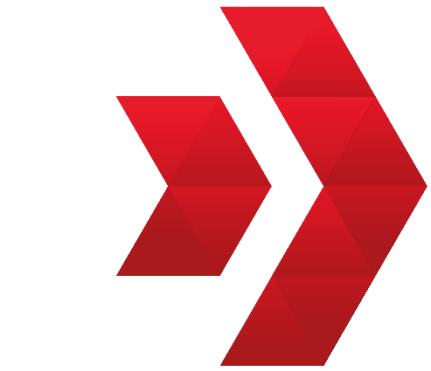


الطيران المدني
Civil Aviation
State of Kuwait - دولة الكويت

Attachment 1 to KCASR 00

KCASR Definitions

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Foreword

This document forms part of KCASR 00 and consolidates definitions drawn from the relevant ICAO Annexes and KCASR parts. Its purpose is to establish consistent terminology across all regulations, ensuring uniform interpretation and application by all users.

The definitions herein are authoritative for the purposes of the Kuwait Civil Aviation Safety Regulations.

President of Kuwait Civil Aviation Authority

Abdullah F. Alrajhi
Acting / Deputy Director General
for Aviation Safety, Air Transport & Aviation Security

Attachment 1
KCASR Definitions

Definition	Definition Details
A	
A non-power-driven lighter-than-air aircraft.	A mark assigned by the International Civil Aviation Organization to the common mark registering authority registering aircraft of an international operating agency on other than a national basis. ***Note.*** *All aircraft of an international operating agency which are registered on other than a national basis will bear the same common mark.*
A station in the aeronautical telecommunication service.	An aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders.
Accelerate-stop distance available (ASDA).	The length of the take-off run available plus the length of stop-way, if provided.
Accepting unit.	Air traffic control unit next to take control of an aircraft.
Accident investigation authority.	The authority designated by a State as responsible for aircraft accident and incident investigations within the context of the KCASR.
Accident.	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: a) a person is fatally or seriously injured as a result of: • being in the aircraft, or • direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or • direct exposure to jet blast, ***except*** when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

	b) the aircraft sustains damage or structural failure which: • adversely affects the structural strength, performance or flight characteristics of the aircraft, and • 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, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the Radom); or c) the aircraft is missing or is completely inaccessible. ***Note 1***. *For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.* ***Note 2.*** *An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.* ***Note 3***. *The type of unmanned aircraft system to be investigated is addressed in 5.1 of KCASR 13.* ***Note 4.*** *Guidance for the determination of aircraft damage can be found in Attachment E of KCASR 13.*
Accompanying person.	An adult who is travelling with a minor. This person will not necessarily be the parent or legal guardian of the minor. ***Note***. *It is to be noted that this definition might need to be applied in light of any obligation resulting from the application of national regulations on border checks.*
Accredited medical conclusion.	The conclusion reached by one or more medical experts acceptable to the Licensing Authority 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.
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, including but not limited to: • unlawful seizure of aircraft, • destruction of an aircraft in service, • hostage-taking on board 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, • use of an aircraft in service for the purpose of causing death, serious bodily injury, or serious damage to property or the environment, • communication of false information such 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.
Adapted competency model.	A group of competencies with their associated description and performance criteria adapted from an ICAO competency framework that an organization uses to develop competency-based training and assessment for a given role
Administrative partnership.	Delegation of administering tasks in this Volume from one State to another State(s).
Admission.	The permission granted to a person to enter a State by the public authorities of that State in accordance with its national laws.
ADS-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.*
Advance Passenger Information (API) System.	An electronic communications system whereby required data elements are collected and transmitted to border control agencies prior to flight departure or arrival and made available on the primary line at the airport of entry.
Advanced aircraft.	An aircraft with equipment in addition to that required for a basic aircraft for a given take-off, approach or landing operation.
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.
Aero plane.	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.
Aerodrome beacon.	Aeronautical beacon used to indicate the location of an aerodrome from the air.
Aerodrome certificate.	A certificate issued by the appropriate authority under applicable regulations for the operation of an aerodrome.
Aerodrome climatological summary.	Concise summary of specified meteorological elements at an aerodrome, based on statistical data.
Aerodrome climatological table.	Table providing statistical data on the observed occurrence of one or more meteorological elements at an aerodrome.
Aerodrome control radio station.	A station providing radiocommunication between an aerodrome control tower and aircraft or mobile aeronautical stations.
Aerodrome control service.	Air traffic control service for aerodrome traffic.
Aerodrome control tower.	A unit established to provide air traffic control service to aerodrome traffic.
Aerodrome elevation.	The elevation of the highest point of the landing area.
Aerodrome identification sign.	A sign placed on an aerodrome to aid in identifying the aerodrome from the air.
Aerodrome mapping data (AMD).	Data collected for the purpose of compiling aerodrome mapping information for aeronautical uses. ***Note.*** *Aerodrome mapping data is collected for purposes that include the improvement of the user's situational awareness, surface navigation operations, training, charting and planning.*
Aerodrome mapping database (AMDB).	A collection of aerodrome mapping data organized and arranged as a structured data set.
Aerodrome meteorological office.	An office designated to provide meteorological service for aerodromes serving international air navigation.
Aerodrome operating minima	The limits of usability of an aerodrome for: a) take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions; b) landing in 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.
Aerodrome pair.	A group of two aerodromes composed of a departing aerodrome and an arrival aerodrome.
Aerodrome reference point.	The designated geographical location of an aerodrome.
Aerodrome traffic density.	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. ***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.* ***Note 2****. Either a take-off or a landing constitutes a movement.*
Aerodrome traffic zone.	An airspace of defined dimensions established around an aerodrome for the protection of aerodrome traffic.
Aerodrome traffic.	All traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome. ***Note.*** *An aircraft is in the vicinity of an aerodrome when it is in, entering or leaving an aerodrome traffic circuit.*
Aerodrome.	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.
Aeronautical administrative communications (AAC).	Communications necessary for the exchange of aeronautical administrative messages.
Aeronautical beacon.	An aeronautical ground light visible at all azimuths, either continuously or intermittently, to designate a particular point on the surface of the earth.

Aeronautical broadcasting service.	A broadcasting service intended for the transmission of information relating to air navigation.
Aeronautical chart.	A representation of a portion of the Earth, its culture and relief, specifically designated to meet the requirements of air navigation.
Aeronautical Data.	A representation of aeronautical facts, concepts or instructions in a formalized manner suitable for communication, interpretation or processing.
Aeronautical fixed circuit.	A circuit forming part of the aeronautical fixed service (AFS).
Aeronautical fixed service (AFS).	A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.
Aeronautical fixed station.	A station in the aeronautical fixed service.
Aeronautical fixed telecommunication network (AFTN).	A worldwide system of aeronautical fixed circuits provided, as part of the aeronautical fixed service, for the exchange of messages and/or digital data between aeronautical fixed stations having the same or compatible communications characteristics.
Aeronautical fixed telecommunication network circuit.	A circuit forming part of the aeronautical fixed telecommunication network (AFTN).
Aeronautical ground light.	Any light specially provided as an aid to air navigation, other than a light displayed on an aircraft.
Aeronautical Information Circular (AIC).	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.
Aeronautical information management (AIM).	The dynamic, integrated management of aeronautical information through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties.
Aeronautical information product	Aeronautical data and aeronautical information provided either as digital data sets or as a standardized presentation in paper or electronic media. Aeronautical information products include: • Aeronautical Information Publication (AIP), including Amendments and Supplements; • Aeronautical Information Circulars (AIC); • aeronautical charts; • NOTAM; and • digital data sets.

	***Note**. Aeronautical information products are intended primarily to satisfy international requirements for the exchange of aeronautical information.*
Aeronautical Information Publication (AIP).	A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.
Aeronautical information service (AIS).	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.
Aeronautical information.	Information resulting from the assembly, analysis and formatting of aeronautical data.
Aeronautical meteorological station.	A station designated to make observations and meteorological reports for use in international air navigation.
Aeronautical mobile (R) service (RR S1.33).	An aeronautical mobile service reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes.
Aeronautical mobile service (RR S1.32).	A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies.
Aeronautical mobile-satellite (R) service (RR S1.36).	An aeronautical mobile-satellite service reserved for communications relating to safety and regularity of flights, primarily along national or international civil air routes.
Aeronautical mobile-satellite service (RR S1.35).	A mobile-satellite service in which mobile earth stations are located on board aircraft; survival craft stations and emergency position-indicating radio-beacon stations may also participate in this service.
Aeronautical operational control (AOC).	Communication required for the exercise of authority over the initiation, continuation, diversion or termination of flight for safety, regularity and efficiency reasons.
Aeronautical radio navigation service (RR S1.46).	A radio navigation service intended for the benefit and for the safe operation of aircraft. ***Note.** The following Radio Regulations are quoted for purposes of reference and/or clarity in understanding of the above definition of the aeronautical radio navigation service:* *RR S1.10 Radio navigation: Radiodetermination used for the purpose of navigation, including obstruction warning.* *RR S1.9 Radiodetermination: The determination of the position, velocity and/or other characteristics of an object, or the obtaining of*

	information relating to these parameters, by means of the propagation properties of radio waves.
Aeronautical station (RR S1.81).	A land station in the aeronautical mobile service. In certain instances, an aeronautical station may be located, for example, on board ship or on a platform at sea.
Aeronautical telecommunication agency.	An agency responsible for operating a station or stations in the aeronautical telecommunication service.
Aeronautical telecommunication log.	A record of the activities of an aeronautical telecommunication station.
Aeronautical telecommunication network (ATN).	A global internetwork architecture that allows ground, air-ground and avionic data subnetworks to exchange digital data for the safety of air navigation and for the regular, efficient and economic operation of air traffic services.
Aeronautical telecommunication service.	A telecommunication service provided for any aeronautical purpose.
Aeronautical telecommunication station.	A station in the aeronautical telecommunication service.
Aeroplane owner. Till 25 Nov 2026	Person(s), organization(s) or enterprise(s) identified via Item 4 (Name of owner) and Item 5 (Address of owner) on the certificate of registration of an aeroplane.
Aeroplane owner. Applicable as of 26 Nov 2026	Person(s), organization(s) or enterprise(s) identified either through Items 4a and 4b on the certificate of registration of an aeroplane (provided that the selected basis of registration be "ownership of aircraft"), or otherwise through Item 5 of the said certificate.
Aeroplane reference field length.	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. ***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.*
Aeroplane.	A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.
Afterburning.	A mode of engine operation wherein a combustion system fed (in whole or part) by vitiated air is used.

AFTN communication centre.	An AFTN station whose primary function is the relay or retransmission of AFTN traffic from (or to) a number of other AFTN stations connected to it.
AFTN destination station.	An AFTN station to which messages and/or digital data are addressed for processing for delivery to the addressee.
AFTN origin station.	An AFTN station where messages and/or digital data are accepted for transmission over the AFTN.
AFTN station.	A station forming part of the aeronautical fixed telecommunication network (AFTN) and operating as such under the authority or control of a State.
Agreement summary.	When an aircraft is operating under an Article 83 *bis* agreement between the State of Registry and another State, the agreement summary is a document transmitted with the Article 83 *bis* Agreement registered with the ICAO Council that identifies succinctly and clearly which functions and duties are transferred by the State of Registry to that other State. ***Note****. The other State in the above definition refers to either the State of the Operator for commercial air transport operations or, for general aviation operations, to the State of the principal location of a general aviation operator.*
AIP Amendment.	Permanent changes to the information contained in the AIP.
AIP Supplement.	Temporary changes to the information contained in the AIP which are provided by means of special pages.
Air defence identification zone (ADIZ).	Special designated airspace of defined dimensions within which aircraft are required to comply with special identification and/or reporting procedures additional to those related to the provision of air traffic services (ATS).
Air operator certificate (AOC).	A certificate authorizing an operator to carry out specified commercial air transport operations.
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 manoeuvring area between aircraft and obstructions; and b) expediting and maintaining an orderly flow of air traffic.
Air traffic control unit.	A generic term meaning variously, area control centre, approach control unit or aerodrome control tower.
Air traffic controller schedule.	A plan for allocating air traffic controller duty periods and non-duty periods over a period of time, otherwise referred to as a roster.
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 airspaces.	Airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified. ***Note.*** *ATS airspaces are classified as Class A to G.*
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 manoeuvring area of an aerodrome.
Air transit route.	A defined route for the air transiting of helicopters.
AIRAC	An acronym (aeronautical information regulation and control) signifying a system aimed at advance notification, based on

	common effective dates, of circumstances that necessitate significant changes in operating practices.
Airborne collision avoidance system (ACAS).	An aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders. ***Note.*** *SSR transponders referred to above are those operating in Mode C or Mode S.*
Aircraft - category.	Classification of aircraft according to specified basic characteristics, e.g. aeroplane, helicopter, glider, free balloon.
Aircraft - type of.	All aircraft of the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics
Aircraft address.	A unique combination of twenty-four bits available for assignment to an aircraft for the purpose of air ground communications, navigation and surveillance. ***Note****. SSR Mode S transponders transmit extended squitters to support the broadcast of aircraft-derived position for surveillance purposes. The broadcast of this type of information is a form of automatic dependent surveillance (ADS) known as ADS-broadcast (ADS-B).*
Aircraft avionics	A term designating any electronic device - including its electrical part - for use in an aircraft, including radio, automatic flight control and instrument systems
Aircraft certificated for single-pilot operation.	A type of aircraft which the State of Registry has determined, during the certification process, can be operated safely with a minimum crew of one pilot.
Aircraft classification number (ACN).	A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category. ***Note****. The aircraft classification number is calculated with respect to the centre of gravity (CG) position which yields the critical loading on the critical gear. Normally the aft-most CG position appropriate to the maximum gross apron (ramp) mass is used to calculate the ACN. In exceptional cases the forwardmost CG position may result in the nose gear loading being more critical.*
Aircraft classification rating (ACR).	A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category. ***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 aft-most 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.*

Aircraft earth station (AES).	A mobile earth station in the aeronautical mobile-satellite service located on board an aircraft (see also "GES").
Aircraft equipment.	Articles, including first-aid and survival equipment and commissary supplies, but not spare parts or stores, for use on board an aircraft during flight.
Aircraft observation.	The evaluation of one or more meteorological elements made from an aircraft in flight.
Aircraft operating agency.	A person, organization or enterprise engaged in, or offering to engage in, an aircraft operation.
Aircraft operating manual.	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. ***Note***. *The aircraft operating manual is part of the operations manual.*
Aircraft operator.	A person, organization or enterprise engaged in or offering to engage in an aircraft operation.
Aircraft operators' documents.	Air waybills/consignment notes, passenger tickets and boarding passes, bank and agent settlement plan documents, excess baggage tickets, miscellaneous charges orders (M.C.O.), damage and irregularity reports, baggage and cargo labels, timetables, and weight and balance documents, for use by aircraft operators.
Aircraft required to be operated with a co-pilot.	A type of aircraft that is required to be operated with a co-pilot, as specified in the flight manual or by the air operator certificate.
Aircraft security check.	An inspection of the interior of an aircraft to which passengers may have had access and an inspection of the hold for the purposes of discovering suspicious objects, weapons, explosives or other dangerous devices, articles and substances.
Aircraft security search.	A thorough inspection of the interior and exterior of the aircraft for the purpose of discovering suspicious objects, weapons, explosives or other dangerous devices, articles or substances.
Aircraft stand.	A designated area on an apron intended to be used for parking an aircraft.
Aircraft station (RR S1.83).	A mobile station in the aeronautical mobile service, other than a survival craft station, located on board an aircraft.
Aircraft tracking.	A process, established by the operator, that maintains and updates, at standardized intervals, a ground-based record of the four-dimensional position of individual aircraft in flight.
Aircraft.	Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.
Air-ground communication.	Two-way communication between aircraft and stations or locations on the surface of the earth.

Air-ground control radio station.	An aeronautical telecommunication station having primary responsibility for handling communications pertaining to the operation and control of aircraft in a given area.
Airline.	As provided in Article 96 of the Convention, any air transport enterprise offering or operating a scheduled international air service.
Airmanship.	The consistent use of good judgement and well-developed knowledge, skills and attitudes to accomplish flight objectives.
AIRMET information.	Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information region concerned or sub-area thereof.
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 (Doc 4444).*
Airship.	A power-driven lighter-than-air aircraft.
Airside.	The movement area of an airport, adjacent terrain and buildings or portions thereof, access to which is controlled.
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-to-ground communication.	One-way communication from aircraft to stations or locations on the surface of the earth.
Airway.	A control area or portion thereof established in the form of a corridor.
Airworthy.	The status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation.
ALERFA.	The code word used to designate an alert phase.
Alert phase.	A situation wherein apprehension exists as to the safety of an aircraft and its occupants.
Alerting service.	A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.

