p><i>Note:- This value may be assessed by human observation and/or instrumented systems. When instruments are installed, they are used to obtain the best estimate of the prevailing visibility.</i></p>
<b>Preventive action</b>	<p>The action to eliminate the cause of a potential non-compliance, or other undesirable potential situation</p> <p><i>(Source: Annex VII to EASA Executive Director Decision 2020/002/R of 13 March 2020)</i></p>
<b>Principal place of business</b>	The head office or registered office of the organisation within which the principal financial functions and operational control of the activities referred to in the Maldives Civil Aviation Regulations are exercised
<b>Printed communications</b>	Communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such circuit.
<b>Prioritisation of ramp inspections</b>	The dedication of an appropriate portion of the total number of ramp inspections conducted by or on behalf of a competent authority on an annual basis as provided in Part-ARO
<b>Private pilot</b>	A pilot who holds a licence which prohibits the piloting of aircraft in operations for which remuneration is given, with the exclusion of instruction or examination activities, as established in Part-FCL

<b>Problematic use of substances</b>	<p>The use of one or more psychoactive substances by aviation personnel in a way that:</p> <ul style="list-style-type: none"><li>(a) constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or</li><li>(b) causes or worsens an occupational, social, mental or physical problem or disorder.</li></ul>
<b>Procedure altitude/height</b>	<p>A published altitude/height used in defining the vertical profile of a flight procedure, at or above the minimum obstacle clearance altitude/height where established.</p>
<b>Procedure turn</b>	<p>A manoeuvre in which a turn is made away from a designated track followed by a turn in the opposite direction to permit the aircraft to intercept and proceed along the reciprocal of the designated track.</p> <p><i>Note 1:- Procedure turns are designated “left” or “right” according to the direction of the initial turn.</i></p> <p><i>Note 2:- Procedure turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.</i></p>
<b>Product</b>	<p>An aircraft, engine or propeller.</p> <p><i>(Source: Regulation (EC) No 216/2008 of the European parliament and of the council of 20 February 2008</i></p>
<b>Proficiency check</b>	<p>The demonstration of skill to revalidate or renew ratings, and including such oral examination as may be required</p>
<b>Prognostic chart</b>	<p>A forecast of a specified meteorological element(s) for a specified time or period and a specified surface or portion of airspace, depicted graphically on a chart.</p>
<b>Prohibited area</b>	<p>An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.</p>
<b>Propeller</b>	<p>A complete propeller including all parts attached to and rotating with the hub and blades, and all equipment required for the control and operation of the propeller.</p> <p><i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i></p>

<b>Protective breathing equipment</b>	Breathing equipment for protection against smoke, fumes and other harmful gases.  <i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i>
<b>Protected flight zones</b>	Airspace specifically designated to mitigate the hazardous effects of laser radiation.
<b>Psychoactive substances</b>	Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.
<b>Public interest site (PIS)</b>	A site used exclusively for operations in the public interest
<b>Qualification test guide (QTG)</b>	A document designed to demonstrate that the performance and handling qualities of an FSTD represent those of the aircraft, class of aeroplane or type of helicopter, simulated within prescribed limits and that all applicable requirements have been met. The QTG includes both the data of the aircraft, class of aeroplane or type of helicopter and FSTD data used to support the validation
<b>Quality</b>	Degree to which a set of inherent characteristics fulfils requirements (ISO 9000*).  <i>*ISO Standard 9000 — Quality Management Systems — Fundamentals and Vocabulary</i>  <i>Note 1.— The term “quality” can be used with adjectives such as poor, good or excellent.</i>  <i>Note 2.— “Inherent”, as opposed to “assigned”, means existing in something, especially as a permanent characteristic.</i>
<b>Quality assurance</b>	Part of quality management focused on providing confidence that quality requirements will be fulfilled (ISO 9000).
<b>Quality control</b>	Part of quality management focused on fulfilling quality requirements (ISO 9000).
<b>Quality management</b>	Coordinated activities to direct and control an organization with regard to quality (ISO 9000).



<b>Quality system</b>	Documented organizational procedures and policies; internal audit of those policies and procedures; management review and recommendation for quality improvement.
<b>Radiation</b>	Emission or transfer of energy in the form of electromagnetic waves. The process by which electromagnetic radiation is propagated through free space by virtue of joint undulatory variations in the electric and magnetic fields in space. This concept is to be distinguished from conduction and convection.
<b>Radio navigation service</b>	A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids.
<b>Radiotelephony</b>	A form of radio communication primarily intended for the exchange of information in the form of speech.
<b>Ramp inspection</b>	The inspection of aircraft, of flight and cabin crew qualifications and of flight documentation in order to verify the compliance with the applicable requirements
<b>Rated air traffic controller</b>	An air traffic controller holding a licence and valid ratings appropriate to the privileges to be exercised.
<b>Rating</b>	An authorization entered on or associated with a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence.
<b>RCP type</b>	A label (e.g. RCP 240) that represents the values assigned to RCP parameters for communication transaction time, continuity, availability and integrity.
<b>Rectification interval</b>	A limitation on the duration of operations with inoperative equipment
<b>Reference time</b>	The local time at the reporting point in a time zone band 2 hours wide around the local time where a crew member is acclimatised
<b>Refractive error</b>	The deviation from emmetropia measured in dioptres in the most ametropic meridian, measured by standard methods
<b>Regional Air Navigation Agreement</b>	Agreement approved by the Council of ICAO normally on the advice of a regional air navigation meeting.

