

Thailand Civil Aviation Regulation – Air Operations

Part Definitions of Terms Used in TCAR OPS

(TCAR OPS Part - DEF)

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TCAR OPS Part - DEF

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Approved By

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The Civil Aviation Authority of Thailand

THAILAND CIVIL AVIATION REGULATION (TCAR)

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RECORD OF REVISIONS

Issue No.	Revision No.	Date (DD/MMM/YYYY)	Subject	Insert By (Department/ Division)
01	00	8 Dec 2023	Initial issue including (EU) No 2019/1387, (EU) No2018/1384, (EU) No 2019/1387, (EU) No 2020/2036, (EU) No 2021/1296, (EU) No 2021/2237, (EU) 2022/2203 and (EU) 2023/217, Notably, (EU) 2023/203 was not included.	OPS
02	00	20 Dec 2024	New Issue	OPS
02	01	DD MMM YYYY	Adoption of Amendment 51 to Annex 6, Part I	OPS

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REVISION HIGHLIGHTS

Area of Change	Change Detail(s)
Definitions for terms used in TCAR OPS	Item (4) update definition of 'acts of unlawful interference' and sub items (a), (b), (e) and (f)
Definitions for terms used in TCAR OPS	Item (12) update definition of 'aircraft operating manual'
Definitions for terms used in TCAR OPS	Item (26) update definition of 'area navigation'
Definitions for terms used in TCAR OPS	Item (98) add definition of 'flight data analysis'
Definitions for terms used in TCAR OPS	Item (164) add definition of 'modification'
Definitions for terms used in TCAR OPS	Item (165) add definition of 'Navigation specification'
Definitions for terms used in TCAR OPS	Item (166); (b) updated definition of 'RNAV specification'
Definitions for terms used in TCAR OPS	Item (181) add definition of 'operational control'
Definitions for terms used in TCAR OPS	Item (185) add definition of 'Operations specifications'
Definitions for terms used in TCAR OPS	Item (188) add note for 'Performance-based navigation (PBN)'
Definitions for terms used in TCAR OPS	Item (198) add definition of 'Pressure-altitude'
Definitions for terms used in TCAR OPS	Item (224) add definition of 'Specific approval'
Definitions for terms used in TCAR OPS	Item (228) add definition of 'State of the Operator'
Definitions for terms used in TCAR OPS	Item (229) add definition of 'State of the Registry'

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LIST OF EFFECTIVE PAGES

Change and amendment bar is placed against each paragraph affected.

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INTRODUCTION AND APPLICABILITY

In this publication the word 'must' or 'shall' is used to indicate where the Director General requires the Organisation, owner or operator to respond to and comply with, or adhere closely to, the defined requirement.

If the Organisation's/owner's/operator's response is deemed to be inadequate by the Director General, a specific requirement or restriction may be applied as a condition of the appropriate instrument to be issued under Thailand Civil Aviation Regulations.

TCAR OPS is based on the latest consolidated version of Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations, as amended up to (EU) No 2023/217. Notably, (EU) 2023/203 was not included as part of the initial issue.

TCAR OPS Part DEF is a part of the overall TCAR OPS Regulation set.

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DEFINITIONS FOR TERMS USED IN TCAR OPS PARTS

For the purpose of this Regulation, the following definitions shall apply:

(1) 'accelerate-stop distance available (ASDA)' means the length of the take-off run available plus the length of stopway, if such stopway is declared available by the State of the aerodrome and is capable of bearing the mass of the aeroplane under the prevailing operating conditions.

(2) 'acceptable means of compliance (AMC)' means non-binding standards adopted by the CAAT to illustrate means to establish compliance with the Air Navigation Act B.E.2497 and its Regulations.

(3) 'acceptance checklist' means a document used to assist in carrying out a check on the external appearance of packages of dangerous goods and their associated documents to determine that all appropriate requirements have been met with.