Alternate aerodrome.	An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing where the necessary services and facilities are available, where aircraft performance requirements can be met and which is operational the expected time of use. Alternate aerodromes include the following: ***Take-off alternate***. 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. ***En-route alternate***. An alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en route. ***Destination alternates***. An alternate aerodrome at 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 alternates.*** 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. ***Note***. *The heliport from which a flight departs may be an en-route or a destination alternate heliport for that flight.*
Alternative means of communication.	A means of communication provided with equal status, and in addition to the primary means.

Altimetry system error (ASE).	The difference between the altitude indicated by the altimeter display, assuming a correct altimeter barometric setting, and the pressure altitude corresponding to the undisturbed ambient pressure.
Altitude.	The vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL).
Ampere (A).	The ampere is that constant electric current which, if maintained in two straight parallel conductors of infinite length, of negligible circular cross-section, and placed 1 metre apart in a vacuum, would produce between these conductors a force equal to 2 × 10–7 newton per metre of length.
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.
Application entity (AE).	An AE represents a set of ISO/OSI communication capabilities of a particular application process (see ISO/IEC 9545 for further details).
Application.	Manipulation and processing of data in support of user requirements (ISO 19104).
Approach and landing phase helicopters.	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 balked landing point.
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 phase.	The operating phase defined by the time during which the engine is operated in the approach operating mode.

Appropriate airworthiness requirements.	The comprehensive and detailed airworthiness codes established, adopted or accepted by a Contracting State for the class of aircraft, engine or propeller under consideration.
Appropriate ATS authority.	The relevant authority designated by the State responsible for providing air traffic services in the airspace concerned.
Appropriate authority.	a) *Regarding flight over the high seas:* The relevant authority of the State of Registry. b) *Regarding flight other than over the high seas:* The relevant authority of the State having sovereignty over the territory being overflown.
Approval.	An authorization granted by an appropriate national authority for: a) The transport of dangerous goods forbidden on passenger and/or cargo aircraft where the Technical Instructions state that such goods may be carried with an approval; or b) Other purposes as provided for in the Technical Instructions. ***Note.*** *In the absence of a specific reference in the Technical Instructions allowing the granting of an approval, an exemption may be sought.*
Approved maintenance organization.	An organization approved by Kuwait DGCA, in accordance with the requirements of KCASR 8, Part 145 Maintenance Organization Approval, to perform maintenance of aircraft, engine, propeller or parts thereof and operating under supervision approved by that State. ***Note.*** *Nothing in this definition is intended to preclude that the organization and its supervision be approved by more than one State.*
Approved training organization.	An organization approved by and operating under the supervision of Kuwait DGCA in accordance with the requirements of KCASR 1 to perform approved training.
Approved training.	Training conducted under special curricula and supervision approved by a Contracting State.
Approved.	Accepted by a Contracting State as suitable for a particular purpose.
Apron management service.	A service provided to regulate the activities and the movement of aircraft and vehicles on an apron.
Apron.	A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.

Area control centre (ACC).	A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.
Area control service.	Air traffic control service for controlled flights in control areas.
Area minimum altitude (AMA).	The minimum altitude to be used under instrument meteorological conditions (IMC), that provides a minimum obstacle clearance within a specified area, normally formed by parallels and meridians.
Area navigation.	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.
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.
Ascent/Descent surface.	An inclined plane or complex surface that slopes upward from the centre of the FATO to indicate the path helicopters are expected to follow when vertical procedures are utilized – it can consist of: a) an inverted triangle when there is no lateral component; or b) an inverted conical surface when there is a lateral component.
ASHTAM.	A special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption and/or volcanic ash cloud that is of significance to aircraft operations.
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.*
Associated aircraft systems.	Those aircraft systems drawing electrical/pneumatic power from an auxiliary power unit during ground operations.
ATN security services.	A set of information security provisions allowing the receiving end system or intermediate system to unambiguously identify (i.e. authenticate) the source of the received information and to verify the integrity of that information.
ATS direct speech circuit.	An aeronautical fixed service (AFS) telephone circuit, for direct exchange of information between air traffic services (ATS) units.

ATS interfacility data communication (AIDC).	Automated data exchange between air traffic services units in support of flight notification, flight coordination, transfer of control and transfer of communication.
ATS message handling service (ATSMHS).	An ATN application consisting of procedures used to exchange ATS messages in store-and-forward mode over the ATN such that the conveyance of an ATS message is in general not correlated with the conveyance of another ATS message by the service provider.
ATS message handling system (AMHS).	The set of computing and communication resources implemented by ATS organizations to provide the ATS message handling service.
ATS route.	A specified route designed for channelling the flow of traffic as necessary for the provision of air traffic services. ***Note 1****. The term "ATS route" is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.* ***Note 2****. An ATS route is defined by route 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.*
ATS surveillance service.	A term used to indicate a service provided directly by means of an ATS surveillance system.
ATS surveillance system.	A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft. ***Note.*** *A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal to or better than mono-pulse SSR.*
Authorized agent.	A person who represents an aircraft operator and who is authorized by or on behalf of such operator to act on formalities connected with the entry and clearance of the operator's aircraft, crew, passengers, cargo, mail, baggage or stores and includes, where national law permits, a third party authorized to handle cargo on the aircraft.
Authorized Economic Operator.	AEO is a party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national Customs administration as complying with WCO or equivalent supply chain security standards. AEOs may include manufacturers, importers, exporters, brokers, carriers, consolidators, intermediaries, ports, airports, terminal operators,

	integrated operators, warehouses, distributors and freight forwarders. ***Note**. The definition is aligned with that found in the World Customs Organization's "SAFE Framework of Standards to Secure and Facilitate Global Trade."*
Authorized path.	A communication path suitable for a given message category.
Automated Border Control (ABC).	An automated system which authenticates the electronic machine-readable travel document or token, establishes that the passenger is the rightful holder of the document or token, queries border control records, then determines eligibility for border crossing according to pre-defined rules.
Automatic dependent surveillance — broadcast (ADS-B).	A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.
Automatic dependent surveillance - contract (ADS-C).	A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports. ***Note**. The abbreviated term "ADS contract" is commonly used to refer to ADS event contract, ADS demand contract, ADS periodic contract or an emergency mode.*
Automatic dependent surveillance-broadcast (ADS-B) IN.	A function that receives surveillance data from ADS-B OUT data sources.
Automatic dependent surveillance-broadcast (ADS-B) OUT.	A function on an aircraft or vehicle that periodically broadcasts its state vector (position and velocity) and other information derived from on-board systems in a format suitable for ADS-B IN capable receivers.
Automatic deployable flight recorder (ADFR).	A combination flight recorder installed on the aircraft which is capable of automatically deploying from the aircraft.
Automatic relay installation.	A teletypewriter installation where automatic equipment is used to transfer messages from incoming to outgoing circuits. ***Note**. This term covers both fully automatic and semi-automatic installations.*
Automatic telecommunication log.	A record of the activities of an aeronautical telecommunication station recorded by electrical or mechanical means.
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.
Autonomous runway incursion warning system (ARIWS).	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.
Auxiliary power unit (APU).	A self-contained power unit on an aircraft providing electrical/pneumatic power to aircraft systems during ground operations or in flight, separate from the propulsion engine(s).
Axial ratio.	The ratio, expressed in decibels, between the maximum output power and the minimum output power of an antenna to an incident linearly polarized wave as the polarization orientation is varied over all directions perpendicular to the direction of propagation.
B	
Background check.	A check of a person's identity and previous experience, including criminal history and any other security related information relevant for assessing the person's suitability, in accordance with national legislation.
Baggage.	Personal property of passengers or crew carried on an aircraft by agreement with the operator.
Balked landing.	A landing manoeuvre that is unexpectedly discontinued at any point below the obstacle clearance altitude/height (OCA/H).
Balloon.	A non-power-driven lighter-than-air aircraft. ***Note***. *For the purposes of the KCASR, this definition applies to free balloons.*
Bare Earth.	Surface of the Earth including bodies of water and permanent ice and snow, and excluding vegetation and man-made objects.
Barrette.	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.
Base turn.	A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. The tracks are not reciprocal. ***Note***. *Base turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.*
Basic aircraft.	An aircraft which has the minimum equipment required to perform the intended take-off, approach or landing operation.

BDS Open Service (BDS OS).	The specified level of positioning, velocity and timing accuracy that is available to any BDS user on a continuous, worldwide basis.
Becquerel (Bq).	The activity of a radionuclide having one spontaneous nuclear transition per second.
Behaviour detection.	Within an aviation security environment, the application of techniques involving the recognition of behavioural characteristics, including but not limited to physiological or gestural signs indicative of anomalous behaviour, to identify persons who may pose a threat to civil aviation.
BeiDou Navigation Satellite System (BDS).	The satellite navigation system operated by the People's Republic of China.
Bit error rate (BER).	The number of bit errors in a sample divided by the total number of bits in the sample, generally averaged over many such samples.
Blind transmission.	A transmission from one station to another station in circumstances where two-way communication cannot be established but where it is believed that the called station is able to receive the transmission.
Border security.	The enforcement, by a State, of its laws and/or regulations concerning the movement of goods and/or persons across its borders.
Briefing.	Oral commentary on existing and/or expected meteorological conditions.
Broadcast.	A transmission of information relating to air navigation that is not addressed to a specific station or stations.
Bypass ratio.	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.
C	
C2 Link ***(Applicable as of 26 November 2026)***	The data link between the remotely piloted aircraft and the remote pilot station for the purposes of managing the flight.
Cabin crew member.	A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.
Calendar.	Discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day (ISO 19108).
Candela (cd).	The luminous intensity, in the perpendicular direction, of a surface of 1/600 000 square metre of black body at the temperature of freezing platinum under a pressure of 101 325 newtons per square metre.

Canopy.	Bare Earth supplemented by vegetation height.
Cargo aircraft.	Any aircraft, other than a passenger aircraft, which is carrying goods or property.
Cargo.	Any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage.
Carrier-to-multipath ratio (C/M).	The ratio of the carrier power received directly, i.e. without reflection, to the multipath power, i.e. carrier power received via reflection.
Carrier-to-noise density ratio (C/No).	The ratio of the total carrier power to the average noise power in a 1 Hz bandwidth, usually expressed in dBHz.
Category A.	With respect to helicopters, means a multi-engine helicopter designed with engine and system isolation features specified in KCASR 8 and capable of operations using take-off and landing data scheduled under a critical engine failure concept which assures adequate designated surface area and adequate performance capability for continued safe flight or safe rejected take-off.
Category B.	With respect to helicopters, means a single-engine or multi-engine helicopter which 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 a forced landing is assumed
Causes.	Actions, omissions, events, conditions, or a combination thereof, which led to the accident or incident. The dentification of causes does not imply the assignment of fault or the determination of administrative, civil or criminal liability.
Ceiling.	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.
Celsius temperature (t°C).	The Celsius temperature is equal to the difference t°C = T – T0 between two thermodynamic temperatures T and T0 where T0 equals 273.15 kelvin.
Certification.	A formal evaluation and confirmation by or on behalf of the appropriate authority for aviation security that a person possesses the necessary competencies to perform assigned functions to an acceptable level as defined by the appropriate authority.
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.
Change-over point.	The point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omnidirectional 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.*
Channel of standard accuracy (CSA).	The specified level of positioning, velocity and timing accuracy that is available to any GLONASS user on a continuous, worldwide basis.
Channel rate accuracy.	This is relative accuracy of the clock to which the transmitted channel bits are synchronized. For example, at a channel rate of 1.2 kbits/s, maximum error of one part in 106 implies the maximum allowed error in the clock is ±1.2 × 10-3 Hz.
Channel rate.	The rate at which bits are transmitted over the RF channel. These bits include those bits used for framing and error correction, as well as the information bits. For burst transmission, the channel rate refers to the instantaneous burst rate over the period of the burst.
Circuit mode.	A configuration of the communications network which gives the appearance to the application of a dedicated transmission path.
Civil aviation inspector.	A civil aviation inspector is an individual, designated by a Contracting State, who is charged with the inspection of the safety, security or related aspects of air transport operations as directed by the appropriate authority. ***Note.** Examples of civil aviation inspectors include inspectors responsible for airworthiness, flight operations and other safety-related aspects, and security-related aspects, of air transport operations.*
Clearance limit.	The point to which an aircraft is granted an air traffic control clearance.
Clearance of goods.	The accomplishment of the customs formalities necessary to allow goods to enter home use, to be exported or to be placed under another customs procedure.
Clearway.	A defined rectangular area on the ground or water under the control of the appropriate authority, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.
Climb phase.	The operating phase defined by the time during which the engine is operated in the climb operating mode.
Cloud of operational significance.	A cloud with the height of cloud base below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater, or a cumulonimbus cloud or a towering cumulus cloud at any height.

Cockpit crew zone.	The part of the cabin that is exclusively designated for flight crew use.
Collision avoidance logic.	The sub-system or part of ACAS that analyses data relating to an intruder and own aircraft, decides whether or not advisories are appropriate and, if so, generates the advisories. It includes the following functions: range and altitude tracking, threat detection and RA generation. It excludes surveillance.
COMAT.	Operator material carried on an operator's aircraft for the operator's own purposes.
Combined vision system (CVS).	A system to display images from a combination of an enhanced vision system (EVS) and a synthetic vision system (SVS).
Command and control (C2) link.	The data link between the remotely piloted aircraft and the remote pilot station for the purposes of managing the flight.
Commencement of journey.	The point at which the person began his journey, without considering any airport at which he stopped in direct transit, either on a through-flight or a connecting flight, if he did not leave the direct transit area of the airport in question.
Commercial air transport operation.	An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.
Commissary supplies.	Items, either disposable or intended for multiple use, that are used by the aircraft operator for provision of services during flights, in particular for catering, and for the comfort of passengers.
Common mark registering authority.	The authority maintaining the non-national register or, where appropriate, the part thereof, in which aircraft of an international operating agency are registered.
Communication centre.	An aeronautical fixed station which relays or retransmits telecommunication traffic from (or to) a number of other aeronautical fixed stations directly connected to it.
Competency standard.	A level of performance that is defined as acceptable when assessing whether or not competency has been achieved.
Competency.	A dimension of human performance that is used to reliably predict successful performance on the job. A competency is manifested and observed through behaviors that mobilize the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions.
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.
Conditions.	Anything that may qualify a specific environment in which performance will be demonstrated.
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.
Consignment.	One or more packages of dangerous goods accepted by an operator from one shipper at one time and at one address, receipted for in one lot and moving to one consignee at one destination address.
Consultation.	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.
Contact tracing.	Contact tracing is the practice of identifying, notifying, and monitoring individuals who may have had close contact with or who have been exposed to, and possibly infected by, a person having a confirmed or probable case of an infectious disease as a means of controlling the spread of infection. The confirmed or potentially infected person's identity is not discussed with contacts, even if asked.
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.
Continuing airworthiness records.	Records which are related to the continuing airworthiness status of an aircraft, engine, rotor or associated part.
Continuing airworthiness.	The set of processes by which an aircraft, engine, propeller or part complies with the applicable airworthiness requirements and remains in a condition for safe operation throughout its operating life.
Continuing airworthiness.	The set of processes by which an aircraft, engine, rotor or part complies with the applicable airworthiness requirements and

	remains in a condition for safe operation throughout its operating life.
Continuous descent final approach (CDFA).	A technique, consistent with stabilized approach procedures, for flying the final approach segment (FAS) of an instrument non-precision approach (NPA) 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 begins for the type of aircraft flown; for the FAS of an NPA procedure followed by a circling approach, the CDFA technique applies until circling approach minima (circling OCA/H) or visual flight manoeuvre altitude/height are reached.
Contour line.	A line on a map or chart connecting points of equal elevation.
Contracted State	When mentioned in the KCASR 3, 4, 10, 11, 12, 15 means the State of Kuwait
Contributing factors.	Actions, omissions, events, conditions, or a combination thereof, which, if eliminated, avoided or absent, would have reduced the probability of the accident or incident occurring, or mitigated the severity of the consequences of the accident or incident. The identification of contributing factors does not imply the assignment of fault or the determination of administrative, civil or criminal liability.
Control area.	A controlled airspace extending upwards from a specified limit above the earth.
Control zone.	A controlled airspace extending upwards from the surface of the earth to a specified upper limit.
Controlled aerodrome.	An aerodrome at which air traffic control service is provided to aerodrome traffic. ***Note****. The term "controlled aerodrome" indicates that air traffic control service is provided to aerodrome traffic but does not necessarily imply that a control zone exists.*
Controlled airspace.	An airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.
Controlled flight.	Any flight which is subject to an air traffic control clearance.
Controller-pilot data link communications (CPDLC).	A means of communication between controller and pilot, using data link for ATC communications.
Controller-pilot data link communications (CPDLC).	A means of communication between controller and pilot, using data link for ATC communications.
Conversion process.	A type of technology used to convert a feedstock into aviation fuel.