<b>Rejected take-off distance available (RTODAH)</b>	The length of the final approach and take-off area declared available and suitable for helicopters operated in performance class 1 to complete a rejected take-off;
<b>Rejected take-off distance required (RTODRH)</b>	The horizontal distance required from the start of the take-off to the point where the helicopter comes to a full stop following an engine failure and rejection of the take-off at the take-off decision point
<b>Relative humidity</b>	The (dimensionless) ratio of the actual vapor pressure of the air to the saturation vapor pressure. The relative humidity is usually expressed in per cent, and can be computed from psychrometric data. See humidity.
<b>Relief</b>	The inequalities in elevation of the surface of the Earth represented on aeronautical charts by contours, hypsometric tints, shading or spot elevations.
<b>Remote co-pilot</b>	A licensed remote pilot serving in any piloting capacity other than as remote pilot-in-command but excluding a remote pilot who is in the remote pilot station for the sole purpose of receiving flight instruction.
<b>Remote flight crew member</b>	A licensed flight crew member charged with duties essential to the operation of a remotely piloted aircraft system during a flight duty period.
<b>Remote pilot</b>	A person charged by the operator with duties essential to the operation of a remotely piloted aircraft and who manipulates the flight controls, as appropriate, during flight time.
<b>Remote pilot-in-command</b>	The remote pilot designated by the operator as being in command and charged with the safe conduct of a flight.
<b>Remote pilot station (RPS)</b>	The component of the remotely piloted aircraft system containing the equipment used to pilot the remotely piloted aircraft.
<b>Remotely piloted aircraft (RPA)</b>	An unmanned aircraft which is piloted from a remote pilot station.
<b>Remotely piloted aircraft system (RPAS)</b>	A remotely piloted aircraft, its associated remote pilot station(s), the required command and control links and any other components as specified in the type design.

<b>Rendering (a licence) valid</b>	The action taken by CAA, as an alternative to issuing its own licence, in accepting a licence issued by an ICAO Contracting State as the equivalent of its own licence.
<b>Renewal (of, e.g. a rating or certificate)</b>	The administrative action taken after a rating or certificate has lapsed for the purpose of renewing the privileges of the rating or certificate for a further specified period consequent upon the fulfilment of specified requirements
<b>Repair</b>	Elimination of damage and/or restoration to an airworthy condition following initial release into service by the manufacturer of any product, part or appliance.  <i>(Source: Commission Regulation (EU) No. 748/2012 of 3 August 2012)</i>
<b>Reporting point</b>	A specified geographical location in relation to which the position of an aircraft can be reported.  <i>Note;- There are three categories of reporting points: ground-based navigation aid, intersection and waypoint. In this context of this definition, intersection is a significant point expressed as radials, bearings and /or distances from ground-based navigation aids. A reporting point can be indicated as “on request” or as “compulsory”</i>
<b>Required communication performance (RCP) specification</b>	A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication.
<b>Required communication performance type (RCP type)</b>	A label (e.g. RCP 240) that represents the values assigned to RCP parameters for communication transaction time, continuity, availability and integrity.
<b>Required navigation performance (RNP)</b>	A statement of the navigation performance necessary for operation within a defined airspace.  <i>Note — Navigation performance and requirements are defined for a particular RNP type and/or application.</i>
<b>Required surveillance performance (RSP) specification</b>	A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance.
<b>Requirement</b>	Need or expectation that is stated, generally implied or obligatory (ISO 9000* ).

*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.*

<b>Rescue</b>	An operation to retrieve persons in distress, provide for their initial medical or other needs, and deliver them to a place of safety.
<b>Rescue coordination centre (RCC)</b>	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.
<b>Rescue subcentre (RSC)</b>	A unit subordinate to a rescue coordination centre, established to complement the latter according to particular provisions of the responsible authorities.
<b>Reserve</b>	A period of time during which a crew is required by the operator to be available to receive an assignment for a flight, positioning or other duty with at least a 10 hour notification before the start of the assigned duty
<b>Resolution</b>	A number of units or digits to which a measured or calculated value is expressed and used.
<b>Rest facility</b>	A bunk or seat with leg and foot support that provides a crew member with a sleep opportunity on board an aircraft.
<b>Rest period</b>	A continuous, uninterrupted and defined period of time, subsequent to and/or prior to duty, during which a crew member is free of all duties and reserve.
<b>Restricted area</b>	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.
<b>Revalidation' (of, e.g. a rating or certificate)</b>	The administrative action taken within the period of validity of a rating or certificate which allows the holder to continue to exercise

the privileges of a rating or certificate for a further specified period consequent upon the fulfilment of specified requirements

<b>Reversal procedure</b>	A procedure designed to enable aircraft to reverse direction during the initial approach segment of an instrument approach procedure. The sequence may include procedure turns or base turns.
<b>Ridge (of high pressure)</b>	In meteorology, an elongated area of relatively high atmospheric pressure, almost always associated with and most clearly identified as an area of maximum anticyclonic curvature of wind flow.
<b>RNP type</b>	A containment value expressed as a distance in nautical miles from the intended position within which flights would be for at least 95 per cent of the total flying time.  <i>Example — RNP 4 represents a navigation accuracy of plus or minus 7.4 km (4 NM) on a 95 per cent containment basis.</i>
<b>Road</b>	In the context of an aerodrome, an established surface route on the movement area meant for the exclusive use of vehicles.
<b>Road-holding position</b>	A designated position at which vehicles may be required to hold.
<b>Rotation</b>	It is a duty or a series of duties, including at least one flight duty, and rest periods out of home base, starting at home base and ending when returning to home base for a rest period where the operator is no longer responsible for the accommodation of the crew member
<b>Rotorcraft</b>	A power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors.
<b>Route sector</b>	A flight comprising take-off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases
<b>Route stage</b>	A route or portion of a route flown without an intermediate landing.
<b>RPA observer</b>	A trained and competent person designated by the operator who, by visual observation of the remotely piloted aircraft, assists the remote pilot in the safe conduct of the flight.