(4) 'acts of unlawful interference' means acts or attempted acts such as to jeopardise the safety of civil aviation and air transport, i.e.

(a) unlawful seizure of aircraft,

(b) destruction of an aircraft in service,

(c) hostage-taking on board an aircraft or on aerodromes,

(d) forcible intrusion on board an aircraft, at an airport or on the premises of an aeronautical facility,

(e) introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes,

(f) use of an aircraft in service for the purpose of causing death, serious bodily injury, or serious damage to property or the environment,

(g) communication of false information as to jeopardise 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.

(5) 'adequate aerodrome' means an aerodrome on which the aircraft can be operated, taking account of the applicable performance requirements and runway characteristics.

(6) 'aerial work' means 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.
In TCAR OPS, the term 'aerial work' is referred to as 'Specialised Operation'.

(7) 'Aerodrome' A defined area on land and 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.

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(8) 'aerodrome operating minima' means the limits of usability of an aerodrome for:

(a) take-off, expressed in terms of runway visual range (RVR) and/or visibility and, if necessary, ceiling;

(b) landing in 2D instrument approach operations, expressed in terms of visibility and/or RVR, minimum descent altitude/height (MDA/H) and, if necessary, ceiling;

(c) landing in 3D instrument approach operations, expressed in terms of visibility and/or RVR and decision altitude/height (DA/H) as appropriate to the type and/or category of the operation;

(9) 'aeroplane' means a power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under certain conditions of flight.

(10) 'aided night vision imaging system (NVIS) flight' means, in the case of NVIS operations, that portion of a visual flight rules (VFR) flight performed at night when a crew member is using night vision goggles (NVG).

(11) 'aircraft' means a 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.

(12) '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.

(13) 'aircraft operator' means any legal or natural person operating or proposing to operate one or more aircraft.

(14) 'aircraft tracking' means a ground-based process, established by the operator that maintains and updates, at standardised intervals, a record of the four dimensional position of individual aircraft in flight.

(15) 'aircraft tracking system' means a system that relies on aircraft tracking in order to identify abnormal flight behaviour and provide alert.

(16) 'air operator certificate (AOC)' means a certificate authorising an operator to carry out specified commercial air transport operations.

(17) 'air traffic services (ATS)' means a generic term meaning variously, flight information service, altering service, air traffic advisory service, air traffic control service area control service, approach control service or aerodrome control service.

(18) 'air taxi operation' means, for the purpose of flight time and duty time limitations, a non-scheduled on demand commercial air transport operation with an aeroplane with a maximum operational passenger seating configuration ('MOPSC') of 19 or less.

(19) 'airworthy' means the status of an aircraft, engine, propeller, or part when it conforms to its approved design and is in a condition for safe operation.

(20) 'alternate aerodrome' means an adequate aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or land at the aerodrome of intended landing, where the necessary services and facilities are available, where aircraft performance requirements can be met, and which is operational at the expected time of use; 'alternate aerodrome' includes the following:

(a) 'take-off alternate aerodrome': an alternate aerodrome at which an aircraft would be able to land if it becomes necessary shortly after take-off and it is not possible to use the aerodrome of departure;

(b) 'en route alternate (ERA) aerodrome': an alternate aerodrome at which an aircraft would be able to land if a diversion becomes necessary while en route;

(c) 'fuel/energy en route alternate (fuel/energy ERA) aerodrome' means an ERA aerodrome that is required at the planning stage for use in the calculation of fuel/energy;

(d) 'destination alternate aerodrome': an alternate aerodrome at which an aircraft would be able to land if it becomes either impossible or inadvisable to land at the aerodrome of intended landing;

(21) 'alternative means of compliance' means those means that propose an alternative to an existing acceptable means of compliance or those that propose new means to establish compliance with the Air Navigation Act B.E.2497 and its Regulations for which no associated AMC have been adopted by the CAAT.

(22) 'altimetry system error (ASE)' means 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.