Co-pilot.	A licensed pilot serving in any piloting capacity other than as pilot-in-command but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction.
Core satellite constellation(s).	The core satellite constellations are GPS, GLONASS, Galileo and BDS
Corporate aviation operation.	The non-commercial operation or use of aircraft by a company for the carriage of passengers or goods as an aid to the conduct of company business, flown by a professional pilot(s) employed to fly the aircraft.
Corporate aviation.	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 employed to fly the aircraft. (*Note that corporate aviation is a subset of general aviation*.)
CORSIA eligible fuel.	A CORSIA sustainable aviation fuel or a CORSIA lower carbon aviation fuel, which an operator may use to reduce their offsetting requirements.
CORSIA lower carbon aviation fuel.	A fossil-based aviation fuel that meets the CORSIA Sustainability Criteria under this Volume.
CORSIA sustainable aviation fuel.	A renewable or waste-derived aviation fuel that meets the CORSIA Sustainability Criteria under this Volume.
Coulomb (C).	The quantity of electricity transported in 1 second by a current of 1 ampere.
CPDLC message set.	A list of standard message elements and free text message elements.
CPDLC message.	Information exchanged between an airborne system and its ground counterpart. A CPDLC message consists of a single message element or a combination of message elements conveyed in a single transmission by the initiator.
Credit.	Recognition of alternative means or prior qualifications.
Crew member.	A person assigned by an operator to duty on an aircraft during a flight duty period.
Critical engine(s).	Any engine whose failure gives the most adverse effect on the aircraft characteristics relative to the case under consideration. ***Note****. On some aircraft there may be more than one equally critical engine. In this case, the expression "the critical engine" means one of those critical engines.*
Cross-country.	A flight between a point of departure and a point of arrival following a pre-planned route using standard navigation procedures.
Cruise climb.	An aeroplane cruising technique resulting in a net increase in altitude as the aeroplane mass decreases.

Cruise relief pilot.	A flight crew member who is assigned to perform pilot tasks during cruise flight, to allow the pilot-in command or a co-pilot to obtain planned rest.
Cruising level.	A level maintained during a significant portion of a flight.
Culture.	All man-made features constructed on the surface of the Earth, such as cities, railways and canals.
Current data authority.	The designated ground system through which a CPDLC dialogue between a pilot and a controller currently responsible for the flight is permitted to take place.
Current flight plan (CPL).	The flight plan that reflects changes to the filed flight plan, if any, by subsequent ATC clearances..
Current flight plan.	The flight plan, including changes, if any, brought about by subsequent clearances.
Cyclic redundancy check (CRC).	A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.
D	
D.	The largest overall dimension of the helicopter when rotor(s) are turning measured from the most forward position of the main rotor tip path plane to the most rearward position of the tail rotor tip path plane or helicopter structure.
Danger area.	An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.
Dangerous goods accident.	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 or environmental damage.
Dangerous goods incident.	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 or environmental damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardizes the aircraft or its occupants is also deemed to constitute a dangerous goods incident.
Dangerous goods.	Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions. ***Note***. *Dangerous goods are classified in KCASR 18, Chapter 3.*
Data accuracy.	A degree of conformance between the estimated or measured value and the true value.

Data completeness.	The degree of confidence that all of the data needed to support the intended use is provided.
Data format.	A structure of data elements, records and files arranged to meet standards, specifications or data quality Requirements.
Data integrity (assurance level).	A degree of assurance that an aeronautical data and its value has not been lost or altered since the origination or authorized amendment.
Data link communications.	A form of communication intended for the exchange of messages via a data link.
Data link flight information services (D-FIS).	The provision of FIS via data link.
Data link initiation capability (DLIC).	A data link application that provides the ability to exchange addresses, names and version numbers necessary to initiate data link applications (see Doc 4444).
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 series.	Collection of data sets sharing the same product specification (ISO 19115).
Data set.	Identifiable collection of data (ISO 19101).
Data timeliness.	The degree of confidence that the data is applicable to the period of its intended use.
Data traceability.	The degree that a system or a data product can provide a record of the changes made to that product and thereby enable an audit trail to be followed from the end-user to the originator.
Date of manufacture.	The date of issue of the document attesting that the individual aircraft or engine as appropriate conforms to the requirements of the type or the date of an analogous document.
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 three-dimensional (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".*
Declarant.	Any person who makes a goods declaration or in whose name such a declaration is made.
Declared capacity.	A measure of the ability of the ATC system or any of its subsystems or operating positions to provide service to aircraft during normal activities. It is expressed as the number of aircraft entering a specified portion of airspace in a given period of time, taking due account of weather, ATC unit configuration, staff and equipment available, and any other factors that may affect the workload of the controller responsible for the airspace.
Declared distances - heliports.	*a) Take-off distance available (TODAH). The length of the FATO plus the length of helicopter clearway or elevated helicopter clearway (if provided) declared available and suitable for helicopters to complete the take-off.* b) *Rejected take-off distance available (RTODAH).* The length of the FATO declared available and suitable for helicopters operated in performance class 1 to complete a rejected take-off. c) *Landing distance available (LDAH).* The length of the FATO plus any additional area declared available and suitable for helicopters to complete the landing maneuver from a defined height.
Declared distances.	a) *Take-off run available (TORA).* The length of runway declared available and suitable for the ground run of an Aeroplan taking off. b) *Take-off distance available (TODA).* The length of the take-off run available plus the length of the clearway, if provided.

	c) *Accelerate-stop distance available (ASDA).* The length of the take-off run available plus the length of the stop way, if provided. d) *Landing distance available (LDA).* The length of runway which is declared available and suitable for the ground run of an aeroplane landing.
Defined point after take-off (DPATO).	The point, within the take-off and initial climb phase, before which the helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required. ***Note***. *Defined points apply to helicopters operating in performance Class 2 only*.
Defined point before landing (DPBL).	The point, within the approach and landing phase, after which the helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required. ***Note.*** *Defined points apply to helicopters operating in performance Class 2 only.*
Degree Celsius (°C).	The special name for the unit kelvin for use in stating values of Celsius temperature.
De-icing/anti-icing facility.	A facility where frost, ice or snow is removed (de-icing) from the aeroplane to provide clean surfaces, and/or where clean surfaces of the aeroplane receive protection (anti-icing) against the formation of frost or ice and accumulation of snow or slush for a limited period of time. ***Note***. *Further guidance is given in the* Manual of Aircraft Ground De-icing/Anti-icing Operations *(Doc 9640)*.
De-icing/anti-icing pad.	An area comprising an inner area for the parking of an aeroplane to receive de-icing/anti-icing treatment and an outer area for the manoeuvring of two or more mobile de-icing/anti-icing equipment.
Deleterious effects.	Effects that are capable of posing a hazard to the health of passengers, personnel, live cargo or on the structure of the aircraft.
Dependent parallel approaches.	Simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway centre lines are prescribed.
Deportation order.	A written order, issued by the competent authorities of a State and served upon a deportee, directing him to leave that State.
Deportee.	A person who had legally been admitted to a State by its authorities or who had entered a State illegally, and who at some

	later time is formally ordered by the competent authorities to leave that State.
Derivative version.	An aircraft gas turbine engine of the same generic family as an originally type-certificated engine and having features which retain the basic core engine and combustor design of the original model and for which other factors, as judged by the certificating authority, have not changed. ***Note***. *Attention is drawn to the difference between the definition of "derived version of an aeroplane" in Volume I of KCASR 16 and the definition of "derivative version" in this Volume.*
Derived version of an aircraft.	An aircraft which incorporates changes in type design which may adversely affect its noise characteristics as follows: 1. For aeroplanes certificated according to annex 16-Vol I Chapters 3, 4, 14, 15 or 16 – an increase of more than 0.10 EPNdB in any one of the noise certification levels, unless the cumulative effect of changes in type design are tracked by an approved procedure, in which case a cumulative increase in the noise level in any one of the noise certification levels of more than 0.30 EPNdB or the margin of compliance, whichever is smaller. 2. For aeroplanes certificated according to annex 16-Vol I Chapters 6 or 10 – an increase of more than 0.10 dB(A) in the noise certification level, unless the cumulative effect of changes in type design is tracked by an approved procedure, in which case a cumulative increase in the noise certification level of more than 0.30 dB(A) or the margin of compliance, whichever is smaller. 3. For helicopters – an increase of more than 0.30 EPNdB in any one of the noise certification levels for helicopters certificated according to annex 16-Vol I Chapter 8, and 0.30 dB(A) in the noise certification level for helicopters certificated according to annex 16-Vol I Chapter 11. 4. For tilt-rotors – an increase of more than 0.30 EPNdB in any one of the take-off, approach or overflight in VTOL/conversion mode noise certification levels.
Derived version of a CO2-certified aeroplane.	An aeroplane which incorporates a change in the type design that either increases its maximum take-off mass, or that increases its CO2 emissions evaluation metric value by more than:

	a) 1.35 per cent at a maximum take-off mass of 5 700 kg, decreasing linearly to; b) 0.75 per cent at a maximum take-off mass of 60 000 kg, decreasing linearly to; c) 0.70 per cent at a maximum take-off mass of 600 000 kg; and d) a constant 0.70 per cent at maximum take-off masses greater than 600 000 kg. ***Note**. In some States, where the certificating authority finds that the proposed change in design, configuration, power or mass is so extensive that a substantially complete investigation of compliance with the applicable airworthiness regulations is required, the aeroplane requires a new Type Certificate.*
Derived version of a non-CO2-certified aeroplane.	An individual aeroplane that conforms to an existing Type Certificate, but which is not certified to KCASR 16, Volume III, and to which a change in the type design is made prior to the issuance of the aeroplane's first certificate of airworthiness that increases its CO2 emissions evaluation metric value by more than 1.5 per cent or is considered to be a significant CO2 change.
Design D.	The D of the design helicopter.
Design landing mass.	The maximum mass of the aircraft at which, for structural design purposes, it is assumed that it will be planned to land.
Design take-off mass.	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.
Design taxiing mass.	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.
Designated postal operator.	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.
Detect and avoid.	The capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action.
DETRESFA.	The code word used to designate a distress phase.
Digital Elevation Model (DEM).	The representation of terrain surface by continuous elevation values at all intersections of a defined grid, referenced to common datum. ***Note**. Digital Terrain Model (DTM) is sometimes referred to as DEM.*

Direct transit area.	A special area established in an international airport, approved by the public authorities concerned and under their direct supervision or control, where passengers can stay during transit or transfer without applying for entry to the State.
Direct transit arrangements.	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.
Directory service (DIR).	A service, based on the ITU-T X.500 series of recommendations, providing access to and management of structured information relevant to the operation of the ATN and its users.
Discrete source damage.	Structural damage of the aeroplane that is likely to result from: impact with a bird, uncontained fan blade failure, uncontained engine failure, uncontained high-energy rotating machinery failure or similar causes.
Disembarkation.	The leaving of an aircraft after a landing, except by crew or passengers continuing on the next stage of the same through-flight.
Disinfection.	The procedure whereby health measures are taken to control or kill infectious agents on a human or animal body, in or on affected parts of aircraft, baggage, cargo, goods or containers, as required, by direct exposure to chemical or physical agents.
Disinsection.	The procedure whereby health measures are taken to control or kill insects present in aircraft, baggage, cargo, containers, goods and mail.
Displaced threshold.	A threshold not located at the extremity of a runway.
Disruptive passenger.	A passenger who fails to respect the rules of conduct at an airport or on board an aircraft or to follow the instructions of the airport staff or crew members and thereby disturbs the good order and discipline at an airport or on board the aircraft.
Distress phase.	A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger and/or require immediate assistance.
Ditching.	The forced landing of an aircraft on water.
Doppler shift.	The frequency shift observed at a receiver due to any relative motion between transmitter and receiver.
Double channel simplex.	Simplex using two frequency channels, one in each direction. ***Note****. This method was sometimes referred to as cross-band.*
Downstream clearance.	A clearance issued to an aircraft by an air traffic control unit that is not the current controlling authority of that aircraft.
Dry runway.	A runway is considered dry if its surface is free of visible moisture and not contaminated within the area intended to be used.

Dual instruction time	Flight time during which a person is receiving flight instruction from a properly authorized pilot on board the aircraft, or from a properly authorized remote pilot using the remote pilot station during a remotely piloted aircraft flight.
Duplex.	A method in which telecommunication between two stations can take place in both directions simultaneously.
Duty period. (Controller)	A period which starts when an air traffic controller is required by an air traffic services provider to report for or to commence a duty and ends when that person is free from all duties.
Duty period. (Flight Crew)	A period which starts when a flight- or cabin-crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties.
Duty. (ATCO)	Any task that an air traffic controller is required by an air traffic services provider to perform. These tasks include those performed during time-in-position, administrative work and training.
Duty. (Flight)	Any task that flight or cabin crew members are required by the operator to perform, including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue.
D-value.	A limiting dimension, in terms of "D", for a heliport, helideck or shipboard heliport, or for a defined are a within.
Dynamic load-bearing surface.	A surface capable of supporting the loads generated by a helicopter in motion.
E	
EDTO critical fuel.	The fuel quantity necessary to fly to an en-route alternate aerodrome considering, at the most critical point on the route, the most limiting system failure. ***Note***. *Attachment C contains guidance on EDTO critical fuel scenarios.*
EDTO significant system.	An aeroplane system whose failure or degradation could adversely affect the safety particular to an EDTO flight, or whose continued functioning is specifically important to the safe flight and landing of an aeroplane during an EDTO diversion.
EDTO.	critical fuel. The fuel quantity necessary to fly to an en-route alternate aerodrome considering, at the most critical point on the route, the most limiting system failure. ***Note***. *Guidance on EDTO critical fuel scenarios is contained in the Extended Diversion Time Operations Manual (Doc 10085).*
Effective acceptance bandwidth.	The range of frequencies with respect to the assigned frequency for which reception is assured when all receiver tolerances have been taken into account.

Effective adjacent channel rejection.	The rejection that is obtained at the appropriate adjacent channel frequency when all relevant receiver tolerances have been taken into account.
Effective intensity.	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.
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.
Electronic Travel Systems (ETS).	The automated process for the lodgement, acceptance and verification of a passenger's authorization to travel to a State, in lieu of the standard counterfoil paper visa.
Elevated helicopter clearway.	A helicopter clearway that has been raised to a level that provides obstacle clearance
Elevated heliport.	A heliport located on a raised structure on land.
Elevation.	The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.
Ellipsoid height (Geodetic height).	The height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.
Elongated.	When used with TLOF or FATO, elongated means an area which has a length more than twice its width.
Embarkation.	The boarding of an aircraft for the purpose of commencing a flight, except by such crew or passengers as have embarked on a previous stage of the same through-flight.
Emergency Fuel.	The commander shall declare an emergency when the calculated usable fuel on landing, at the nearest adequate aerodrome where a safe landing can be performed, is less than final reserve fuel.
Emergency locator transmitter (ELT).	A generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated. An ELT may be any of the following: ***Automatic fixed ELT (ELT(AF)).*** An automatically activated ELT which is permanently attached to an aircraft. ***Automatic portable ELT (ELT(AP)).*** An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft.