<b>Runway</b>	A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.
<b>Runway condition assessment matrix (RCAM)</b>	A matrix allowing the assessment of the runway condition code, using associated procedures, from a set of observed runway surface condition(s) and pilot report of braking action.
<b>Runway condition code (RWYCC)</b>	<p>A number describing the runway surface condition to be used in the runway condition report.</p> <p><i>Note. — The purpose of the runway condition code is to permit an operational aeroplane performance calculation by the flight crew. Procedures for the determination of the runway condition code are described in the PANS-Aerodromes (Doc 9981).</i></p>
<b>Runway condition report (RCR)</b>	A comprehensive standardized report relating to runway surface condition(s) and its effect on the aeroplane landing and take-off performance.
<b>Runway end safety area (RESA)</b>	An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.
<b>Runway guard lights</b>	A light system intended to caution pilots or vehicle drivers that they are about to enter an active runway.
<b>Runway-holding position</b>	<p>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.</p> <p><i>Note — In radiotelephony phraseologies, the expression “holding point” is used to designate the runway-holding position.</i></p>
<b>Runway strip</b>	<p>A defined area including the runway and stopway, if provided, intended:</p> <ol style="list-style-type: none"><li>a. to reduce the risk of damage to aircraft running off a runway; and</li><li>b. to protect aircraft flying over it during take-off or landing operations.</li></ol>

**Runway surface condition(s)**

A description of the condition(s) of the runway surface used in the runway condition report which establishes the basis for the determination of the runway condition code for aeroplane performance purposes.

*Note 1. — The runway surface conditions used in the runway condition report establish the performance requirements between the aerodrome operator, aeroplane manufacturer and aeroplane operator.*

*Note 2. — Aircraft de-icing chemicals and other contaminants are also reported but are not included in the list of runway surface condition descriptors because their effect on runway surface friction characteristics and the runway condition code cannot be evaluated in a standardized manner.*

*Note 3.— Procedures on determining runway surface conditions are available in the PANS-Aerodromes (Doc 9981).*

- a. 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.
- b. 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.
- c. Slippery wet runway. A wet runway where the surface friction characteristics of a significant portion of the runway have been determined to be degraded.
- d. 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.
- e. Note. — Procedures on determination of contaminant coverage on runway are available in the PANS-Aerodromes (Doc 9981).
- f. Runway surface condition descriptors. One of the following elements on the surface of the runway:

*Note. — The descriptions for e) i) to viii) are used solely in the context of the runway condition report and are not intended to supersede or replace any existing WMO definitions.*

- i. Compacted snow: Snow that has been compacted into a solid mass such that aeroplane tires, at operating pressures and loadings, will run on the surface without significant further compaction or rutting of the surface.
- ii. Dry snow: Snow from which a snowball cannot readily be made.
- iii. Frost: Frost consists of ice crystals formed from airborne moisture on a surface whose temperature is below freezing. Frost differs from ice in that the frost crystals grow independently and therefore have a more granular texture.

*Note 1.— Below freezing refers to air temperature equal to or less than the freezing point of water (0 degree Celsius).*

*Note 2. — Under certain conditions frost can cause the surface to become very slippery and it is then reported appropriately as reduced braking action.*

- iv. Ice: Water that has frozen or compacted snow that has transitioned into ice, in cold and dry conditions.
- v. Slush: Snow that is so water-saturated that water will drain from it when a handful is picked up or will splatter if stepped on forcefully.
- vi. Standing water: Water of depth greater than 3 mm.

*Note. — Running water of depth greater than 3 mm is reported as standing water by convention.*

- vii. Wet ice: Ice with water on top of it or ice that is melting.  
*Note. — Freezing precipitation can lead to runway conditions associated with wet ice from an aeroplane performance point of view. Wet ice can cause the surface to become very slippery. It is then reported appropriately as reduced braking action in line with procedures in the PANS-Aerodromes (Doc 9981).*
- viii. Wet snow: Snow that contains enough water content to be able to make a well-compacted, solid snowball, but water will not squeeze out.

**Runway turn pad**

A defined area on a land aerodrome adjacent to a runway for the purpose of completing a 180-degree turn on a runway.



<b>Runway visual range (RVR)</b>	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.
<b>Runway-holding position</b>	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.  <i>Note – In radiotelephony phraseologies, the expression “holding point” is used to designate the runway-holding position.</i>
<b>Safe forced landing</b>	Unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface.
<b>Safety</b>	The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.
<b>Safety data</b>	A defined set of facts or set of safety values collected from various aviation-related sources, which is used to maintain or improve safety
<b>Safety information</b>	Safety data processed, organized or analysed in a given context so as to make it useful for safety management purposes.
<b>Safety management system (SMS)</b>	A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.
<b>Safety oversight</b>	A function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.
<b>Safety performance</b>	A State or a service provider’s safety achievement as defined by its safety performance targets and safety performance indicators.
<b>Safety performance indicator</b>	A data-based parameter used for monitoring and assessing safety performance.
<b>Safety performance target</b>	The State or service provider’s planned or intended target for a safety performance indicator over a given period that aligns with the safety objectives.