(23) 'anti-icing', in the case of ground procedures, means a procedure that provides protection against the formation of frost or ice and accumulation of snow on treated surfaces of the aircraft for a limited period of time (hold-over time).

(24) 'Approach and landing phase – helicopters' that part of the flight from 300m (1000 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.

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

(26) 'area navigation' means 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.

(27) 'Authority' means the Director General of the Civil Aviation Authority of Thailand.

(28) 'cabin crew member' means an appropriately qualified crew member, other than a flight crew or technical crew member, who is assigned by an operator or the pilot-in-command to perform duties related to the safety of passengers and flight during operations.

(29) 'cargo aircraft' means any aircraft, other than a passenger aircraft, which is carrying goods or property.

(30) 'category A with respect to helicopters' means a multi-engined helicopter designed with engine and system isolation features specified in the applicable certification specification and capable of operations using take-off and landing data scheduled under a critical engine failure concept that assures adequate designated surface area and adequate performance capability for continued safe flight or safe rejected take-off in the event of engine failure.

(31) 'category B with respect to helicopters' means a single-engined or multi-engined helicopter that does not meet category A standards. Category B helicopters have no guaranteed capability to continue safe flight in the event of an engine failure, and unscheduled landing is assumed.

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

(33) 'certification specifications' (CS) means technical standards adopted by the CAAT indicating means to show compliance with the Air Navigation Act B.E.2497 and its Regulations and which can be used by an organisation for the purpose of certification.

(34) 'circling' means the visual phase of a circling approach operation.

(35) 'circling approach operation' means a Type A instrument approach operation to bring an aircraft into position for landing on a runway/final approach and take-off area (FATO) that is not suitably located for a straight-in approach.

(36) 'clearway' means 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.

(37) 'cloud base' means the height of the base of the lowest observed or forecast cloud element in the vicinity of an aerodrome or operating site or within a specified area of operations, normally measured above aerodrome elevation or, in the case of offshore operations, above mean sea level.

(38) 'cockpit voice recorder (CVR)' means a crash-protected flight recorder that uses a combination of microphones and other audio and digital inputs to collect and record the aural environment of the flight crew compartment and communications to, from and between the flight crew members.

(39) 'code share' means an arrangement under which an operator places its designator code on a flight operated by another operator, and sells and issues tickets for that flight.

(40) 'COMAT 'operator material carried out on an operator's aircraft for the operator's own purposes.

(41) 'combined vision system (CVS)' a system to display images from a combination of an enhanced vision system (EVS) and a synthetic vision system (SVS).

(42) 'commercial air transport operation' means an aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire. This could also be interpreted as 'public transport' in this document.

(43) 'commercial operation' means any operation of an aircraft, in return for remuneration or other valuable consideration, which is available for the public or, when not made available to the public, which is performed under a contract between an operator and a customer, where the latter has no control over the operator.

(44) 'competency' means a dimension of human performance that is used to reliably predict successful performance on the job and which is manifested and observed through behaviours that mobilise the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions.

(45) 'competency-based training' means assessment and training programmes that are characterised by a performance orientation, emphasis on standards of performance and their measurement and the development of training to the specified performance standards.

(46) 'competency framework' means a complete set of identified competencies that are developed, trained and assessed in the operator's evidence-based training programme utilising scenarios that are relevant to operations and which is wide enough to prepare the pilot for both foreseen and unforeseen threats and errors;'

(47) complex motor-powered aircraft' shall mean:

(i) an aeroplane:

- with a maximum certificated take-off mass exceeding 5 700 kg, or
- certificated for a maximum passenger seating configuration of more than nineteen, or
- certificated for operation with a minimum crew of at least two pilots, or
- equipped with (a) turbojet engine(s) or more than one turboprop engine, or

(ii) a helicopter certificated:

- for a maximum take-off mass exceeding 3 175 kg, or
- for a maximum passenger seating configuration of more than nine, or
- for operation with a minimum crew of at least two pilots, or

(iii) a tilt rotor aircraft.