	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. ***Survival ELT (ELT(S)).*** An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors.
Emergency phase.	A generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.
eMRTD.	An MRTD (passport, visa or card) that has a contactless integrated circuit embedded in it and the capability of being used for biometric identification of the MRTD holder in accordance with the standards specified in the relevant Part of Doc 9303 — *Machine Readable Travel Documents*.
End-to-end.	Pertaining or relating to an entire communication path, typically from (1) the interface between the information source and the communication system at the transmitting end to (2) the interface between the communication system and the information user or processor or application at the receiving end.
End-user.	An ultimate source and/or consumer of information.
Energy per symbol to noise density ratio (Es/No).	The ratio of the average energy transmitted per channel symbol to the average noise power in a 1 Hz bandwidth, usually expressed in dB. For A-BPSK and A-QPSK, one channel symbol refers to one channel bit.
Engine.	A unit used or intended to be used for aircraft propulsion. It consists of at least those components and equipment necessary for functioning and control, but excludes the propeller/rotors (if applicable).
Enhanced vision system (EVS).	A system to display electronic real-time images of the external scene achieved through the use of image sensors. ***Note****. EVS does not include night vision imaging systems (NVIS).*
En-route phase.	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. ***Note****. Where adequate obstacle clearance cannot be guaranteed visually, flights must be planned to ensure that obstacles can be cleared by an appropriate margin. In the event of failure of the critical engine, operators may need to adopt alternative procedures.*
Equivalent isotropically radiated power (e.i.r.p.).	The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna *(absolute or isotropic gain).*

Equivalent procedure.	A test or analysis procedure which, while differing from the one specified in KCASR 16, in the technical judgement of the certificating authority yields effectively the same CO2 emissions evaluation metric value as the specified procedure.
Error management.	The process of detecting errors and responding to them with countermeasures that reduce or eliminate the consequences of errors and mitigate the probability of further errors or undesired states. ***Note***. *See Chapter 6 of Part II, Section 1 of the Procedures for Air Navigation Services — Training (PANS-TRG, Doc9868) and Circular 314 — Threat and Error Management (TEM) in Air Traffic Control for a description of undesired states*.
Error.	An action or inaction by an operational person that leads to deviations from organizational or the operational person's intentions or expectations.
Escort.	An individual authorized by a Contracting State or an aircraft operator to accompany inadmissible persons or deportees being removed from that Contracting State.
Essential radio navigation service.	A radio navigation service whose disruption has a significant impact on operations in the affected airspace or aerodrome.
Estimated off-block time.	The estimated time at which the aircraft will commence movement associated with departure.
Estimated time of arrival.	For IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome. For VFR flights, the time at which it is estimated that the aircraft will arrive over the aerodrome.
ETOPS.	ETOPS (Extended-range Twin-engine Operations). The former term used by ICAO and other authorities to describe the approval and operational requirements for twin-engine aeroplanes operating beyond a specified distance or diversion time from an adequate airport. ***Note:*** *ICAO has replaced the term ETOPS with EDTO (Extended Diversion Time Operations) to better reflect the concept, which is not limited to twin-engine aeroplanes. In current ICAO usage, EDTO applies to any turbine-powered aeroplane conducting extended-range operations, while ETOPS is retained only in historical or legacy references.*
Exception.	A provision which excludes a specific item of dangerous goods from the requirements normally applicable to that item.

Exemption.	An authorization, other than an approval, granted by an appropriate national authority providing relief from the provisions of the Technical Instructions.
Exhaust nozzle.	In the exhaust emissions sampling of gas turbine engines where the jet effluxes are not mixed (as in some turbofan engines, for example) the nozzle considered is that for the gas generator (core) flow only. Where, however, the jet efflux is mixed the nozzle considered is the total exit nozzle.
Expected approach time.	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. ***Note.*** *The actual time of leaving the holding fix will depend upon the approach clearance.*
Extended diversion time operations (EDTO).	Any operation by an aeroplane with two or more turbine engines where the diversion time to an en-route alternate aerodrome is greater than the threshold time established by the State of the Operator.
Extended flight over water.	A flight operated over water at a distance of more than 93 km (50 NM), or 30 minutes at normal cruising speed, whichever is the lesser, away from land suitable for making an emergency landing.
Extended range operation.	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.
External equipment (helicopter).	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.
F	
Factor of safety.	A design factor used to provide for the possibility of loads greater than those assumed, and for uncertainties in design and fabrication.
Fan marker beacon.	A type of radio beacon, the emissions of which radiate in a vertical fan-shaped pattern.
Farad (F).	The capacitance of a capacitor between the plates of which there appears a difference of potential of 1 volt when it is charged by a quantity of electricity equal to 1 coulomb.
Fatigue Risk Management System (FRMS).	A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure

	relevant personnel are performing at adequate levels of alertness.
Fatigue.	A physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety-related operational duties.
Feature attribute.	Characteristic of a feature (ISO 19101). ***Note***. *A feature attribute has a name, a data type and a value domain associated with it.*
Feature operation.	Operation that every instance of a feature type may perform (ISO 19110). ***Note.*** *An operation upon the feature type dam is to raise the dam. The result of this operation is to raise the level of water in the reservoir*
Feature relationship.	Relationship that links instances of one feature type with instances of the same or a different feature type (ISO 19101).
Feature type.	Class of real world phenomena with common properties (ISO 19110). ***Note***. *In a feature catalogue, the basic level of classification is the feature type.*
Feature.	Abstraction of real world phenomena (ISO 19101).
Feedstock.	A type of unprocessed raw material used for the production of aviation fuel.
Filed flight plan (FPL or eFPL).	The latest flight plan as submitted by the pilot, an operator or a designated representative, for use by ATS units. ***Note***. *The FPL denotes a filed flight plan exchanged using aeronautical fixed service while eFPL denotes a filed flight plan exchanged using FF-ICE services. The eFPL allows for the exchange of additional information not contained within the FPL.*
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 helicopters operated in performance class 1, the defined area includes the rejected take-off area available.
Final approach fix or point.	That fix or point of an instrument approach procedure where the final approach segment commences.
Final approach segment (FAS).	That segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

Final approach.	That part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified, a) at the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or b) at the point of interception of the last track specified in the approach procedure; and ends at a point in the vicinity of an aerodrome from which: 1) a landing can be made; or 2) a missed approach procedure is initiated.
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 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.
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.*
Fixed light.	A light having constant luminous intensity when observed from a fixed point.
Flight crew member.	A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.
Flight data analysis.	A process of analysing recorded flight data in order to improve the safety of flight operations.
Flight documentation.	Written or printed documents, including charts or forms, containing meteorological information for a flight.
Flight duty period.	A period which commences when a flight or cabin crew member is required to report for duty that includes a flight or a series of flights and which 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 is a crew member.
Flight information centre (FIC).	A unit established to provide flight information service and alerting service.
Flight information region (FIR).	An airspace of defined dimensions within which flight information service and alerting service are provided.
Flight information service (FIS).	A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

Flight level.	A surface of constant atmospheric pressure which is related to a specific pressure datum, 1 013.2 hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals. ***Note 1***. *A pressure type altimeter calibrated in accordance with the standard atmosphere:* *a) when set to a QNH altimeter setting, will indicate altitude;* *b) when set to a QFE altimeter setting, will indicate height above the QFE reference datum;* *c) when set to a pressure 1 013.2 hPa, may be used to indicate flight levels.* ***Note 2.*** *The terms "height" and "altitude", used in Note 1 above, indicate altimetric rather than geometric heights and altitudes.*
Flight manual.	A manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft.
Flight operations officer/flight dispatcher.	A person designated by the operator to engage in the control and supervision of flight operations, whether licensed or not, suitably qualified in accordance with KCASR 1, who supports, briefs and/or assists the pilot-in-command in the safe conduct of the flight.
Flight plan.	Specified information, relative to an intended flight or portion of a flight of an aircraft. ***Note 1***. *The term flight plan may be prefixed by the words preliminary", "filed", "current" or "operational" to indicate the context and different stages of a flight.* ***Note 2.*** *When the word "message" is used as a suffix to this term, it denotes the content and format of the flight plan data as transmitted.*
Flight procedures trainer.	*See* Flight simulation training device.
Flight recorder.	Any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation. ***Note***. *See KCASR 6* — Operation of Aircraft, *for specifications relating to flight recorders.*
Flight safety documents system.	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 maintenance control manual.
Flight simulation training device (FSTD).	Any one of the following three types of apparatus in which flight conditions are simulated on the ground: ***A flight simulator***, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated; ***A flight procedures trainer***, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class; ***A basic instrument flight trainer***, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.
Flight simulation training device (FSTD) for RPAS.	Any one of the following three types of apparatus in which flight conditions are simulated on the ground: ***A flight simulator,*** which provides an accurate representation of the flight deck of a particular aircraft type or an accurate representation of the remotely piloted aircraft system (RPAS) to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated; ***A flight procedures trainer,*** which provides a realistic flight deck environment or realistic RPAS environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class; ***A basic instrument flight trainer***, which is equipped with appropriate instruments, and which simulates the flight deck

	environment of an aircraft in flight or the RPAS environment in instrument flight conditions.
Flight simulation training device.	Any one of the following three types of apparatus in which flight conditions are simulated on the ground: ***A flight simulator***, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated; ***A flight procedures trainer***, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class; ***A basic instrument flight trainer,*** which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.
Flight simulator.	*See* Flight simulation training device.
Flight time aeroplanes.	The total time from the moment an aeroplane first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight. ***Note***. *Flight time as here defined is synonymous with the term "block to block" time or "chock to chock" time in general usage which is measured from the time an aeroplane first moves for the purpose of taking off until it finally stops at the end of the flight.*
Flight time helicopters.	The total time from the moment a helicopter's rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped.
Flight time remotely piloted aircraft systems.	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.
Flight visibility.	The visibility forward from the cockpit of an aircraft in flight.
Foot (ft).	The length equal to 0.304 8 metre exactly.

Forecast.	A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.
Foreign object debris (FOD).	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.
Forward error correction (FEC).	The process of adding redundant information to the transmitted signal in a manner which allows correction, at the receiver, of errors incurred in the transmission.
Frangible object.	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.*
Free text message element.	Part of a message that does not conform to any standard message element in the PANS-ATM (Doc 4444).
Free zone.	A part of the territory of a Contracting State where any goods introduced are generally regarded, insofar as import duties and taxes are concerned, as being outside the customs territory.
Frequency channel.	A continuous portion of the frequency spectrum appropriate for a transmission utilizing a specified class of emission. ***Note***. *The classification of emissions and information relevant to the portion of the frequency spectrum appropriate for a given type of transmission (bandwidths) are specified in the ITU Radio Regulations, Article S2 and Appendix S1.*
Fuel uplift.	Measurement of fuel provided by the fuel supplier, as documented in the fuel delivery notes or invoices for each flight (in litre).
Fully automatic relay installation.	A teletypewriter installation where interpretation of the relaying responsibility in respect of an incoming message and the resultant setting-up of the connections required to affect the appropriate retransmissions is carried out automatically, as well as all other normal operations of relay, thus obviating the need for operator intervention, except for supervisory purposes.
G	
Gain-to-noise temperature ratio.	The ratio, usually expressed in dB/K, of the antenna gain to the noise at the receiver output of the antenna subsystem. The noise is expressed as the temperature that a 1-ohm resistor must be raised to produce the same noise power density.
Galileo Open Service (Galileo OS).	The specified level of positioning, velocity and timing accuracy that is available to any Galileo user on a continuous, worldwide basis.
Galileo.	The satellite navigation system operated by the European Union.

GAMET area forecast.	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 meteorological authority concerned and exchanged with meteorological offices in adjacent flight information regions, as agreed between the meteorological authorities concerned.
General aviation operation.	An aircraft operation other than a commercial air transport operation or an aerial work operation.
Geodesic distance.	The shortest distance between any two points on a mathematically defined ellipsoidal surface.
Geodetic datum.	A minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system/frame.
Geoid undulation.	The distance of the geoid above (positive) or below (negative) the mathematical reference ellipsoid. ***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.*
Geoid.	The equipotential surface in the gravity field of the Earth which coincides with the undisturbed mean sea level (MSL) extended continuously through the continents. ***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.*
Glide path.	descent profile determined for vertical guidance during a final approach.
Glider flight time.	The total time occupied in flight, whether being towed or not, from the moment the glider first moves for the purpose of taking off until the moment it comes to rest at the end of the flight.
Glider.	A non-power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.
Gray (Gy).	The energy imparted by ionizing radiation to a mass of matter corresponding to 1 joule per kilogram.
Great Circle Distance.	The shortest distance, rounded to the nearest kilometre, between the origin and the destination aerodromes, measured over the earth's surface modelled according to the World Geodetic System 1984 (WGS84). ***Note.*** *Latitude and longitude coordinates of aerodromes can be obtained from the ICAO Location Indicators database*

Gregorian calendar.	Calendar in general use; first introduced in 1582 to define a year that more closely approximates the tropical year than the Julian calendar (ISO 19108). ***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 another 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 earth station (GES).	An earth station in the fixed satellite service, or, in some cases, in the aeronautical mobile-satellite service, located at a specified fixed point on land to provide a feeder link for the aeronautical mobile satellite service. ***Note****. This definition is used in the ITU's Radio Regulations under the term "aeronautical earth station". The definition herein as "GES" for use in the SARPs is to clearly distinguish it from an aircraft earth station (AES), which is a mobile station on an aircraft.*
Ground equipment.	Articles of a specialized nature for use in the maintenance, repair and servicing of an aircraft on the ground, including testing equipment and cargo- and passenger-handling equipment.
Ground handling.	Services necessary for an aircraft's arrival at, and departure from, an airport, other than air traffic services.
Ground 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.
Ground-to-air communication.	One-way communication from stations or locations on the surface of the earth to aircraft.
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.
H	
Handover.	The act of passing piloting control from one remote pilot station to another.
Hazard beacon.	An aeronautical beacon used to designate a danger to air navigation.
Hazard.	A condition or an object with the potential to cause or contribute to an aircraft incident or accident.

Heading.	The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid).
Head-up display (HUD).	A display system that presents flight information into the pilot's forward external field of view.
Health-related documentation.	Documentary evidence required by Contracting States, including those standardized by the World Health Organization (WHO) International Health Regulations (IHR) (2005), to indicate that passengers and crew members have fulfilled the requirements for preventing and mitigating the spread of communicable diseases for the purposes of transiting or entering a Contracting State.
Heavier-than-air aircraft.	Any aircraft deriving its lift in flight chiefly from aerodynamic forces.
Height.	The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.
Helicopter clearway.	A defined area over which a helicopter may accelerate and achieve a specified set of helicopter flight conditions.
Helicopter stand.	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.
Helicopter taxi-route.	A defined path established for the movement of helicopters from one part of a heliport to another. a) *Air taxi-route.* A marked taxi-route intended for air taxiing. b) *Ground taxi-route.* A taxi-route centred on a taxiway.
Helicopter taxiway.	A defined path on a heliport intended for the ground movement of helicopters and that may be combined with an air taxi-route to permit both ground and air taxiing.
Helicopter.	A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes. ***Note***. *Some States use the term "rotorcraft" as an alternative to "helicopter".*
Helideck.	A heliport located on a fixed or floating offshore facility such as an exploration and/or production unit used for the exploitation of oil or gas.
Heliport elevation.	The elevation of the highest point of the FATO.
Heliport operating minima.	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.
Heliport reference point (HRP).	The designated location of a heliport or a landing location.
Heliport.	An aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters. ***Note 1***. *when the term "heliport" is used, it is intended that the term also applies to aerodromes primarily meant for the use of aeroplanes.* ***Note 2***. *Helicopters may be operated to and from areas other than heliports.*
Henry (H).	The inductance of a closed circuit in which an electromotive force of 1 volt is produced when the electric current in the circuit varies uniformly at a rate of 1 ampere per second.
Hertz (Hz).	The frequency of a periodic phenomenon of which the period is 1 second.
High-risk cargo or mail.	Cargo or mail which is deemed to pose a threat to civil aviation as a result of specific intelligence; or shows anomalies or signs of tampering which give rise to suspicion.
Holding bay.	A defined area where aircraft can be held, or bypassed, to facilitate efficient surface movement of aircraft.
Holding procedure.	A predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance.
Holdover time.	The estimated time the anti-icing fluid (treatment) will prevent the formation of ice and frost and the accumulation of snow on the protected (treated) surfaces of an aeroplane.
Homing.	The procedure of using the direction-finding equipment of one radio station with the emission of another radio station, where at least one of the stations is mobile, and whereby the mobile station proceeds continuously towards the other station.
Hostile environment.	An environment in which: a) a safe forced landing cannot be accomplished because the surface and surrounding environment are inadequate; or

	b) the helicopter occupants cannot be adequately protected from the elements; or c) search and rescue response/capability is not provided consistent with anticipated exposure; or d) there is an unacceptable risk of endangering persons or property on the ground.
Hot spot.	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.
Human Factors principles.	Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.
Human performance.	Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.
Hypsometric tints.	A succession of shades or colour gradations used to depict ranges of elevation.
I	
ICAO competency framework.	A competency framework, developed by ICAO, is a selected group of competencies for a given aviation discipline. Each competency has an associated description and observable behaviors.
ICAO meteorological information exchange model (IWXXM).	A data model for representing aeronautical meteorological information.
ICAO Public Key Directory (ICAO PKD).	The central database serving as the repository of Document Signer Certificates (CDS) (containing Document Signer Public Keys), CSCA Master List (MLCSCA), Country Signing CA Link Certificates (lCCSCA) and Certificate Revocation Lists issued by Participants, together with a system for their distribution worldwide, maintained by ICAO on behalf of Participants in order to facilitate the validation of data in eMRTDs.
Identification beacon.	An aeronautical beacon emitting a coded signal by means of which a particular point of reference can be identified.
IFR flight.	A flight conducted in accordance with the instrument flight rules.
IFR.	The symbol used to designate the instrument flight rules.
IMC.	The symbol used to designate instrument meteorological conditions.