<b>Safety risk</b>	The predicted probability and severity of the consequences or outcomes of a hazard.
<b>State of the Aerodrome</b>	The State in whose territory the aerodrome is located.
<b>Safety Recommendation</b>	A proposal of the accident investigation authority of the State conducting the investigation, based on information derived from the investigation, made with the intention of preventing accidents or incidents.
<b>Safety-sensitive personnel</b>	Persons who might endanger aviation safety if they perform their duties and functions improperly including, but not limited to, crew members, aircraft maintenance personnel and air traffic controllers.
<b>Sailplane</b>	A heavier-than-air aircraft which is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the free flight of which does not depend on an engine
<b>Satisfactory evidence</b>	A set of documents or activities that a Contracting State accepts as sufficient to show compliance with an airworthiness requirement.
<b>Sea surface temperature</b>	Temperature of the water film at the sea surface
<b>Sea-level pressure</b>	The atmospheric pressure at mean sea level, either directly measured or, most commonly, empirically determined from the observed station pressure.
<b>Seaplane</b>	A fixed wing aircraft which is designed for taking off and landing on water and includes amphibians operated as seaplanes
<b>Search</b>	An operation normally coordinated by a rescue coordination centre or rescue subcentre using available personnel and facilities to locate persons in distress.
<b>Search and rescue aircraft</b>	An aircraft provided with specialized equipment suitable for the efficient conduct of search and rescue missions.
<b>Search and rescue facility</b>	Any mobile resource, including designated search and rescue units, used to conduct search and rescue operations.
<b>Search and rescue region (SRR)</b>	An area of defined dimensions, associated with a rescue coordination centre, within which search and rescue services are provided.

<b>Search and rescue service</b>	The performance of distress monitoring, communication, coordination and search and rescue functions, initial medical assistance or medical evacuation, through the use of public and private resources, including cooperating aircraft, vessels and other craft and installations.
<b>Search and rescue services units</b>	A generic term meaning, as the case may be, rescue coordination centre, rescue sub centre or alerting post.
<b>Sector</b>	The time between an aircraft first moving for the purpose of taking off until it comes to rest after landing on the designated parking position.
<b>Segregated parallel operations</b>	Simultaneous operations on parallel or near-parallel instrument runways in which one runway is used exclusively for approaches and the other runway is used exclusively for departures.
<b>Self-sustaining powered sailplane</b>	A powered aeroplane with available engine power which allows it to maintain level flight but not to take off under its own power.
<b>Separate runways</b>	Runways at the same aerodrome that are separate landing surfaces. These runways may overlay or cross in such a way that if one of the runways is blocked, it will not prevent the planned type of operations on the other runway. Each runway shall have a separate approach procedure based on a separate navigation aid
<b>Series of flights</b>	Series of flights are consecutive flights that:  (a) begin and end within a period of 24 hours; and (b) are all conducted by the same pilot-in-command.
<b>Serious incident</b>	An incident involving circumstances indicating that an accident nearly occurred.  <i>Note 1: The difference between an accident and a serious incident lies only in the result.</i>
<b>Serious Injury</b>	any injury, which is sustained by a person in an accident and which:  (a) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (b) results in a fracture of any bone (except simple fractures of fingers, toes, or nose);

- (c) causes severe haemorrhages, nerve muscle, or tendon damage;
- (d) involves 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.

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

**SIGMET information** Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations.

**Sign** means;  
(a) Fixed message sign. A sign presenting only one message.  
(b) Variable message sign. A sign capable of presenting several pre-determined messages or no message, as applicable.

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

**Slush** Water-saturated snow which with a heel-and-toe slap-down motion against the ground will be displaced with a splatter; specific gravity: 0.5 up to 0.8. (Applicable until 4 November 2021)

*Note. — Combinations of ice, snow and/or standing water may, especially when rain, rain and snow, or snow is falling, produce substances with specific gravities in excess of 0.8. These substances, due to their high water/ice content, will have a transparent rather than a cloudy appearance and, at the higher specific gravities, will be readily distinguishable from slush.*

**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.

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

<b>Significant point</b>	<p>A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.</p> <p><i>Note.— There are three categories of significant points: ground-based navigation aid, intersection and waypoint. In the context of this definition, intersection is a significant point expressed as radials, bearings and/or distances from groundbased navigation aids.</i></p>
<b>Single day free of duty</b>	<p>A time free of all duties consisting of a single day and two local nights and which may include a rest period as part of the day off.</p>
<b>Single-pilot aircraft</b>	<p>An aircraft certificated for operation by one pilot</p>
<b>Skill test</b>	<p>The demonstration of skill for a licence or rating issue, including such oral examination as may be required</p>
<b>Small aircraft</b>	<p>An aircraft of a maximum certificated take-off mass of 5 700 kg or less.</p>
<b>Snow (on the ground)</b>	<p>(Applicable until 4 November 2021)</p> <ul style="list-style-type: none"><li>(a) Dry snow. Snow which can be blown if loose or, if compacted by hand, will fall apart again upon release; specific gravity: up to but not including 0.35.</li><li>(b) Wet snow. Snow which, if compacted by hand, will stick together and tend to or form a snowball; specific gravity: 0.35 up to but not including 0.5.</li><li>(c) Compacted snow. Snow which has been compressed into a solid mass that resists further compression and will hold together or break up into lumps if picked up; specific gravity: 0.5 and over.</li></ul>
<b>SNOWTAM</b>	<p>(Applicable until 3 November 2021)</p> <p>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.</p> <p>(Applicable as of 4 November 2021)</p> <p>A special series NOTAM given in a standard format providing a surface condition report notifying the presence or cessation of</p>

hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area.