(48) 'configuration deviation list (CDL)' means a list established by the organisation 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.

(49) 'congested area' means in relation to a city, town or settlement, any area which is substantially used for residential, commercial or recreational purposes.

(50) 'contaminated runway' means a runway of which a significant portion of its 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 under the runway surface condition descriptors.

(51) 'contingency fuel/energy' means the fuel/energy required to compensate for unforeseen factors that could have an influence on the fuel/energy consumption to the destination aerodrome.

(52) 'continuing airworthiness' the set of processes by which all aircraft comply with the applicable airworthiness requirements and remain in a safe operation throughout their operating life.

(53) 'continuous descent final approach (CDFA)' means a technique, consistent with stabilised 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:

(a) for straight-in approach operations, to a point approximately 15 m (50 ft) above the landing runway threshold or the point where the flare manoeuvre begins; or

(b) for circling approach operations, until MDA/H or visual flight manoeuvre altitude/height is reached;

(54) 'converted meteorological visibility (CMV)' means a value, equivalent to an RVR, which is derived from the reported meteorological visibility.

(55) 'crew member' means a person assigned by an operator to perform duties on board an aircraft.

(56) 'critical phases of flight' in the case of aeroplanes means the take-off run, the take-off flight path, the final approach, the missed approach, the landing, including the landing roll, and any other phases of flight as determined by the pilot-in-command or commander.

(57) 'critical phases of flight' in the case of helicopters means taxiing, hovering, take-off, final approach, missed approach, the landing and any other phases of flight as determined by the pilot-in-command or commander.

(58) '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.

(59) 'current fuel/energy scheme' means the approved fuel/energy scheme that is currently used by the operator.

(60) 'dangerous goods (DG)' means articles or substances which are capable of posing a hazard 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.

(61) 'dangerous goods accident' means 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.

(62) 'dangerous goods incident' means:

(a) an occurrence other than a dangerous goods accident associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property or environmental damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained;

(b) any occurrence relating to the transport of dangerous goods which seriously jeopardises an aircraft or its occupants is also deemed to be a dangerous goods incident.

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

(64) 'defined point after take-off (DPATO)' means the point, within the take-off and initial climb phase, before which the helicopter's ability to continue the flight safely, with the critical engine inoperative, is not assured and a forced landing may be required.

(65) 'defined point before landing (DPBL)' means the point within the approach and landing phase, after which the helicopter's ability to continue the flight safely, with the critical engine inoperative, is not assured and a forced landing may be required.

(66) 'de-icing', in the case of ground procedures, means a procedure by which frost, ice, snow or slush is removed from an aircraft in order to provide uncontaminated surfaces.

(67) 'distance DR' means the horizontal distance that the helicopter has travelled from the end of the take-off distance available.

(68) 'dry lease agreement' means an agreement between undertakings pursuant to which the aircraft is operated under the air operator certificate (AOC) of the lessee or, in the case of commercial operations other than CAT, under the responsibility of the lessee.

(69) 'dry operating mass' means the total mass of the aircraft ready for a specific type of operation, excluding usable fuel and traffic load.

(70) 'dry runway' means a runway whose surface is free of visible moisture and not contaminated within the area intended to be used.

(71) 'EBT module' means a combination of sessions in a qualified flight simulation training device as part of the 3-year period of recurrent assessment and training.

(72) 'EDTO critical fuel' means the fuel quantity necessary to fly to an en-route alternate aerodrome, considering, at the most critical point on that route, the most limiting system failure.

(73) 'EDTO significant system' means an aeroplane system whose failure or degradation could adversely affect the safety particularly to an EDTO flight, or whose continued functioning is specifically important to the safe flight and a landing of an aeroplane during an EDTO diversion.