Immigration control.	Measures adopted by States to control the entry into, transit through and departure from their territories of persons travelling by air.
Import duties and taxes.	Customs duties and all other duties, taxes or charges, which are collected on or in connection with the importation of goods. Not included are any charges which are limited in amount to the approximate cost of services rendered or collected by the customs on behalf of another national authority.
Imposter.	A person who impersonates the rightful holder of a genuine travel document.
Improperly documented person.	a) A person who travels, or attempts to travel: b) with an expired travel document or an invalid visa; c) with a counterfeit, forged or altered travel document or visa; d) with someone else's travel document or visa; e) without a travel document; or f) without a visa, if required.
Inadmissible person.	A person who is or will be refused admission to a State by its authorities.
INCERFA.	The code word used to designate an uncertainty phase.
Incident.	An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation. ***Note***. *The types of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in KCASR 13, Attachment C.*
Independent parallel approaches.	Simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway centre lines are not prescribed.
Independent parallel departures.	Simultaneous departures from parallel or near-parallel instrument runways.
In-flight security officer.	A person who is authorized by the government of the State of the Operator and the government of the State of Registration to be deployed on an aircraft with the purpose of protecting that aircraft and its occupants against acts of unlawful interference. This excludes persons employed to provide exclusive personal protection for one or more specific people travelling on the aircraft, such as personal bodyguards.
Initial approach segment.	That segment of an instrument approach procedure between the initial approach fix and the intermediate approach fix or, where applicable, the final approach fix or point.
Initial departure fix (IDF).	The terminal fix for the visual segment and the fix where the instrument phase of the (PinS) departure begins.

Instrument approach operations.	An approach and landing using instruments for navigation guidance based on an instrument approach procedure. There are two methods for executing instrument approach operations: a) a two-dimensional (2D) instrument approach operation, using lateral navigation guidance only; and b) a three-dimensional (3D) instrument approach operation, using both lateral and vertical navigation guidance. ***Note***. *Lateral and vertical navigation guidance refers to the guidance provided either by:* *a) a ground-based radio navigation aid; or* *b) computer-generated navigation data from ground-based, space-based, self-contained navigation aids or a combination of these.*
Instrument approach procedure. (IAP)	A series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply. Instrument approach procedures are classified as follows: *Non-precision approach (NPA) procedure*. An instrument approach procedure designed for 2D instrument approach operations Type A. ***Note***. *Non-precision approach procedures may be flown using a continuous descent final approach (CDFA) technique. CDFAs with advisory VNAV guidance calculated by on-board equipment are considered 3D instrument approach operations. CDFAs with manual calculation of the required rate of descent are considered 2D instrument approach operations. For more information on CDFAs, refer to PANS-OPS (Doc 8168) Volume I, Part II, Section 5.* ***Approach procedure with vertical guidance (APV).*** A performance-based navigation (PBN) instrument approach procedure designed for 3D instrument approach operations Type A. ***Precision approach (PA) procedure***. An instrument approach procedure based on navigation systems (ILS, MLS, GLS and SBAS Cat I) designed for 3D instrument approach operations Type A or B. ***Note.*** *Refer to KCASR 6 for instrument approach operation types.*

Instrument flight procedure design service.	A service established for the design, documentation, validation, maintenance and periodic review of instrument flight procedures necessary for the safety, regularity and efficiency of air navigation.
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 practicing, on the ground, simulated instrument flight in a flight simulation training device approved by the Licensing Authority.
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 KCASR 2.*

Instrument runway.	One of the following types of runways intended for the operation of aircraft using instrument approach procedures: a) ***Non-precision approach runway***. A runway served by visual aids and non-visual aid(s) 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***. 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***. 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***. 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 KCASR 6* — Operation of Aircraft *for instrument approach operation types.*
Instrument time.	Instrument flight time or instrument ground time.
Integrated survival suit.	A survival suit which meets the combined requirements of the survival suit and life jacket.
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.
Integrity.	A measure of the trust that can be placed in the correctness of the information supplied by the total system. Integrity includes the ability of a system to provide timely and valid warnings to the user (alerts).
Interactive API (iAPI) system.	An electronic system that transmits, during check-in, API data elements collected by the aircraft operator to public authorities who, within existing business processing times for passenger check-in, return to the operator a response message for each passenger and/or crew member.
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.
Intermediate system (IS).	A system which performs relaying and routing functions and comprises the lowest three layers of the OSI reference model.
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.*

International NOTAM office. (NOF)	An office designated by a State for the exchange of NOTAM internationally.
International operating agency.	An agency of the kind contemplated in Article 77 of the Convention.
International telecommunication service.	A telecommunication service between offices or stations of different States, or between mobile stations which are not in the same State, or are subject to different States.
Interpilot air-to-air communication.	oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.
Investigation.	A process conducted for the purpose of accident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and/or contributing factors and, when appropriate, the making of safety recommendations.
Investigator-in-charge.	A person charged, on the basis of his or her qualifications, with the responsibility for the organization, conduct and control of an investigation. ***Note***. *Nothing in the above definition is intended to preclude the functions of an investigator-in-charge being assigned to a commission or other body*.
Ionosphere-free pseudo-range.	A pseudo-range in which the first order ionosphere effect on signal propagation has been removed by a linear combination of pseudo-range measurements from signals on two distinct frequencies from the same satellite.
Isogonal.	A line on a map or chart on which all points have the same magnetic variation for a specified epoch.
Isogriv.	A line on a map or chart which joins points of equal angular difference between the North of the navigation grid and Magnetic North.
Isolated aerodrome.	A destination aerodrome for which there is no destination alternate aerodrome suitable for a given aeroplane type.
J	
Joint rescue coordination centre (JRCC).	A rescue coordination centres responsible for both aeronautical and maritime search and rescue operations.
Joule (J).	The work done when the point of application of a force of 1 newton is displaced a distance of 1 metre in the direction of the force.
K	
Kelvin (K).	A unit of thermodynamic temperature which is the fraction 1/273.16 of the thermodynamic temperature of the triple point of water.

Kilogram (kg).	The unit of mass equal to the mass of the international prototype of the kilogram.
Knot (kt).	The speed equal to 1 nautical mile per hour.
Known consignor.	A consignor who originates cargo or mail for its own account and whose procedures meet common security rules and standards sufficient to allow the carriage of cargo or mail on any aircraft.
L	
Lading.	The placing of cargo, mail, baggage or stores on board an aircraft to be carried on a flight.
Landing area.	That part of a movement area intended for the landing or take-off of aircraft.
Landing decision point (LDP).	The point used in determining landing performance from which, an engine failure occurring at this point, the landing may be safely continued or a balked landing initiated. ***Note***. *LDP applies only to helicopters operating in performance Class 1.*
Landing direction indicator.	A device to indicate visually the direction currently designated for landing and for take-off.
Landing distance available (LDA).	The length of runway which is declared available and suitable for the ground run of an aeroplane landing.
Landing surface.	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.
Large aeroplane.	An aeroplane of a maximum certificated take-off mass of over 5700 kg.
Laser-beam critical flight zone (LCFZ).	Airspace in the proximity of an aerodrome but beyond the LFFZ where the irradiance is restricted to a level unlikely to cause glare effects.
Laser-beam free flight zone (LFFZ).	Airspace in the immediate proximity of the aerodrome where the irradiance is restricted to a level unlikely to cause any visual disruption.
Laser-beam sensitive flight zone (LSFZ).	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.
lerting post.	Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue coordination centre or rescue subcentre.
Level.	A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.
Licensing Authority.	The Authority designated by a Contracting State as responsible for the licensing of personnel.
Lighter-than-air aircraft.	Any aircraft supported chiefly by its buoyancy in the air .

Lighting system reliability.	The probability that the complete installation operates within the specified tolerances and that the system is operationally usable.
Likely.	In the context of the medical provisions in Chapter 6, ***likely*** means with a probability of occurring that is unacceptable to the medical assessor.
Limit loads.	The maximum loads assumed to occur in the anticipated operating conditions.
Litre (L).	A unit of volume restricted to the measurement of liquids and gases which is equal to 1 cubic decimetre.
Load factor.	The ratio of a specified load to the weight of the aircraft, the former being expressed in terms of aerodynamic forces, inertia forces, or ground reactions.
Location indicator.	A four-letter code group formulated in accordance with rules prescribed by ICAO and assigned to the location of an aeronautical fixed station.
Logon address.	A specified code used for data link logon to an ATS unit.
Low-visibility operations (LVO).	Approach operations in RVRs less than 550 m and/or with a DH less than 60 m (200 ft) or take-off operations in RVRs less than 400 m.
Lumen (lm).	The luminous flux emitted in a solid angle of 1 steradian by a point source having a uniform intensity of 1 candela.
Lux (lx).	The illuminance produced by a luminous flux of 1 lumen uniformly distributed over a surface of 1 square metre.
M	
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.*
Mail.	Dispatches of correspondence and other items tendered by and intended for delivery to postal services in accordance with the rules of the Universal Postal Union (UPU).
Maintenance 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 records.	Records that set out the details of the maintenance carried out on an aircraft, engine, propeller or associated part.
Maintenance release.	A document which contains a certification confirming that the maintenance work to which it relates has been completed in a

	satisfactory manner in accordance with appropriate airworthiness requirements.
Maintenance.	The performance of tasks on an aircraft, engine, propeller or associated part required to ensure the continuing airworthiness of an aircraft, engine, propeller or associated part including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.
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 list established for a particular aircraft type by the organization responsible for the type design with the approval of the State of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures.
Maximum diversion time.	Maximum allowable range, expressed in time, from a point on a route to an en-route alternate aerodrome.
Maximum mass.	Maximum certificated take-off mass.
Maximum passenger seating capacity.	The maximum certificated number of passengers for the aeroplane type design.
Maximum take-off mass.	The highest of all take-off masses for the type design.
Mean power (of a radio transmitter).	The average power supplied to the antenna transmission line by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions. ***Note***. *A time of 1/10 second* during *which the mean power is greatest will be selected normally.*
Medical Assessment.	The evidence issued by a Contracting State that the license holder meets specific requirements of medical fitness.
Medical assessor.	A physician, appointed by the Licensing Authority, qualified and experienced in the practice of aviation medicine and competent in evaluating and assessing medical conditions of flight safety significance. ***Note 1***. *Medical assessors evaluate medical reports submitted to the Licensing Authority by medical examiners.* ***Note 2***. *Medical assessors are expected to maintain the currency of their professional knowledge.*

Medical examiner.	A physician with training in aviation medicine and practical knowledge and experience of the aviation environment, who is designated by the Licensing Authority to conduct medical examinations of fitness of applicants for licenses or ratings for which medical requirements are prescribed.
Message field.	An assigned area of a message containing specified elements of data.
Metadata.	Data about data (ISO 19115). ***Note.*** *A structured description of the content, quality, condition or other characteristics of data.*
Meteorological authority.	The entity arranging for the provision of meteorological service for international air navigation on behalf of a Contracting State, and providing regulation and oversight of the meteorological service.
Meteorological bulletin.	A text comprising meteorological information preceded by an appropriate heading.
Meteorological information.	Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.
Meteorological office.	An office designated to provide meteorological service for international air navigation.
Meteorological operational channel.	A channel of the aeronautical fixed service (AFS), for the exchange of aeronautical meteorological information.
Meteorological operational telecommunication network.	An integrated system of meteorological operational channels, as part of the aeronautical fixed service (AFS), for the exchange of aeronautical meteorological information between the aeronautical fixed stations within the network. ***Note****. "Integrated" is to be interpreted as a mode of operation necessary to ensure that the information can be transmitted and received by the stations within the network in accordance with pre-established schedules.*
Meteorological report.	A statement of observed meteorological conditions related to a specified time and location.
Meteorological satellite.	An artificial Earth satellite making meteorological observations and transmitting these observations to Earth.
Meteorological service provider.	The relevant entity designated to provide meteorological service for international air navigation on behalf of a Contracting State.
Meteorological watch office (MWO).	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.

Metre (m).	The distance travelled by light in a vacuum during 1/299,792,458 of a second.
Minimum descent altitude (MDA) or ***minimum descent height (MDH).***	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 which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.
Minimum obstacle clearance altitude (MOCA).	The minimum altitude for a defined segment of flight that provides the required obstacle clearance.
Minimum sector altitude (MSA).	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 significant point, the aerodrome reference point (ARP) or the heliport reference point (HRP).
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.
Minor.	A person who has not attained the age of majority as determined under the law applicable to the person.
Mishandled baggage.	Baggage involuntarily, or inadvertently, separated from passengers or crew.

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.
Mobile surface station.	A station in the aeronautical telecommunication service, other than an aircraft station, intended to be used while in motion or during halts at unspecified points.
Mode S subnetwork.	A means of performing an interchange of digital data through the use of secondary surveillance radar (SSR) Mode S interrogators and transponders in accordance with defined protocols.
Modification.	A change to the type design of an aircraft, engine, propeller or rotor. ***Note***. *A modification may also include the embodiment of the modification which is a maintenance task subject to a maintenance release. Further guidance on aircraft maintenance — modification and repair is contained in the* Airworthiness Manual *(Doc 9760).*
Mole (mol).	The amount of substance of a system which contains as many elementary entities as there are atoms in 0.012 kilogram of carbon-12. ***Note***. *When the mole is used, the elementary entities must be specified and may be atoms, molecules, ions, electrons, other particles or specified groups of such particles.*
Monitoring.	A cognitive process to compare an actual to an expected state. ***Note***. *Monitoring is embedded in the competencies for a given role within an aviation discipline, which serve as countermeasures in the threat and error management model. It requires knowledge, skills and attitudes to create a mental model and to take appropriate action when deviations are recognized.*
Movement area.	That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).
Multilink.	The ability to use more than one available air-ground subnetworks in order to provide the required performance.
N	
Narcotics control.	Measures to control the illicit movement of narcotics and psychotropic substances by air.
National accreditation body.	A body authorized by a State which attests that a verification body is competent to provide specific verification services.
Nautical mile (NM).	The length equal to 1 852 metres exactly.

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 the KCASR as the concept of RNP has been overtaken by the concept of PBN. The term RNP in the KCASR 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 oniperating 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.
Necessary precautions.	Verifications carried out by adequately trained staff members of the aircraft operator or the company operating on behalf of the aircraft operator, at the point of embarkation, in order to ensure that every person holds a valid travel document and, where applicable, the visa or residence permit required to enter the State of transit and/or receiving State. These verifications are designed to ensure that irregularities (e.g. obvious document alteration) are detected.
Network station.	An aeronautical station forming part of a radiotelephony network.
New entrant.	Any aeroplane operator that commences an aviation activity falling within the scope of this Volume on or after its entry into force and whose activity is not in whole or in part a continuation of an aviation activity previously performed by another aeroplane operator.
Newton (N).	The force which when applied to a body having a mass of 1 kilogram gives it an acceleration of 1 metre per second squared.