**Solar radiation**

The total electromagnetic radiation emitted by the Sun.

**Solo flight time**

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

**Solo flight time —  
remotely piloted  
aircraft systems**

Flight time during which a student remote pilot is controlling the remotely piloted aircraft system, acting solo.

**Special VFR flight**

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

**Special VFR flight**

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

**Stabilised approach  
(SAp)**

An approach that is flown in a controlled and appropriate manner in terms of configuration, energy and control of the flight path from a pre-determined point or altitude/height down to a point 50 ft above the threshold or the point where the flare manoeuvre is initiated if higher.

**Standard atmosphere**

See 'Atmosphere, International Standard'.

*(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)*

**Standard isobaric  
surface**

An isobaric surface used on a worldwide basis for representing and analyzing the conditions in the atmosphere.

**Standby**

A pre-notified and defined period of time during which a crew member is required by the operator to be available to receive an assignment for a flight, positioning or other duty without an intervening rest period, as follows:

- (a) airport standby means a standby performed at the airport, which may lead to an assignment of duty;
- (b) other standby means a standby either at home or in a suitable accommodation, which may lead to an assignment of duty.

**State of Design**

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

<b>State of Manufacture</b>	The State having jurisdiction over the organization responsible for the final assembly of the aircraft, engine or propeller.
<b>State of Occurrence</b>	The State in the territory of which an accident or incident occurs.
<b>State of Registry</b>	The State on whose register the aircraft is entered.  <i>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).</i>
<b>State of the Aerodrome</b>	The State in whose territory the aerodrome is located.
<b>State of the Operator</b>	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.
<b>State safety programme (SSP)</b>	An integrated set of regulations and activities aimed at improving safety.
<b>Station declination</b>	An alignment variation between the zero degree radial of a VOR and true north, determined at the time the VOR station is calibrated.
<b>Station pressure</b>	Atmospheric pressure observed at a station.
<b>Stopway</b>	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.
<b>Stratocumulus (SC)</b>	A principal low-level cloud type (cloud genus), predominantly stratiform, in the form of relatively low gray and/or whitish layer, sheet or patch. Its elements are often arranged in bands or rolls that lie across the wind. Light rain, snow, or sleet may fall from stratocumulus.
<b>Stratopause</b>	The boundary layer between the stratosphere and the mesosphere at about 50 to 55 km.

<b>Stratosphere</b>	The atmospheric shell above the troposphere and below the mesosphere. It is characterized at first by isothermal conditions and then a gradual temperature increase. The composition of stratospheric air is basically the same as that of the lower atmosphere, with the addition of ozone.
<b>Stratus (ST)</b>	A principal low-level cloud type (cloud genus) in the form of a low-altitude, light to dark gray cloud layer with a rather uniform base. Stratus clouds are generally diffuse and dull. This cloud formation has little structure and looks like fog, except that it is above the ground. Stratus does not usually produce precipitation, but when it does occur it is in the form of minute particles, such as drizzle, ice crystals, or fine snow grains.
<b>Student pilot-in-command' (SPIC)</b>	A student pilot acting as pilot-in-command on a flight with an instructor where the latter will only observe the student pilot and shall not influence or control the flight of the aircraft
<b>Subsonic aeroplane</b>	An aeroplane incapable of sustaining level flight at speeds exceeding flight Mach number of 1.
<b>Substantial Damage</b>	<p>Substantial Damage means damage or failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. For the purposes of this regulation, the following conditions are not considered "substantial damage":</p> <ul style="list-style-type: none"><li>(a) for multiengine aircraft: engine failure or damage limited to an engine if only one engine fails or is damaged,</li><li>(b) bent fairings or cowling, dented skin, small punctured holes in the skin or fabric,</li><li>(c) ground damage to rotor or propeller blades,</li><li>(d) and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips.</li></ul>
<b>Suitable accommodation</b>	For the purpose of standby, split duty and minimum rest, a separate room, with appropriate facilities, for each crew member located in a quiet environment, equipped with a bed, sufficient ventilation, a device for regulating temperature and light intensity, and access to food and drink



<b>Supplemental oxygen</b>	<p>The additional oxygen required to protect each occupant against the adverse effects of excessive cabin altitude and to maintain acceptable physiological conditions.</p> <p><i>(Source: EASA Executive Director (ED) Decision 2003/11/RM dated 05/11/2003-CS definitions)</i></p>
<b>Surface wind</b>	<p>Wind blowing near the Earth's surface. It is measured, by convention, at a height of 10 m above ground in an area where the distance between the anemometer and any obstruction is at least 10 times the height of the obstruction.</p>
<b>Surveillance</b>	<p>The State activities through which the State proactively verifies through inspections and audits that aviation licence, certificate, authorization or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State.</p>
<b>Synoptic – scale</b>	<p>The scale of the high- and low-pressure systems of the lower atmosphere which typical dimensions range approximately from 1000 to 2500 kilometers (synoptic-scale circulation).</p>
<b>Synoptic analysis</b>	<p>The study of the synoptic observation data plotted on synoptic charts aimed at analysis of the atmospheric disturbances (for example, fronts, cyclones, and anticyclones).</p>
<b>Synoptic chart</b>	<p>A weather chart reflecting the state of the atmosphere over a large area at a given moment.</p>
<b>Synoptic code (International synoptic surface observation, or synop, code)</b>	<p>A code approved by the World Meteorological Organization, by which meteorological elements observed at the Earth's surface at synoptic times are encoded in groups of five figures and transmitted internationally through the available immediate communication means.</p>
<b>Synoptic hour</b>	<p>Hour (UTC) determined by international agreement at which meteorological observations are made simultaneously throughout the world. The primary synoptic hours are every six hours, commencing at 00:00 UTC.</p>
<b>Synoptic weather observation</b>	<p>A surface weather observation, made at periodic times (usually at 3-hourly and 6-hourly intervals specified by the World Meteorological Organization), of sky cover, state of the sky, cloud height, atmospheric pressure reduced to sea level, temperature,</p>

dew point, wind speed and direction, amount of precipitation, hydrometeors and lithometeors, and special phenomena that prevail at the time of the observation or have been observed since the previous specified observation.