(74) 'EFB application' means a software application installed on an EFB host platform that provides one or more specific operational functions which support flight operations.

(75) 'EFB host platform' means the hardware equipment in which the computing capabilities and basic software reside, including the operating system and the input/output software.

(76) 'EFB system' means the hardware equipment (including any battery, connectivity provisions, input/output components) and software (including databases and the operating system) needed to support the intended EFB application(s).

(77) 'electronic flight bag (EFB)' means 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.

(78) 'elevated final approach and take-off area (elevated FATO)' means a FATO that is at least 3 m above the surrounding surface.

(79) 'emergency exit' means an installed exit-type egress point from the aircraft that allows maximum opportunity for cabin and flight crew compartment evacuation within an appropriate time period and includes floor level door, window exit or any other type of exit, for instance hatch in the flight crew compartment and tail cone exit.

(80) 'Engine' a unit used or intended to be used for aircraft propulsion. It consists of at least these components and equipment necessary for the functioning and control, but excludes the propellers/rotors (if applicable).

(81) 'enhanced flight vision system (EFVS)' is an electronic means to provide the flight crew with a real-time sensor-derived or enhanced display of the external scene topography (the natural or man-made features of a place or region especially in a way to show their relative positions and elevation) through the use of imaging sensors; an EFVS is integrated with a flight guidance system and is implemented on a head-up display or an equivalent display system; if an EFVS is certified according to the applicable airworthiness requirements and an operator holds the necessary specific approval (when required), then it may be used for EFVS operations and may allow operations with operational credits.

(82) 'EFVS operation' means an operation in which visibility conditions require an EFVS to be used instead of natural vision in order to perform an approach or landing, identify the required visual references or conduct a roll-out.

(83) 'EFVS 200 operation' means an operation with an operational credit in which visibility conditions require an EFVS to be used down to 200 ft above the FATO or runway threshold. From that point to land, natural vision is used. The RVR shall not be less than 550 m.

(84) 'enhanced vision system (EVS)' is an electronic means to provide the flight crew with a real-time image of the actual external scene topography (the natural or man-made features of a place or region especially in a way to show their relative positions and elevation) through the use of imaging sensors.

(85) 'enrolment' means the administrative action carried out by the operator where a pilot participates in the operator's EBT programme.

(86) 'enrolled pilot' means the pilot that participates in the EBT recurrent training programme.

(87) 'equivalency of approaches' means all the approaches that place an additional demand on a proficient crew regardless of whether they are used or not in the EBT modules.

(88) 'equivalency of malfunctions' means all the malfunctions that put a significant demand on a proficient crew regardless of whether they are used or not in the EBT modules.

(89) 'evaluation phase' means one of the phases of an EBT module which is a line-orientated flight scenario, representative of the operator's environment during which there are one or more occurrences to evaluate key elements of the defined competency framework.

(90) 'evidence-based training (EBT)' means assessment and training based on operational data that is characterised by developing and assessing the overall capability of a pilot across a range of competencies (competency framework) rather than by measuring the performance in individual events or manoeuvres.

(91) Extended diversion time operations (EDTO) means any operation by an aeroplane with two or more turbine engines where the diversion time to an en-route alternate is greater than the threshold distance established by the Authority.

Note EDTO may be referred to as ETOPS in certain documentation when the term is used in the specific context of extended range operations with two-engined aeroplanes.

(92) Extended range operations with two-engined aeroplanes (ETOPS) means any operation by an aeroplane with two turbine engines where the diversion time to an en-route alternate is greater than the threshold distance established by the Authority.

(93) '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.

(94) '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.'final approach segment' that segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

(95) 'final approach and take-off area (FATO)' means a defined area for helicopter operations, over which the final phase of the approach manoeuvre to hover or land is completed, and from which the take-off manoeuvre is commenced. In the case of helicopters operating in performance class 1, the defined area includes the rejected take-off area available.