Next data authority.	The ground system so designated by the current data authority through which an onward transfer of communications and control can take place.
Next intended user.	The entity that receives the aeronautical data or information from the aeronautical information service.
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.*
Non-congested hostile environment.	A hostile environment outside a congested area.
Non-duty period.	A continuous and defined period of time, subsequent to and/or prior to duty periods, during which the air traffic controller is free of all duties.
Non-hostile environment.	An environment in which: a) a safe forced landing can be accomplished because the surface and surrounding environment are adequate; b) the helicopter occupants can be adequately protected from the elements; c) search and rescue response/capability is provided consistent with anticipated exposure; and d) the assessed risk of endangering persons or property on the ground is acceptable. ***Note****. Those parts of a congested area satisfying the above requirements are considered non-hostile.*
Non-instrument runway.	A runway intended for the operation of aircraft using visual approach procedures or an instrument approach procedure to a point beyond which the approach may continue in visual meteorological conditions. ***Note****. Visual meteorological conditions (VMC) are described in Chapter 3 of KCASR 2 —* Rules of the Air.
Non-network communications.	Radiotelephony communications conducted by a station of the aeronautical mobile service, other than those conducted as part of a radiotelephony network.

Non-volatile particulate matter (nvPM).	Emitted particles that exist at a gas turbine engine exhaust nozzle exit plane that do not volatilize when heated to a temperature of 350°C.
Normal flight zone (NFZ).	Airspace not defined as LFFZ, LCFZ or LSFZ but which must be protected from laser radiation capable of causing biological damage to the eye.
NOTAM.	A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.
Notifying State.	The State that has submitted to ICAO the request for the registration of or change in the three-letter designator of an aeroplane operator over which it has jurisdiction.
O	
Observable behaviour (OB).	A single role-related behaviour that can be observed and may or may not be measurable.
Observation (meteorological).	The evaluation of one or more meteorological elements.
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.*
Obstacle free zone (OFZ).	The airspace above the inner approach surface, inner transitional surfaces, and balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangible mounted one required for air navigation purposes.
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 the KCASR 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/terrain data collection surface.	A defined surface intended for the purpose of collecting obstacle/terrain data.
Offset frequency simplex.	A variation of single channel simplex wherein telecommunication between two stations is affected by using in each direction frequencies that are intentionally slightly different but contained within a portion of the spectrum allotted for the operation.
Offshore operations.	Operations which routinely have a substantial proportion of the flight conducted over sea areas to or from offshore locations. Such operations include, but are not limited to, support of offshore oil, gas and mineral exploitation and sea-pilot transfer.
Ohm (Ω).	The electric resistance between two points of a conductor when a constant difference of potential of 1 volt, applied between these two points, produces in this conductor a current of 1 ampere, this conductor not being the source of any electromotive force.
Operating base.	The location from which operational control is exercised. ***Note**. An operating base is normally the location where personnel involved in the operation of the aeroplane work and the records associated with the operation are located. An operating base has a degree of permanency beyond that of a regular point of call.*
Operation.	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. ***Note**. Such activities could include, but would not be limited to, offshore operations, heli-hoist operations or emergency medical service.*
Operational control communications.	Communications required for the exercise of authority over the initiation, continuation, diversion or termination of a flight in the

	interest of the safety of the aircraft and the regularity and efficiency of a flight. ***Note**. Such communications are normally required for the exchange of messages between aircraft and aircraft operating agencies.*
Operational control.	The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.
Operational credit.	A credit authorized for operations with an advanced aircraft enabling a lower aerodrome operating minimum than would normally be authorized for a basic aircraft, based upon the performance of advanced aircraft systems utilizing the available external infrastructure.
Operational flight plan.	The operator's plan for the safe conduct of the flight based on considerations of helicopter performance, other operating limitations and relevant expected conditions on the route to be followed and at the heliports concerned.
Operational personnel.	Personnel involved in aviation activities who are in a position to report safety information. ***Note**. Such personnel include, but are not limited to: flight crews; air traffic controllers; aeronautical station operators; maintenance technicians; personnel of aircraft design and manufacturing organizations; cabin crews; flight dispatchers, apron personnel and ground handling personnel.*
Operational planning.	The planning of flight operations by an operator.
Operations in performance Class 1.	Operations with performance such that, in the event of a critical engine failure, performance is available to enable the helicopter to safely continue the flight to an appropriate landing area, unless the failure occurs prior to reaching the take-off decision point (TDP) or after passing the landing decision point (LDP), in which cases the helicopter must be able to land within the rejected take-off or landing area.
Operations in performance Class 2.	Operations with performance such that, in the event of critical engine failure, performance is available to enable the helicopter to safely continue the flight to an appropriate landing area, 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.
Operations in performance Class 3.	Operations with performance such that, in the event of an engine failure at any time during the flight, a forced landing will be required.
Operations manual.	A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operations specifications.	The authorizations including specific approvals, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual.
Operator.	A person, organization or enterprise engaged in or offering to engage in an aircraft operation. ***Note***. *In the context of remotely piloted aircraft, an aircraft operation includes the remotely piloted aircraft system (RPAS).*
Operator's maintenance control manual.	A document which describes the operator's procedures necessary to ensure that all scheduled and unscheduled maintenance is performed on the operator's aircraft on time and in a controlled and satisfactory manner.
Optimum conditions.	The combinations of altitude and airspeed within the approved operating envelope defined in the aeroplane flight manual that provides the highest specific air range value at each reference aeroplane mass.
Organization responsible for the type design.	The organization that holds the type certificate, or equivalent document, for an aircraft, engine or propeller type, issued by a Contracting State.
Organization responsible for the type design.	The organization that holds the type certificate, or equivalent document, for an aircraft, remote pilot station, engine or propeller type, issued by a Contracting State.
Origination (aeronautical data or aeronautical information).	The creation of the value associated with new data or information or the modification of the value of existing data or information
Originator (aeronautical data or aeronautical information).	An entity that is accountable for data or information origination and/or from which the AIS organization receives aeronautical data and aeronautical information
Ornithopter.	A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on planes to which a flapping motion is imparted.
Orphan aircraft type.	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 ICAO Annex 8. These aircraft do not meet the Standards of KCASR 8 nor ICAO Annex 8.
Orthometric height.	Height of a point related to the geoid, generally presented as an MSL elevation.
Outer main gear wheel span (OMGWS).	The distance between the outside edges of the main gear wheels.
Overpack.	An enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage.

	***Note**. A unit load device is not included in this definition.*
Oxides of nitrogen.	The sum of the amounts of the nitric oxide and nitrogen dioxide contained in a gas sample calculated as if the nitric oxide were in the form of nitrogen dioxide.
P	
Package.	The complete product of the packing operation consisting of the packaging and its contents prepared for transport.
Packaging.	Receptacles and any other components or materials necessary for the receptacle to perform its containment function. ***Note**. For radioactive material, see Part 2, paragraph 7.2 of the Technical Instructions.*
Pascal (Pa).	The pressure or stress of 1 newton per square metre.
Passenger aircraft.	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.
Passenger amenities.	Facilities provided for passengers which are not essential for passenger processing.
Passenger Data Single Window.	A facility that allows parties involved in passenger transport by air to lodge standardized passenger information (i.e. API, iAPI and/or PNR) through a single data entry point to fulfil all regulatory requirements relating to the entry and/or exit of passengers that may be imposed by various agencies of the Contracting State. ***Note**. The Passenger Data Single Window facility to support API/iAPI transmissions does not necessarily need to be the same facility used to support PNR data exchange.*
Pathway.	A specific combination of feedstock and conversion process used for the production of aviation fuel.
Pavement classification number (PCN).	A number expressing the bearing strength of a pavement for unrestricted operations.
Pavement classification rating (PCR).	A number expressing the bearing strength of a pavement.
Performance Class 1 helicopter.	A helicopter with performance such that, in case of engine failure, it is able to land on the rejected take-off area or safely continue the flight to an appropriate landing area.
Performance Class 2 helicopter.	A helicopter with performance such that, in case of engine failure, it is able to safely continue the flight, except when the failure occurs prior to a defined point after take-off or after a

	defined point before landing, in which cases a forced landing may be required.
Performance Class 3 helicopter.	A helicopter with performance such that, in case of engine failure at any point in the flight profile, a forced landing must be performed.
Performance criteria.	Statements used to assess whether the required levels of performance have been achieved for a competency. A performance criterion consists of an observable behavior, condition(s) and a competency standard.
Performance model.	An analytical tool or method validated from corrected flight test data that can be used to determine the SAR values for calculating the CO2 emissions evaluation metric value at the reference conditions.
Performance-based aerodrome operating minimum (PBAOM).	A lower aerodrome operating minimum, for a given take-off, approach or landing operation, than is available when using a basic aircraft. ***Note 1****. The PBAOM is derived by considering the combined capabilities of the aircraft and available ground facilities. Additional guidance material on PBAOM may be found in the Manual of All-Weather Operations (Doc 9365).* ***Note 2****. PBAOM may be based on operational credits* ***Note 3****. PBAOM are not limited to PBN operations.*
Performance-based communication (PBC).	Communication based on performance specifications applied to the provision of air traffic services. ***Note****. A Rearmament Communication Performance (RCP) specification includes communication performance requirements that are allocated to system components in terms of the communication to be provided and associated transaction time, continuity, availability, integrity, safety and functionality needed for the proposed operation in the context of a particular airspace concept.*
Performance-based navigation (PBN).	Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace. ***Note****. Performance requirements are expressed in navigation specifications (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, and functionality needed for the proposed operation in the context of a particular airspace concept. Availability of a global navigation satellite system signal in space and/or some other navigation aid infrastructure is considered within the airspace concept in order to enable the navigation application.*
Performance-based surveillance (PBS).	Surveillance based on performance specifications applied to the provision of air traffic services.

	***Note**. A Required Surveillance Performance (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.*
Person with disabilities.	Any person whose mobility is reduced due to a physical incapacity (sensory or locomotor), an intellectual deficiency, age, illness or any other cause of disability when using transport and whose situation needs special attention and the adaptation to the person's needs of the services made available to all passengers.
Pilot (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.
Pilot-in-command under supervision.	Co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command, in accordance with a method of supervision acceptable to the Licensing Authority.
Pilot-in-command.	The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.
Point light.	A luminous signal appearing without perceptible length.
Point of no return.	The last possible geographic point at which an aircraft can proceed to the destination aerodrome as well as to an available en-route alternate aerodrome for a given flight.
Point-in-space (PinS) approach.	An approach procedure designed for helicopters only that includes both a visual and an instrument segment.
Point-in-space (PinS) departure.	A departure procedure designed for helicopters only that includes both a visual and an instrument segment.
Point-in-space (PinS) reference point (PRP).	Reference point for the point-in-space approach as identified by the latitude and longitude of the MAPt.
Point-in-space (PinS) visual segment.	The segment of a helicopter PinS procedure between a point (MAPt or IDF) and the heliport.

	Note. *The design criteria for a PinS procedures are established in the* Procedures for Air Navigation Services — Aircraft Operations, Vol. II *(PANS-OPS, Doc 8168- Vol. II).*
Point-to-point.	Pertaining or relating to the interconnection of two devices, particularly end-user instruments. A communication path of service intended to connect two discrete end-users; as distinguished from broadcast or multipoint service.
Portrayal.	Presentation of information to humans (ISO 19117).
Position (geographical).	Set of coordinates (latitude and longitude) referenced to the mathematical reference ellipsoid which define the position of a point on the surface of the Earth.
Post spacing.	Angular or linear distance between two adjacent elevation points.
Powered-lift.	A heavier-than-air aircraft capable of vertical take-off, vertical landing, and low-speed flight, which depends principally on engine-driven lift devices or engine thrust for the lift during these flight regimes and on non-rotating aerofoil(s) for lift during horizontal flight.
Powerplant.	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.
Precision approach procedure.	An instrument approach procedure utilizing azimuth and glide path information provided by ILS or PAR.
Precision approach runway, see ***Instrument runway.***	Runway(s) used in preference to others whenever conditions permit.
Precision.	The smallest difference that can be reliably distinguished by a measurement process. ***Note***. *In reference to geodetic surveys, precision is a degree of refinement in performance of an operation or a degree of perfection in the instruments and methods used when taking measurements.*
Pre-flight information bulletin (PIB).	A presentation of current NOTAM information of operational significance, prepared prior to flight.
Preliminary flight plan (PFP).	The information related to a flight submitted by an operator or a designated representative to conduct collaborative planning of a flight, prior to filing a flight plan.
Preliminary Report.	The communication used for the prompt dissemination of data obtained the early stages of the investigation.
Pressure-altitude.	An atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.
Prevailing visibility.	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. ***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.*
Primary frequency.	The radiotelephony frequency assigned to an aircraft as a first choice for air-ground communication in a radiotelephony network.
Primary means of communication.	The means of communication to be adopted normally by aircraft and ground stations as a first choice where alternative means of communication exist.
Printed communications.	Communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such circuit.
Problematic use of substances.	The use of one or more psychoactive substances by aviation personnel in a way that: a) constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or b) auses or worsens an occupational, social, mental or physical problem or disorder.
Procedure altitude/height.	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.
Procedure turn.	A manoeuvre in which a turn is made away from a designated track followed by a turn in the opposite direction to permit the aircraft to intercept and proceed along the reciprocal of the designated track. ***Note 1**. Procedure turns are designated "left" or "right" according to the direction of the initial turn.* ***Note 2.** Procedure turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.*
Prognostic chart.	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.
Prohibited area.	An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.
Protected flight zones.	Airspace specifically designated to mitigate the hazardous effects of laser radiation.

Protected service volume.	A part of the facility coverage where the facility provides a particular service in accordance with relevant SARPs and within which the facility is afforded frequency protection.
Protection area.	A defined area surrounding a stand intended to reduce the risk of damage from helicopters accidentally diverging from the stand.
Pseudo-range	The difference between the time of transmission by a satellite and reception by a GNSS receiver multiplied by the speed of light in a vacuum, including bias due to the difference between a GNSS receiver and satellite time reference.
Psychoactive substances.	Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.
Public authorities.	The agencies or officials of a Contracting State responsible for the application and enforcement of the particular laws and regulations of that State which relate to any aspect of these Standards and Recommended Practices.
Public health emergency of international concern.	An extraordinary event which is determined, as provided in the *International Health Regulations* (2005) of the World Health Organization: a) to constitute a public health risk to other States through the international spread of disease and b) to potentially require a coordinated international response.
Public health risk.	A likelihood of an event that may affect adversely the health of human populations, with an emphasis on one which may spread internationally or may present a serious and direct danger.
Q	
Quality assurance.	Part of quality management focused on providing confidence that quality requirements will be fulfilled (ISO 9000).
Quality control.	Part of quality management focused on fulfilling quality requirements (ISO 9000).
Quality management.	Coordinated activities to direct and control an organization with regard to quality (ISO 9000).
Quality system.	Documented organizational procedures and policies; internal audit of those policies and procedures; management review and recommendation for quality improvement.
Quality.	Degree to which a set of inherent characteristics fulfils requirements (ISO 9000). ***Note 1.*** *The term "quality" can be used with adjectives such as poor, good or excellent.* ***Note 2.*** *"Inherent", as opposed to "assigned", means existing in something, especially as a permanent characteristic.*

Quarantine.	The restriction of activities and/or separation from others of suspect persons who are not ill or of suspect baggage, containers, conveyances or goods in such a manner as to prevent the possible spread of infection or contamination.
R	
Radian (rad).	The plane angle between two radii of a circle which cut off on the circumference an arc equal in length to the radius.
Radio bearing.	The angle between the apparent direction of a definite source of emission of electro-magnetic waves and a reference direction, as determined at a radio direction-finding station. A *true* radio bearing is one for which the reference direction is that of true North. A *magnetic* radio bearing is one for which the reference direction is that of magnetic North.
Radio direction finding (RR S1.12).	Radiodetermination using the reception of radio waves for the purpose of determining the direction of a station or object.
Radio direction-finding station (RR S1.91).	A radiodetermination station using radio direction finding. *Note. The aeronautical application of radio direction finding is in the aeronautical radio navigation service.*
Radio navigation service.	A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids.
Radiotelephony network.	A group of radiotelephony aeronautical stations which operate on and guard frequencies from the same family and which support each other in a defined manner to ensure maximum dependability of air-ground communications and dissemination of air-ground traffic.
Radiotelephony.	A form of radiocommunication primarily intended for the exchange of information in the form of speech.
Rated air traffic controller.	An air traffic controller holding a license and valid ratings appropriate to the privileges to be exercised.
Rated thrust.	For engine emissions purposes, the maximum take-off thrust approved by the certificating authority for use under normal operating conditions at ISA sea level static conditions, and without the use of water injection. Thrust is expressed in kilonewtons.
Rating.	An authorization entered on or associated with a license and forming part thereof, stating special conditions, privileges or limitations pertaining to such license.
Readback.	A procedure whereby the receiving station repeats a received message or an appropriate part thereof back to the transmitting station so as to obtain confirmation of correct reception.
Recertification.	Certification of an aircraft with or without a revision to its certification noise levels, to a Standard different to that to which it was originally certificated.