**Synthetic vision system (SVS)**

A system to display data-derived synthetic images of the external scene from the perspective of the flight deck.

**Switch-over time (light)**

The time required for the actual intensity of a light measured in a given direction to fall from 50 per cent and recover to 50 per cent during a power supply changeover, when the light is being operated at intensities of 25 per cent or above.

**Take-off and initial climb phase**

That part of the flight from the start of take-off to 300 m (1 000 ft) above the elevation of the FATO, if the flight is planned to exceed this height, or to the end of the climb in the other cases.

**Take-off alternate aerodrome**

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

**Take-off decision point (TDP)**

The point used in determining take-off performance from which, an engine failure having been recognised at this point, either a rejected take-off may be made or a take-off safely continued

**Take-off distance available (TODA)**

In the case of aeroplanes means the length of the take-off run available plus the length of the clearway, if provided

**Take-off distance available (TODAH)**

In the case of helicopters means the length of the final approach and take-off area plus, if provided, the length of helicopter clearway declared available and suitable for helicopters to complete the take-off

**Take-off distance required (TODRH)**

In the case of helicopters means the horizontal distance required from the start of the take-off to the point at which take-off safety speed (VTOSS), a selected height and a positive climb gradient are achieved, following failure of the critical engine being recognised at the TDP, the remaining engines operating within approved operating limits

**Take-off flight path**

The vertical and horizontal path, with the critical engine inoperative, from a specified point in the take-off for aeroplanes to 1500 ft above the surface and for helicopters to 1000 ft above the surface

<b>Take-off mass</b>	The mass including everything and everyone carried at the commencement of the take-off for helicopters and take-off run for aeroplanes
<b>Take-off runway</b>	A runway intended for take-off only.
<b>Take-off run available (TORA)</b>	The length of runway that is declared available by the State of the aerodrome and suitable for the ground run of an aeroplane taking off
<b>Take-off surface</b>	That part of the surface of an aerodrome which the aerodrome authority has declared available for the normal ground or water run of aircraft taking off in a particular direction.
<b>Task specialist</b>	<p>A crew member in commercial air transport HEMS, HHO or NVIS operations other than a flight or cabin crew member, assigned by the operator to duties in the aircraft or on the ground for the purpose of assisting the pilot during HEMS, HHO or NVIS operations, which may require the operation of specialised on-board equipment.</p> <p><i>(Source: European Commission Regulation (EU) No. 379/2014 dated 24 April 2014)</i></p>
<b>Target level of safety (TLS)</b>	A generic term representing the level of risk which is considered acceptable in particular circumstances.
<b>Taxiing</b>	<p>Movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing.</p> <p>(a) Aircraft stand taxilane: A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.</p> <p>(b) Aircraft stand taxilane: A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.</p> <p>(c) Rapid exit taxiway: A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.</p>
<b>Taxi-route</b>	A defined path established for the movement of helicopters from one part of a heliport to another. A taxi-route includes a helicopter air or ground taxiway which is centered on the taxi-route.

<b>Taxiway</b>	<p>A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:</p> <ul style="list-style-type: none"><li>(a) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.</li><li>(b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron.</li><li>(c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.</li></ul>
<b>Taxiway intersection</b>	<p>A junction of two or more taxiways.</p>
<b>Taxiway strip</b>	<p>An area including a taxiway intended to protect an aircraft operating on the taxiway and to reduce the risk of damage to an aircraft accidentally running off the taxiway.</p>
<b>Technical crew member</b>	<p>A crew member in commercial air transport HEMS, HHO or NVIS operations other than a flight or cabin crew member, assigned by the operator to duties in the aircraft or on the ground for the purpose of assisting the pilot during HEMS, HHO or NVIS operations, which may require the operation of specialised on-board equipment</p>
<b>Technical instructions (TI)</b>	<p>The latest effective edition of the 'Technical instructions for the safe transport of dangerous goods by air', including the supplement and any addenda, approved and published by the International Civil Aviation Organisation (ICAO).</p>
<b>Temperature</b>	<p>A physical quantity characterizing the mean random motion of molecules in a physical body. In other words, it is a measure of the degree of hotness or coldness of a substance.</p>
<b>Terminal arrival altitude (TAA)</b>	<p>The lowest altitude that will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an arc of a circle defined by a 46 km (25 NM) radius centred on the initial approach fix (IAF), or where there is no IAF on the intermediate approach fix (IF), delimited by straight lines joining the extremity of the arc to the IF.</p>

The combined TAAs associated with an approach procedure shall account for an area of 360 degrees around the IF.

**Terminal control area** A control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes.

**Terrain** The surface of the Earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow, and excluding obstacles.

*Note— In practical terms, depending on the method of data collection, terrain represents the continuous surface that exists at the bare Earth, the top of the canopy or something in-between, also known as “first reflective surface”.*

**Thermograph** An instrument continuously recording temperature.

**Thermometer** An instrument for measuring temperature; in meteorology, generally used to measure the temperature of the air or the soil.