(96) 'final approach segment (FAS)' means that segment of an instrument approach procedure (IAP) in which alignment and descent for landing are accomplished.

(97) 'flight crew member' means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;'

(98) 'flight data analysis' means a process of analysing recorded flight data in order to improve the safety of flight operations.'flight data monitoring (FDM)' means the proactive and non-punitive use of digital flight data from routine operations to improve aviation safety. Note for the purposes of TCAR OPS, the term can be seen as synonymous with 'flight data analysis'.

(99) 'flight data recorder (FDR)' means a crash-protected flight recorder that uses a combination of data sources to collect and record parameters that reflect the state and performance of the aircraft;'

(100) 'flight dispatcher (FD)' means a specific function or role associated with the operational control system of the aircraft operator, which indicates an advanced level of qualification. An FD is qualified to perform specific tasks for the preparation and execution of flights, including to support, brief or assist, or both, the pilot-in-command in the safe conduct of the flight. It requires an initial FOO qualification followed by operator- and advanced role-specific training.

(101) 'flight operations officer (FOO)' means a generic function or role associated with the operational control system of the aircraft operator, which indicates a standard initial qualification in compliance with ICAO Annex 1 and ICAO Docs 9868 and 10106. An FOO is qualified to perform general tasks to support the preparation and execution of a flight, which do not require advanced role-specific training.

(102) 'flight plan' means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

(103) 'flight recorder' means any type of recorder that is installed on the aircraft for the purpose of facilitating accident or incident safety investigations.

(104) 'flight following' means the recording in real time of departure and arrival messages by operational personnel to ensure that a flight is operating and has arrived at the destination aerodrome or an alternate aerodrome.

(105) 'flight monitoring' means, in addition to the requirements defined for flight following:

(a) operational monitoring of flights by suitably qualified operational-control personnel from departure throughout all phases of the flight;

(b) communication of all available and relevant safety information between the operational-control personnel on the ground and the flight crew; and

(c) critical assistance to the flight crew in the event of an in-flight emergency or security issue, or at the request of the flight crew.

(106) 'flight operations officer' or 'flight dispatcher' means a person designated by the operator to engage in the control and supervision of flight operations, who is suitably qualified, who supports, briefs or assists, or both, the pilot-in-command in the safe conduct of the flight;

(107) 'Flight recorder' Any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation.

(108) 'flight safety document 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.

(109) 'flight simulation training device (FSTD)' means a training device which is:

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

(b) in the case of helicopters, a full flight simulator (FFS), a flight training device (FTD) or a flight and navigation procedures trainer (FNPT).

(110) 'flight time' means:

(a) for aeroplanes, the total time from the moment an aeroplane first moves for the purpose of taking off until the moment the aeroplane finally comes to rest at the end of the flight;

(b) for helicopters, the total time between the moment a helicopter's rotor blades start turning for the purpose of taking off until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped;

(111) 'flight watch' means, in addition to all elements defined for 'flight monitoring', the active tracking of a flight by suitably qualified operational-control personnel throughout all phases of the flight to ensure that the flight is following its prescribed route without unplanned deviations, diversions or delays;

(112) 'GBAS landing system (GLS)' means an approach landing system using ground based augmented global navigation satellite system (GNSS/GBAS) information to provide guidance to the aircraft based on its lateral and vertical GNSS position. It uses geometric altitude reference for its final approach slope.

(113) 'go-around' means a transition from an approach operation to a stabilised climb. This includes manoeuvres conducted at or above the MDA/H or DA/H, or below the DA/H (balked landings).

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

(115) 'grounding' means the formal prohibition of an aircraft to take-off and the taking of such steps as are necessary to detain it;

(116) 'head-up display landing system (HUDLS)' means the total airborne system which provides head-up guidance to the pilot to enable the pilot to either control the aircraft or to monitor the autopilot during take-off (if applicable), approach and landing (and roll-out if applicable), or go-around. It includes all the sensors, computers, power supplies, indications and controls.