Reference geometric factor.	An adjustment factor based on a measurement of aeroplane fuselage size derived from a two-dimensional projection of the fuselage.
Reference pressure ratio.	The ratio of the mean total pressure at the last compressor discharge plane of the compressor to the mean total pressure at the compressor entry plane when the engine is developing take-off thrust rating in ISA sea level static conditions.
Regional air navigation agreement.	Agreement approved by the Council of ICAO normally on the advice of a regional air navigation meeting.
Regular station.	A station selected from those forming an en-route air-ground radiotelephony network to communicate with or to intercept communications from aircraft in normal conditions.
Regulated agent.	An agent, freight forwarder or any other entity who conducts business with an operator and provides security controls that are accepted or required by the appropriate authority in respect of cargo or mail.
Rejected take-off area.	A defined area on a heliport suitable for helicopters operating in performance class 1 to complete a rejected take-off.
Release of goods.	The action by the customs authorities to permit goods undergoing clearance to be placed at the disposal of the persons concerned.
Relief flights.	Flights operated for humanitarian purposes which carry relief personnel and relief supplies such as food, clothing, shelter, medical and other items during or after an emergency and/or disaster and/or are used to evacuate persons from a place where their life or health is threatened by such emergency and/or disaster to a safe haven in the same State or another State willing to receive such persons.
Relief.	The inequalities in elevation of the surface of the Earth represented on aeronautical charts by contours, hypsometric tints, shading or spot elevations.
Remote co-pilot.	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.
Remote flight crew member.	A licensed flight crew member charged with duties essential to the operation of a remotely piloted aircraft system during a flight duty period.
Remote pilot station (RPS). ***Applicable as of 26 November 2026***	The component of the remotely piloted aircraft system containing the equipment used to pilot the remotely piloted aircraft.
Remote pilot.	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.

Remote pilot-in-command.	The remote pilot designated by the operator as being in command and charged with the safe conduct of a flight.
Remotely piloted aircraft (RPA). ***Applicable as of 26 November 2026***	An unmanned aircraft which is piloted from a remote pilot station.
Remotely piloted aircraft system (RPAS). ***Applicable as of 26 November 2026***	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.
Removal of a person.	Action by the public authorities of a State, in accordance with its laws, to direct a person to leave that State.
Removal order.	A written order served by a State on the operator on whose flight an inadmissible person travelled into that State, directing the operator to remove that person from its territory.
Rendering (a Certificate of Airworthiness) valid.	The action taken by a Contracting State, as an alternative to issuing its own Certificate of Airworthiness, in accepting a Certificate of Airworthiness issued by any other Contracting State as the equivalent of its own Certificate of Airworthiness.
Rendering (a license) valid.	The action taken by a Contracting State, as an alternative to issuing its own license, in accepting a license issued by any other Contracting State as the equivalent of its own license.
Repair.	The restoration of an aircraft, engine or associated part to an airworthy condition in accordance with the appropriate airworthiness requirements after it has been damaged or subjected to wear.
Repatriation flights.	Special flights organized, facilitated, or supported by a State for the exclusive purpose of transporting that State's nationals, and other eligible persons, from foreign countries to that State, or a safe third country, through operations by State aircraft, humanitarian flights or chartered/non-scheduled commercial flights.
Reporting period.	A period which commences on 1 January and finishes on 31 December in a given year for which an aeroplane operator or State reports required information. The flight departure time (UTC) determines which reporting period a flight belongs to.
Reporting point.	A specified geographical location in relation to which the position of an aircraft can be reported.
Required communication performance (RCP) specification.	A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication.
Required communication performance (RCP).	A statement of the performance requirements for operational communication in support of specific ATM functions (see *Manual on Required Communication Performance (RCP)* (Doc 9869)).

Required surveillance performance (RSP) specification.	A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance.
Requirement.	Need or expectation that is stated, generally implied or obligatory (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.*
Rescue coordination centre (RCC).	A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.
Rescue coordination centre.	A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.
Rescue subcentre (RSC).	A unit subordinate to a rescue coordination centre, established to complement the latter according to particular provisions of the responsible authorities.
Rescue.	An operation to retrieve persons in distress, provide for their initial medical or other needs, and deliver them to a place of safety.
Rest period.	A continuous and defined period of time, subsequent to and/or prior to duty, during which flight or cabin crew members are free of all duties.
Restricted area.	An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions.
Reversal procedure.	A procedure designed to enable aircraft to reverse direction during the initial approach segment of an instrument approach procedure. The sequence may include procedure turns or base turns.
Risk assessment.	The process of hazard identification, risk analysis and risk evaluation.
Risk management.	The systematic application of management procedures and practices which provide border inspection agencies with the

	necessary information to address movements or consignments which represent a risk.
Road.	An established surface route on the movement area meant for the exclusive use of vehicles.
Road-holding position.	A designated position at which vehicles may be required to hold.
Rotorcraft.	A power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors.
Route segment.	A route or portion of route usually flown without an intermediate stop.
Route stage.	A route or portion of a route flown without an intermediate landing.
Router.	A router is a node that forwards Internet protocol (IP) packets not explicitly addressed to itself. A router manages the relaying and routing of data while in transit from an originating end system to a destination end system.
Routing Directory.	A list in a communication centre indicating for each addressee the outgoing circuit to be used.
RPA observer.	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.
Runway condition assessment matrix (RCAM)	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.
Runway condition code (RWYCC)	A number describing the runway surface condition to be used in the runway condition report. ***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).*
Runway condition report (RCR).	A comprehensive standardized report relating to runway surface condition(s) and its effect on the aeroplane landing and take-off performance.
Runway end safety area (RESA).	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.
Runway guard lights.	A light system intended to caution pilots or vehicle drivers that they are about to enter an active runway.
Runway Overrun Awareness And Alerting System (ROAAS)	means an airborne system intended to increase flight crew awareness during approach and landing by generating alerts or warnings when aircraft state, aircraft performance and runway information indicate an increased risk of runway overrun.

Runway strip.	A defined area including the runway and stop-way, if provided, intended: a) to reduce the risk of damage to aircraft running off a runway; and b) to protect aircraft flying over it during take-off or landing operations.
Runway 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. ***Note***. *Procedures on determination of contaminant coverage on runway are available in the PANS-Aerodromes (Doc 9981).*

e) ***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.*

1) ***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.

2) ***Dry snow***. Snow from which a snowball cannot readily be made.

3) ***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.*

4) ***Ice.*** Water that has frozen or compacted snow that has transitioned into ice, in cold and dry conditions.

5) ***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.

6) ***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.*

7) ***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). 8) ***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.
Runway visual range (RVR).	The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.
Runway.	A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.
Runway-holding position.	A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower. ***Note.*** *In radiotelephony phraseologies, the expression "holding point" is used to designate the runway-holding position.*
Runway-type FATO.	A FATO having characteristics similar in shape to a runway.
S	
Safe forced landing.	Unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface.
Safety area.	A defined area on a heliport surrounding the FATO which is free of obstacles, other than those required for air navigation purposes, and intended to reduce the risk of damage to helicopters accidentally diverging from the FATO.
Safety data.	A defined set of facts or values collected, for reference, processing or analysis which could be used to maintain or improve safety.
Safety information.	Safety data processed, organized or analysed in a given context to support safety management and the development of safety intelligence.
Safety management system (SMS).	A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.
Safety objective.	A statement of a desired safety outcome.
Safety oversight.	A function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.
Safety performance indicator.	A metric used to measure and monitor a State or a service provider's safety performance, including the progress towards achieving a safety objective..

Safety performance target.	The State or service provider's planned or intended target for a safety performance indicator over a given period.
Safety performance.	A State or a service provider's measurable effect on safety achievement.
Safety recommendation of global concern (SRGC).	A safety recommendation regarding a systemic deficiency having a probability of recurrence, with significant consequences at a global level, and requiring timely action to improve safety. ***Note***. *The Manual of Aircraft Accident and Incident Investigation (Doc 9756), Part IV — Reporting contains the criteria for a recommendation to be classified as an SRGC.*
Safety recommendation.	A proposal of an accident investigation authority based on information derived from an investigation, made with the intention of preventing accidents or incidents and which in no case has the purpose of creating a presumption of blame or liability for an accident or incident. In addition to safety recommendations arising from accident and incident investigations, safety recommendations may result from diverse sources, including safety studies.
Safety risk.	The predicted probability and severity of the consequences or outcomes of a hazard.
Safety.	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.
Safety-sensitive personnel.	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.
Satisfactory evidence.	A set of documents or activities that a Contracting State accepts as sufficient to show compliance with an airworthiness requirement.
Screening.	The application of technical or other means which are intended to identify and/or detect weapons, explosives or other dangerous devices, articles or substances which may be used to commit an act of unlawful interference. ***Note***. *Certain dangerous articles or substances are classified as dangerous goods by KCASR 18 and the associated* Technical Instructions for the Safe Transport of Dangerous Goods by Air *(Doc 9284) and must be transported in accordance with those instructions. In addition, the* Aviation Security Manual *(Doc 8973 — Restricted) provides a list of prohibited items that must never be carried in the cabin of an aircraft.*
Search and rescue aircraft.	An aircraft provided with specialized equipment suitable for the efficient conduct of search and rescue missions.

Search and rescue facility.	Any mobile resource, including designated search and rescue units, used to conduct search and rescue operations.
Search and rescue region (SRR).	***(SRR).*** An area of defined dimensions, associated with a rescue coordination centre, within which search and rescue services are provided.
Search and rescue service.	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.
Search and rescue services unit.	A generic term meaning, as the case may be, rescue coordination centre, rescue subcentre or alerting post.
Search and rescue unit.	A mobile resource composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations.
Search.	An operation normally coordinated by a rescue coordination centre or rescue subcentre using available personnel and facilities to locate persons in distress.
Second (s).	The duration of 9 192 631 770 periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the caesium-133 atom.
Secondary frequency.	The radiotelephony frequency assigned to an aircraft as a second choice for air-ground communication in a radiotelephony network.
Secondary surveillance radar (SSR).	A surveillance radar system which uses transmitters/receivers (interrogators) and transponders. ***Note****. The requirements for interrogators and transponders are specified in Chapter 3.*
Security audit.	An in-depth compliance examination of all aspects of the implementation of the national civil aviation security programme.
Security control.	A means by which the introduction of weapons, explosives or other dangerous devices, articles or substances which may be used to commit an act of unlawful interference can be prevented.
Security equipment.	Devices of a specialized nature for use, individually or as part of a system, in the prevention or detection of acts of unlawful interference with civil aviation and its facilities.
Security inspection.	An examination of the implementation of relevant national civil aviation security programme requirements by an airline, airport, or other entity involved in security.
Security restricted area.	Those areas of the airside of an airport which are identified as priority risk areas where in addition to access control, other security controls are applied. Such areas will normally include, *inter alia*, all commercial aviation passenger departure areas

	between the screening checkpoint and the aircraft, the ramp, baggage make-up areas, including those where aircraft are being brought into service and screened baggage and cargo are present, cargo sheds, mail centres, airside catering and aircraft cleaning premises.
Security test.	A covert or overt trial of an aviation security measure which simulates an attempt to commit an unlawful act.
Security.	Safeguarding civil aviation against acts of unlawful interference. This objective is achieved by a combination of measures and human and material resources.
Segregated parallel operations.	Simultaneous operations on parallel or near-parallel instrument runways in which one runway is used exclusively for approaches and the other runway is used exclusively for departures.
Self-sustaining powered sailplane.	A powered aeroplane with available engine power which allows it to maintain level flight but not to take off under its own power.
Semi-automatic relay installation.	A teletypewriter installation where interpretation of the relaying responsibility in respect of an incoming message and the resultant setting-up of the connections required to effect the appropriate retransmissions require the intervention of an operator but where all other normal operations of relay are carried out automatically.
Series of flights.	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.
Serious incident.	An incident involving circumstances indicating that there was a high probability of an accident and 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. ***Note 1.*** *The difference between an accident and a serious incident lies only in the result.* ***Note 2****. Examples of serious incidents can be found in Attachment C of KCASR 13.*
Serious injury.	An injury which is sustained by a person in an accident and which:

	a) requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or c) involves lacerations which cause severe hemorrhage, nerve, muscle or tendon damage; or d) involves injury to any internal organ; or e) involves second- or third-degree burns, or any burns affecting more than 5 per cent of the body surface; or f) involves verified exposure to infectious substances or injurious radiation.
Shipboard heliport.	A heliport located on a ship that may be purpose or non-purpose-built. A purpose-built shipboard heliport is one designed specifically for helicopter operations. A non-purpose-built shipboard heliport is one that utilizes an area of the ship that is capable of supporting a helicopter but not designed specifically for that task.
Shoulder.	An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.
Siemens (S).	The electric conductance of a conductor in which a current of 1 ampere is produced by an electric potential difference of 1 volt.
Sievert (Sv).	The unit of radiation dose equivalent corresponding to 1 joule per kilogram.
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 a maintenance release (to).	To certify that maintenance work has been completed satisfactorily in accordance with appropriate airworthiness requirements, by issuing the maintenance release referred to in KCASR 6 (in the case of a release not issued by an approved maintenance organization) or KCASR 8 (in the case of a release issued by an approved maintenance organization).
Sign.	a) ***Fixed message sign***. A sign presenting only one message. b) ***Variable message sign***. A sign capable of presenting several predetermined messages or no message, as applicable.

Signal area.	An area on an aerodrome used for the display of ground signals.
Significant point.	A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes. ***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 ground-based navigation aids.*
Significant.	In the context of the medical provisions in Chapter 6, ***significant*** means to a degree or of a nature that is likely to jeopardize flight safety.
Simplex.	A method in which telecommunication between two stations takes place in one direction at a time. ***Note****. In application to the aeronautical mobile service, this method may be subdivided as follows:* *a) single channel simplex;* *b) double channel simplex;* c) *offset frequency simplex.*
Single channel simplex.	Simplex using the same frequency channel in each direction.
Single Window.	A facility that allows parties involved in trade and transport to lodge standardized information and documents with a single-entry point to fulfil all import, export, and transit-related regulatory requirements. If information is electronic then individual data elements should only be submitted once.
Slotted aloha.	A random-access strategy whereby multiple users access the same communications channel independently, but each communication must be confined to a fixed time slot. The same timing slot structure is known to all users, but there is no other coordination between the users.
Slush.	Water-saturated snow which with a heel-and-toe slap-down motion against the ground will be displaced with asp-latter; specific gravity: 0.5 up to 0.8. ***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.*
Small aeroplane.	An aeroplane of a maximum certificated take-off mass of 5 700 kg or less.
Smoke Number.	The dimensionless term quantifying smoke emissions (see 3 of Appendix 2).

Smoke.	The carbonaceous materials in exhaust emissions which obscure the transmission of light.
Snow (on the ground).	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. 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. 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.
SNOWTAM.	A special series NOTAM given in a standard format providing a surface condition report notifying the presence or cessation of hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area.
Solo flight time - remotely piloted aircraft systems.	Flight time during which a student remote pilot is controlling the remotely piloted aircraft system, acting solo.
Solo flight time.	Flight time during which a student pilot is the sole occupant of an aircraft.
Space weather centre (SWXC).	A global or regional centre designated by ICAO to monitor and provide advisory information on space weather phenomena expected to affect high-frequency radio communications, communications via satellite, GNSS-based navigation and surveillance systems and/or pose a radiation risk to aircraft occupants, under the framework of space weather information service. ***Note***. *A regional centre designated by ICAO supports global centres in the fulfilment of its responsibilities.*
Space weather information service.	A globally coordinated service where space weather centres provide information on space weather phenomena that may affect communications, navigation and surveillance systems and/or pose a radiation risk to aircraft occupants.
Spare parts.	Articles, including engines and propellers, of a repair or replacement nature for incorporation in an aircraft.
Special VFR flight.	A VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.