**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.

*Note — See Attachment E of ICAO Annex 13 — Aircraft Accident and Incident Investigation for a description of operational personnel.*

**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 ICAO 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.*

**Threshold (runway)** The beginning of that portion of the runway usable for landing.

**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.

<b>Tilt-rotor</b>	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.
<b>Total estimated elapsed time</b>	For IFR flights, the estimated time required from take-off to arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the destination aerodrome, to arrive over the destination aerodrome. For VFR flights, the estimated time required from take-off to arrive over the destination aerodrome.
<b>Total vertical error (TVE)</b>	The vertical geometric difference between the actual pressure altitude flown by an aircraft and its assigned pressure altitude (flight level).
<b>Touchdown and lift-off area (TLOF)</b>	A load bearing area on which a helicopter may touch down or lift off.
<b>Touchdown Zone</b>	The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway.
<b>Touring Motor Glider (TMG)</b>	A specific class of powered sailplane having an integrally mounted, non-retractable engine and a non-retractable propeller. It shall be capable of taking off and climbing under its own power according to its flight manual
<b>Traceability</b>	<p>Ability to trace the history, application or location of that which is under consideration (ISO 9000*).</p> <p><i>Note. When considering product, traceability can relate to:</i></p> <ul style="list-style-type: none"><li>– <i>the origin of materials and parts;</i></li><li>– <i>the processing history; and</i></li><li>– <i>the distribution and location of the product after delivery.</i></li></ul>
<b>Track</b>	The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).
<b>Traffic avoidance advice</b>	Advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision.

<b>Traffic information</b>	Information issued by an air traffic services unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision.
<b>Traffic load</b>	The total mass of passengers, baggage, cargo and carry-on specialist equipment, including any ballast
<b>Transfer of control point</b>	A defined point located along the flight path of an aircraft, at which the responsibility for providing air traffic control service to the aircraft is transferred from one control unit or control position to the next.
<b>Transferring unit</b>	Air traffic control unit in the process of transferring the responsibility for providing air traffic control service to an aircraft to the next air traffic control unit along the route of flight.
<b>Transition altitude</b>	The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.
<b>Tropopause</b>	The boundary layer between the troposphere and stratosphere, where an abrupt change in temperature lapse rate usually occurs. It is defined as the lowest level at which the lapse rate decreases to $2^{\circ}\text{C km}^{-1}$ or less, provided that the average lapse rate between this level and all higher levels within 2 km does not exceed $2^{\circ}\text{C km}^{-1}$ . Occasionally, a second tropopause may be found if the lapse rate above the first tropopause exceeds $3^{\circ}\text{C km}^{-1}$ .
<b>Tropical cyclone</b>	Generic term for a non-frontal synoptic-scale cyclone originating over tropical or sub-tropical waters with organized convection and definite cyclonic surface wind circulation.
<b>Tropical Cyclone Advisory Centre (TCAC)</b>	A meteorological centre designated by regional air navigation agreement to provide advisory information to meteorological watch offices, world area forecast centres and international OPMET databanks regarding the position, forecast direction and speed of movement, central pressure and maximum surface wind of tropical cyclones.
<b>Troposphere</b>	Lower part of the atmosphere, extending from the surface up to a height varying from about 7 to 9 km at polar regions to approximately 17 km in tropics. The troposphere is characterized by decreasing temperature with height, appreciable vertical wind motion, appreciable water vapor content, and weather.

<b>Trough</b>	In meteorology, an elongated area of relatively low atmospheric pressure; the opposite of a ridge.
<b>Type Certificate</b>	<p>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.</p> <p>Note: Appropriate airworthiness requirements means the comprehensive and detailed airworthiness codes established, adopted or accepted by a Contracting State for the class of aircraft, engine or propeller under consideration.</p>
<b>Type design</b>	The set of data and information necessary to define an aircraft, engine or propeller type for the purpose of airworthiness determination.
<b>Type of aircraft</b>	A categorisation of aircraft requiring a type rating as determined in the operational suitability data established in accordance with MCAR-21, and which include all aircraft of the same basic design including all modifications thereto except those which result in a change in handling or flight characteristics
<b>Ultimate load</b>	The limit load multiplied by the appropriate factor of safety.
<b>Ultra long range operations (ULR)</b>	Long range flights having a planned flight duration greater than 16 hours or a flight duty period that exceeds 18 hours
<b>Ultraviolet radiation</b>	Electromagnetic radiation of shorter wavelength than visible radiation but longer than x-rays; roughly, radiation in the wavelength interval from 10 to 4000 angstroms.
<b>Unaided NVIS flight</b>	In the case of NVIS operations, that portion of a VFR flight performed at night when a crew member is not using NVG
<b>Uncertainty phase</b>	A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.
<b>Undertaking</b>	Any natural or legal person, whether profit-making or not, or any official body whether having its own personality or not
<b>Unmanned free balloon</b>	A non-power-driven, unmanned, lighter-than-air aircraft in free flight.