(117) 'helicopter' means 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;

(118) 'helicopter hoist operation (HHO) crew member' means a technical crew member who performs assigned duties relating to the operation of a hoist;

(119) 'helideck' means a FATO located on a floating or fixed offshore structure;

(120) '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;

(121) 'heliport operating minima' the limits of useability 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 and decision altitude/height (DA/H) as appropriate to the type and/or category of operation

(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

(122) 'HEMS crew member' means a technical crew member who is assigned to a HEMS flight for the purpose of attending to any person in need of medical assistance carried in the helicopter and assisting the pilot during the mission;

(123) 'HEMS flight' means a flight by a helicopter operating under a HEMS approval, the purpose of which is to facilitate emergency medical assistance, where immediate and rapid transportation is essential, by carrying:

(a) medical personnel;

(b) medical supplies (equipment, blood, organs, drugs); or

(c) ill or injured persons and other persons directly involved;

(124) 'HEMS operating base' means an aerodrome at which the HEMS crew members and the HEMS helicopter may be on stand-by for HEMS operations;

(125) 'HEMS operating site' means a site selected by the commander during a HEMS flight for helicopter hoist operations, landing and take-off;

(126) 'high risk commercial specialised operation' means any commercial specialised aircraft operation carried out over an area where the safety of third parties on the ground is likely to be endangered in the event of an emergency, or, as determined by the CAAT of the place where the operation is conducted, any commercial specialised aircraft operation that, due to its specific nature and the local environment in which it is conducted, poses a high risk, in particular to third parties on the ground;

(127) 'HHO flight' means a flight by a helicopter operating under an HHO approval, the purpose of which is to facilitate the transfer of persons and/or cargo by means of a helicopter hoist;

(128) 'HHO offshore' means a flight by a helicopter operating under an HHO approval, the purpose of which is to facilitate the transfer of persons and/or cargo by means of a helicopter hoist from or to a vessel or structure in a sea area or to the sea itself;

(129) 'HHO passenger' means a person who is to be transferred by means of a helicopter hoist;

(130) 'HHO site' means a specified area at which a helicopter performs a hoist transfer;

(131) 'hold-over time (HoT)' means the estimated time the anti-icing fluid will prevent the formation of ice and frost and the accumulation of snow on the protected (treated) surfaces of an aeroplane;

(132) 'hostile environment' means:

(a) an area in which:

(i) a safe forced landing cannot be accomplished because the surface is inadequate; or

(ii) the helicopter occupants cannot be adequately protected from the elements; or

(iii) search and rescue response/capability are not provided consistent with anticipated exposure; or

(iv) there is an unacceptable risk of endangering persons or property on the ground;

(b) in any case, the following areas:

(i) for overwater operations, the open sea area north of 45 N and south of 45 S, unless any part is designated as non-hostile by the responsible authority of the State in which the operations take place; and

(ii) those parts of a congested area without adequate safe forced landing areas; 'human-machine interface' (HMI)' means a component of certain devices that is capable of handling human-machine interactions. The interface consists of hardware and software that allow user inputs to be interpreted and processed by machines or systems that, in turn, provide the required results to the user;

(133) '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;

(134) 'Human performance' Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations;

(135) 'in-seat instruction' means a technique used in the manoeuvres training phase or the scenario-based training phase, where the instructors can:

(a) provide simple instructions to one pilot; or

(b) perform predetermined exercises acting, in a pilot seat, as pilot flying (PF) or pilot monitoring (PM) for:

(i) the demonstration of techniques; and/or

(ii) triggering the other pilot to intervene or interact;

(136) 'instructor concordance'means the consistency or stability of scores between different EBT instructors which gives a score (or scores) of how much homogeneity, or consensus, there is in the ratings given by instructors (raters);

(137) 'instrument approach operation' means an approach and landing using instruments for navigation guidance based on an instrument approach procedure (IAP). 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.