Specific air range.	The distance an aeroplane travels in the cruise flight phase per unit of fuel consumed.
Specific approval.	An approval which is documented in the operations specifications for commercial air transport operations or in the list of specific approvals for general aviation operations.
Standard atmosphere.	a) the air is a perfect dry gas; b) the physical constants are: • Sea level mean molar mass: M0 = 28.964 420 □ 10–3 kg mol–1 • Sea level atmospheric pressure: P0 = 1 013.250 hPa • Sea level temperature: t0 = 15°C T0 = 288.15 K • Sea level atmospheric density: ρ0 = 1.225 0 kg m–3 • Temperature of the ice point: Ti = 273.15 K • Universal gas constant: R* = 8.314 32 JK–1mol–1 c) the temperature gradients are:

Geopotential altitude(km)		*(Kelvin per standard (Kelvin per standard geopotential kilometre)*
From	To	
-5.0	11.0	-6.5
11.0	20.0	0.0
20.0	32.0	+1.0
32.0	47.0	+2.8
47.0	51.0	
0.0		
51.0	71.0	-2.8
71.0	80.0	-2.0

Note 1*. The standard geopotential metre has the value 9.806 65 m2 s–2.*

	***Note 2**. See Doc 7488 for the relationship between the variables and for tables giving the corresponding values of temperature, pressure, density and geopotential.* ***Note 3**. Doc 7488 also gives the specific weight, dynamic viscosity, kinematic viscosity and speed of sound at various altitudes.*
Standard isobaric surface.	An isobaric surface used on a worldwide basis for representing and analysing the conditions in the atmosphere.
Standard message element.	Part of a message defined in the PANS-ATM (Doc 4444) in terms of display format, intended use and attributes.
Standardized health documents.	Documents standardized by the World Health Organization (WHO) under the International Health Regulations (IHR) (2005).
State of Design of Modification.	The State having jurisdiction over the individual or organization responsible for the design of the modification or repair of an aircraft, engine or propeller.
State of Design.	The State having jurisdiction over the organization responsible for the type design.
State of Destination.	The State in the territory of which the consignment is finally to be unloaded from an aircraft.
State of Manufacture. ***Applicable as of 26 November 2026***	The State having jurisdiction over the organization responsible for the final assembly of the aircraft, remote pilot station, engine or propeller.
State of Manufacture. ***Applicable until 25 November 2026***	The State having jurisdiction over the organization responsible for the final assembly of the aircraft, engine or propeller.
State of Occurrence.	The State in the territory of which an accident or incident occurs.
State of the Operator.	The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.
State of Origin.	The State in the territory of which the consignment is first to be loaded on an aircraft.
State of Registry.	The State on whose register the aircraft is entered. ***Note.** In the case of the registration of aircraft of an international operating agency on other than a national basis, the States constituting the agency are jointly and severally bound to assume the obligations which, under the Chicago Convention, attach to a State of Registry. See, in this regard, the Council Resolution of 14 December 1967 on Nationality and Registration of Aircraft Operated by International Operating Agencies which can be found in the Policy and Guidance Material on the Economic Regulation of International Air Transport (Doc 9587).*
State of the Aerodrome.	The State in whose territory the aerodrome is located.

	Note. *State of the Aerodrome includes heliports and landing locations.*
State of the principal location of a general aviation operator.	The State in which the operator of a general aviation aircraft has its principal place of business or, if there is no such place of business, its permanent residence. ***Note.*** *Guidance concerning the options for the principal location of a general aviation operator is contained in the Manual* on the Implementation of Article 83 bis of the Convention on International Civil Aviation *(Doc 10059).*
State pair.	A group of two States composed of a departing State or its territories and an arrival State or its territories.
State safety programme (SSP).	An integrated set of law, regulations, policies, objectives, processes, procedures and activities aimed at managing safety at the State level.
State volcano observatory.	A volcano observatory, designated by regional air navigation agreement, to monitor active or potentially active volcanoes within a State and to provide information on volcanic activity and/or volcanic ash in the atmosphere.
Static load-bearing surface.	A surface capable of supporting the mass of a helicopter situated upon it.
Station declination.	An alignment variation between the zero-degree radial of a VOR and true north, determined at the time the VOR station is calibrated.
Steradian (sr).	The solid angle which, having its vertex in the centre of a sphere, cuts off an area of the surface of the sphere equal to that of a square with sides of length equal to the radius of the sphere.
Stopway.	A defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.
Stores (Supplies).	a) Stores (supplies) for consumption; and b) Stores (supplies) to be taken away. b) ***Stores (Supplies) for consumption.*** Goods, whether or not sold, intended for consumption by the passengers and the crew on board aircraft, and goods necessary for the operation and maintenance of aircraft, including fuel and lubricants. c) ***Stores (Supplies) to be taken away.*** Goods for sale to the passengers and the crew of aircraft with a view to being landed.
Subsonic aeroplane.	An aeroplane incapable of sustaining level flight at speeds exceeding flight Mach number of 1.

Supersonic aeroplane.	An aeroplane capable of sustaining level flight at speeds exceeding flight Mach number of 1.
Surface-level heliport.	A heliport located on the ground or on a structure on the surface of the water.
Surveillance radar.	Radar equipment used to determine the position of an aircraft in range and azimuth.
Surveillance.	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.
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.
Synthetic vision system (SVS).	A system to display data-derived synthetic images of the external scene from the perspective of the flight deck.
T	
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 decision point (TDP).	The point used in determining take-off performance from which, an engine failure occurring at this point, either a rejected take-off may be made or a take-off safely continued. ***Note****. TDP applies only to helicopters operating in performance Class 1.*
Take-off phase.	The operating phase defined by the time during which the engine is operated at the rated thrust.
Take-off runway.	A runway intended for take-off only.
Take-off surface.	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.
Target level of safety (TLS).	A generic term representing the level of risk which is considered acceptable in particular circumstances.
Taxi/ground idle.	The operating phases involving taxi and idle between the initial starting of the propulsion engine(s) and the initiation of the take-off roll and between the time of runway turn-off and final shutdown of all propulsion engine(s).
Taxiing.	Movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing.
Taxi-route.	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 centred on the taxi-route.

Taxiway intersection.	A junction of two or more taxiways.
Taxiway strip.	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.
Taxiway.	A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including: a) ***Aircraft stand taxi lane***. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only. b) ***Apron taxiway***. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron. c) ***Rapid exit taxiway***. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.
Technical Instructions.	The *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council.
Telecommunication (RR S1.3).	Any transmission, emission, or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems.
Teletypewriter tape.	A tape on which signals are recorded in the 5-unit Start-Stop code by completely severed perforations (Chad Type) or by partially severed perforations (Chadless Type) for transmission over teletypewriter circuits.
Temporary admission.	The customs procedure under which certain goods can be brought into a customs territory conditionally relieved totally or partially from payment of import duties and taxes; such goods must be imported for a specific purpose and must be intended for re-exportation within a specified period and without having undergone any change except normal depreciation due to the use made of them.
Terminal arrival altitude (TAA).	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. 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".*
Tesla (T).	The magnetic flux density given by a magnetic flux of 1 weber per square metre.
Threat management.	The process of detecting threats and responding to them with countermeasures that reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired states. ***Note***. *See Chapter 6 of Part II, Section 1 of the* Procedures for Air Navigation Services — Training *(PANS-TRG, Doc 9868) and Circular 314* — Threat and Error Management (TEM) in Air Traffic Control *for a description of undesired states*.
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.
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 a specific approval for EDTO from the State of the Operator.
Threshold.	The beginning of that portion of the runway usable for landing.
Through-flight.	A particular operation of aircraft, identified by the operator by the use throughout of the same symbol, from point of origin via any intermediate points to point of destination.
Tilt-rotor.	A powered-lift capable of vertical take-off, vertical landing, and sustained low-speed flight, which depends principally on engine-driven rotors mounted on tiltable nacelles for the lift during these flight regimes and on nonrotating aerofoil(s) for lift during high-speed flight.
Time division multiple access (TDMA).	A multiple access scheme based on time-shared use of an RF channel employing: a) discrete contiguous time slots as the fundamental shared resource; and

	b) a set of operating protocols that allows users to interact with a master control station to mediate access to the channel.
Time division multiplex (TDM).	A channel sharing strategy in which packets of information from the same source but with different destinations are sequenced in time on the same channel.
Time-in-position.	The period of time when an air traffic controller is exercising the privileges of the air traffic controller's licence at an operational position.
Tonne (t).	The mass equal to 1000 kilograms.
Torn-tap, relay installation.	A teletypewriter installation where messages are received and relayed in teletypewriter tape form and where all operations of relay are performed as the result of operator intervention.
Total estimated elapsed time.	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.
Total vertical error (TVE).	The vertical geometric difference between the actual pressure altitude flown by an aircraft and its assigned pressure altitude (flight level).
Touchdown and lift-off area (TLOF).	An area on which a helicopter may touch down or lift off.
Touchdown zone.	The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway
Touchdown.	The point where the nominal glide path intercepts the runway. ***Note****. "Touchdown" as defined above is only a datum and is not necessarily the actual point at which the aircraft will touch the runway.*
Touchdown/positioning circle (TDPC).	A touchdown positioning marking (TDPM) in the form of a circle used for omnidirectional positioning in a TLOF.
Touchdown/positioning marking (TDPM).	A marking or set of markings providing visual cues for the positioning of helicopters.
Traceability.	Ability to trace the history, application or location of that which is under consideration (ISO 9000). ***Note.*** *When considering product, traceability can relate to:* *— the origin of materials and parts;* *— the processing history; and* *— the distribution and location of the product after delivery*.
Track.	The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).

Traffic avoidance advice.	Advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision.
Traffic information service – broadcast (TIS-B) IN.	A surveillance function that receives and processes surveillance data from TIS-B OUT data sources.
Traffic information service – broadcast (TIS-B) OUT.	A function on the ground that periodically broadcasts the surveillance information made available by ground sensors in a format suitable for TIS-B IN capable receivers. ***Note***. *This technique can be achieved through different data links. The requirements for Mode S extended squitters are specified in KCASR 10, Volume IV, Chapter 5. The requirements for VHF digital link (VDL) Mode 4 and universal access transceiver (UAT) are specified in KCASR 10, Volume III, Part I.*
Traffic information.	Information issued by an air traffic services unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision.
Transfer cargo and mail.	Cargo and mail departing on an aircraft other than that on which it arrived.
Transfer of control point.	A defined point located along the flight path of an aircraft, at which the responsibility for providing air traffic control service to the aircraft is transferred from one control unit or control position to the next.
Transferring unit.	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.
Transit delay.	In packet data systems, the elapsed time between a request to transmit an assembled data packet and an indication at the receiving end that the corresponding packet has been received and is ready to be used or forwarded.
Transition altitude.	The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.
Transponder occupancy.	A state of unavailability of the transponder from the time it detects an incoming signal that appears to cause some action or from the time of a self-initiated transmission, to the time that it is capable of replying to another interrogation. ***Note***. *Signals from various systems that contribute to transponder occupancy are described in the* Aeronautical Surveillance Manual *(Doc 9924), Appendix M.*
Travel document.	A passport or other official document of identity issued by a State or organization, which may be used by the rightful holder for international travel.

Tributary station.	An aeronautical fixed station that may receive or transmit messages and/or digital data but which does not relay except for the purpose of serving similar stations connected through it to a communication centre.
Tropical cyclone advisory centre (TCAC).	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.
Tropical cyclone.	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.
Type Certificate.	A document issued by a Contracting State to define the design of an aircraft, engine or propeller type and to certify that this design meets the appropriate airworthiness requirements of that State. ***Note 1.*** *In some Contracting States a document equivalent to a Type Certificate may be issued for an engine or propeller type.* ***Note 2****. In some Contracting States the Type Certificate may also certify that the design meets the appropriate aircraft engine emissions requirements of that State.*
Type design.	The set of data and information necessary to define an aircraft, engine or propeller type for the purpose of airworthiness determination.
U	
Ultimate load.	The limit load multiplied by the appropriate factor of safety.
UN number.	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.
Unaccompanied baggage.	Baggage that is transported as cargo and may or may not be carried on the same aircraft with the person to whom it belongs.
Unaccompanied minor.	A minor travelling alone or travelling only in the company of another minor. ***Note****. It is to be noted that this definition might need to be applied in light of any obligation resulting from the application of national regulations on border checks.*
Unburned hydrocarbons.	The total of hydrocarbon compounds of all classes and molecular weights contained in a gas sample, calculated as if they were in the form of methane.

Uncertainty phase.	A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.
Unclaimed baggage.	Baggage that arrives at an airport and is not picked up or claimed by a passenger.
Unidentified baggage.	Baggage at an airport, with or without a baggage tag, which is not picked up by or identified with a passenger.
Unit load device.	Any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo. ***Note***. *An overpack is not included in this definition.*
Unlading.	The removal of cargo, mail, baggage or stores from an aircraft after a landing.
Unmanned free balloon.	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 the regulation.*
Unpredictability.	The implementation of security measures in order to increase their deterrent effect and their efficiency, by applying them at irregular frequencies, different locations and/or with varying means, in accordance with a defined framework.
Upper-air chart.	A meteorological chart relating to a specified upper-air surface or layer of the atmosphere.
Usability factor.	The percentage of time during which the use of a runway or system of runways is not restricted because of the crosswind component. ***Note***. *Crosswind component means the surface wind component at right angles to the runway centre line.*
V	
Validation.	Confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled (ISO 9000).
Vectoring.	Provision of navigational guidance to aircraft in the form of specific headings, based on the use of an ATS surveillance system.
Verification body.	A legal entity that performs the verification of an Emissions Report and, when required, an Emissions Unit Cancellation Report, as an accredited impartial independent third party.
Verification of report.	An independent, systematic and sufficiently documented evaluation process of an emissions report and, when required, a cancellation of eligible emissions units' report.

Verification report.	A document, drafted by the verification body, containing the verification opinion statement and required supporting information.
Verification team.	A group of verifiers, or a single verifier that also qualifies as a team leader, belonging to a verification body conducting the verification of an Emissions Report and, when required, an Emissions Unit Cancellation Report. The team can be supported by technical experts.
Verification.	Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled (ISO 9000). ***Note.*** *The term "verified" is used to designate the corresponding status.*
Vertical procedures.	Take-off and landing procedures that include an initial vertical or steep climb and a final vertical or steep descent profile. The profile may or may not include a lateral component.
VFR flight.	A flight conducted in accordance with the visual flight rules.
VFR.	The symbol used to designate the visual flight rules.
VHF digital link (VDL).	A constituent mobile subnetwork of the aeronautical telecommunication network (ATN), operating in the aeronautical mobile VHF frequency band. In addition, the VDL may provide non-ATN functions such as, for instance, digitized voice.
Visibility.	Visibility for aeronautical purposes is the greater of: a) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background; b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background. ***Note 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).* ***Note. 2.*** *The definition applies to the observations of visibility in local routine and special reports, to the observations of prevailing and minimum visibility reported in METAR and SPECI and to the observations of ground visibility.*

Visitor.	Any person who disembarks and enters the territory of a Contracting State other than that in which that person normally resides; remains there lawfully as prescribed by that Contracting State for legitimate non-immigrant purposes, such as touring, recreation, sports, health, family reasons, religious pilgrimages, or business; and does not take up any gainful occupation during his stay in the territory visited.
Visual 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 Chapter 4 of KCASR 2.*
VMC.	The symbol used to designate visual meteorological conditions.
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.
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.
Volt (V).	The unit of electric potential difference and electromotive force which is the difference of electric potential between two points of a conductor carrying a constant current of 1 ampere, when the power dissipated between these points is equal to 1 watt.

V_{TOSS}.	The minimum speed at which climb shall be achieved with the critical engine inoperative, the remaining engines operating within approved operating limits. ***Note.*** *The speed referred to above may be measured by instrument indications or achieved by a procedure specified in the flight manual.*
W	
Watt (W).	The power which gives rise to the production of energy at the rate of 1 joule per second.
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.
Weber (Wb).	The magnetic flux which, linking a circuit of one turn, produces in it an electromotive force of 1 volt as it is reduced to zero at a uniform rate in 1 second.
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.
Winching area.	An area provided for the transfer by helicopter of personnel or stores to or from a ship.
World area forecast centre (WAFC).	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.
World area forecast system (WAFS).	A worldwide system by which world area forecast centres provide aeronautical meteorological en-route forecasts in uniform standardized formats.
X	
Y	
Z	
Z marker beacon.	A type of radio beacon, the emissions of which radiate in a vertical cone-shaped pattern.

END