*Note: Unmanned free balloons are classified as heavy, medium or light in accordance with specifications contained in MCAR2, Appendix 4.*

<b>Unit load device</b>	Any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo.
<b>UN number</b>	The four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals to identify an article or substance or a particular group of articles or substances.
<b>Unstable air</b>	Air in which static instability prevails. This condition is determined by the vertical gradients of air temperature and humidity.
<b>Upper air observation</b>	An observation made in the free atmosphere either directly or indirectly
<b>Upper atmosphere</b>	The general term applied to the atmosphere above the mesopause.
<b>Upper-air chart</b>	A meteorological chart relating to a specified upper-air surface or layer of the atmosphere.
<b>Usability factor (runway)</b>	<p>The percentage of time during which the use of a runway or system of runways is not restricted because of the cross-wind component.</p> <p><i>Note — Cross-wind component means the surface wind component at right angles to the runway centre line.</i></p>
<b>V1</b>	The maximum speed in the take-off at which the pilot must take the first action to stop the aeroplane within the accelerate-stop distance. V1 also means the minimum speed in the take-off, following a failure of the critical engine at $V_{EF}$ , at which the pilot can continue the take-off and achieve the required height above the take-off surface within the take-off distance
<b>Validation</b>	Confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled (ISO 9000*).

<b>Vectoring</b>	Provision of navigational guidance to aircraft in the form of specific headings, based on the use of an ATS surveillance system.
<b>VEF</b>	The speed at which the critical engine is assumed to fail during take-off
<b>VTOSS</b>	The minimum speed at which climb shall be achieved with the critical engine inoperative, the remaining engines operating within approved operating limits.
<b>Verification</b>	<p>Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled (ISO 9000*).</p> <p><i>Note 1. The term “verified” is used to designate the corresponding status.</i></p> <p><i>Note 2. Confirmation can comprise activities such as:</i></p> <ul style="list-style-type: none"><li>– <i>performing alternative calculations;</i></li><li>– <i>comparing a new design specification with a similar proven design specification;</i></li><li>– <i>undertaking tests and demonstrations; and</i></li><li>– <i>reviewing documents prior to issue.</i></li></ul>
<b>VFR</b>	The symbol used to designate the visual flight rules.
<b>VFR flight</b>	A flight conducted in accordance with the visual flight rules.
<b>Visibility</b>	<p>Visibility for aeronautical purposes is the greater of:</p> <p>(a) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background;</p> <p>(b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.</p> <p><i>Note 1: The two distances have different values in air of a given extinction coefficient, and the latter b) varies with the background illumination. The former a) is represented by the meteorological optical range (MOR).</i></p> <p><i>Note 2: The definition applies to the observations of visibility in local routine and special reports, to the observations of prevailing and</i></p>

*minimum visibility reported in METAR and SPECI and to the observations of ground visibility.*

**Visual approach**

An approach when either part or all of an instrument approach procedure is not completed and the approach is executed with visual reference to the terrain

**Visual approach procedure**

A series of predetermined manoeuvres by visual reference, 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, a go-around procedure can be carried out.

**Visual line-of-sight (VLOS) operation**

An operation in which the remote pilot or RPA observer maintains direct unaided visual contact with the remotely piloted aircraft.

**Visual meteorological conditions (VMC)**

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

*Note: The specified minima are contained in MCAR2, Chapter 4.*

**Visual meteorological conditions (VMC)**

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

**VMC**

The symbol used to designate visual meteorological conditions.

**Voice-automatic terminal information service (Voice-ATIS)**

The provision of ATIS by means of continuous and repetitive voice broadcasts.

**Volcanic Ash Advisory Centre (VAAC)**

A meteorological centre designated by regional air navigation agreement to provide advisory information to meteorological watch offices, area control centres, flight information centres, world area forecast centres and international OPMET databanks regarding the lateral and vertical extent and forecast movement of volcanic ash in the atmosphere following volcanic eruptions.

**VOLMET**

Meteorological information for aircraft in flight.

*Data Link-VOLMET (D- VOLMET). Provision of current aerodrome routine meteorological reports (METAR) and aerodrome special meteorological reports (SPECI), aerodrome forecasts (TAF), SIGMET, special air-reports not covered by a SIGMET and, where available, AIRMET via data link.*

*VOLMET Broadcast. Provision, as appropriate, of current METAR, SPECI, TAF and SIGMET by means of continuous and repetitive voice broadcasts.*

**VSO** The stall speed or the minimum steady flight speed in the landing configuration.

**Warm front** The forward edge of an advancing warm air mass that is displacing cooler air in its path.

**Water Vapor** Water substance in vapor (gaseous) form; one of the most important of all constituents of the atmosphere.

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

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

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

19104 — Geographic information — Terminology

19108 — Geographic information — Temporal schema

**Weather** The state of the atmosphere, mainly with respect to its effects upon life and human activities. As distinguished from climate, weather consists of the short-term (minutes to about 15 days) variations of the atmosphere state.

**Weather-permissible aerodrome** An adequate aerodrome where, for the anticipated time of use, weather reports, or forecasts, or any combination thereof, indicate that the weather conditions will be at or above the required aerodrome operating minima, and the runway surface condition reports indicate that a safe landing will be possible.

*(Source: European Commission Regulation (EU) No. 379/2014 dated 24 April 2014)*

**Wet lease agreement** An agreement between air carriers pursuant to which the aircraft is operated under the AOC of the lessor;

<b>Wet runway</b>	The runway surface is covered by any visible dampness or water up to and including 3 mm deep within the intended area of use.
<b>Window of Circadian Low (WOCL)</b>	The period between 02:00 and 05:59 hours in the time zone to which a crew member is acclimatised
<b>World Area Forecast Centre (WAFC)</b>	A meteorological centre designated to prepare and issue significant weather forecasts and upper-air forecasts in digital form on a global basis direct to States using the aeronautical fixed service Internet based services.
<b>World Area Forecast System (WAFS)</b>	A worldwide system by which world area forecast centers provide aeronautical meteorological en-route forecasts in uniform standardized formats.