(138) 'instrument approach procedure (IAP)' means 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. IAPs are classified as follows:

(a) non-precision approach (NPA) procedure, which means an IAP designed for 2D instrument approach operations Type A;

(b) approach procedure with vertical guidance (APV) means a performance-based navigation (PBN) IAP designed for 3D instrument approach operations Type A;

(c) *precision approach (PA) procedure means an IAP based on navigation systems designed for 3D instrument approach operations Type A or B*.

(139) '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.

(140) 'Integrated survival suit' a survival suit which meets the combined requirements of the survival suit and life jacket

(141) 'landing decision point (LDP)' means the point used in determining landing performance from which, an engine failure having been recognised at this point, the landing may be safely continued or a balked landing initiated;

(142) 'landing distance available (LDA)' means the length of the runway which is declared available by the State of the aerodrome and suitable for the ground run of an aeroplane landing;

(143) 'landing distance at time of arrival (LDTA)' means a landing distance that is achievable in normal operations based on landing performance data and associated procedures determined for the prevailing conditions at the time of landing;

(144) 'landplane' means a fixed wing aircraft which is designed for taking off and landing on land and includes amphibians operated as landplanes;

(145) 'line-orientated flight scenario' means the assessment and training involving a realistic, 'real-time', full mission simulation of scenarios that are representative of line operations;

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(146) 'local helicopter operation' means a commercial air transport operation of helicopters with a maximum certified take-off mass (MCTOM) over 3 175 kg and a maximum operational passenger seating configuration (MOPSC) of nine or less, by day, over routes navigated by reference to visual landmarks, conducted within a local and defined geographical area specified in the operations manual;

(147) 'line check' means a check conducted by the operator and completed by the pilot or the technical crew member to demonstrate competence in carrying out normal line operations described in the operations manual.

(148) 'local helicopter operation (LHO)' means a commercial air transport operation of helicopters with a maximum certified take-off mass (MCTOM) over 3 175kg and a maximum operational passenger seating configuration (MOPSC) of nine or less, by day, over routes navigated by reference to visual landmarks, conducted within a local and defined geographical area specified in the operations manual.

(149) 'low-visibility operations (LVOs)' means approach or take-off operations on a runway with a runway visual range less than 550 m or with a decision height less than 200 ft.

(150) 'low-visibility take-off (LVTO)' means a take-off with an RVR less than 550 m.

(151) 'manoeuvres training phase' means a phase of an EBT module during which, according to aircraft generation, crews have time to practise and improve performance in largely psychomotor skill-based exercises by achieving a prescribed flight path or performing a prescribed event to a prescribed outcome;

(152) 'maintenance check flight ('MCF')' means a flight of an aircraft with an airworthiness certificate or with a permit to fly which is carried out for troubleshooting purposes or to check the functioning of one or more systems, parts or appliances after maintenance, if the functioning of the systems, parts or appliances cannot be established during ground checks and which is carried out in any of the following situations:

(a) as required by the aircraft maintenance manual ("AMM") or any other maintenance data issued by a design approval holder being responsible for the continuing airworthiness of the aircraft;

(b) after maintenance, as required by the operator or proposed by the organisation responsible for the continuing airworthiness of the aircraft;

(c) as requested by the maintenance organisation for verification of a successful defect rectification;

(d) to assist with fault isolation or troubleshooting.

(153) 'Master minimum equipment list (MMEL)' means a list established for a particular aircraft type by the organisation 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 the special operating conditions, limitations or procedures;

(154) 'Maximum diversion time' means maximum allowable range, expressed in time, from a point on a route to an en-route alternate aerodrome;

(155) 'Maximum mass' means maximum certificated take-off mass.

(156) 'maximum operational passenger seating configuration (MOPSC)' means the maximum passenger seating capacity of an individual aircraft, excluding crew seats, established for operational purposes and specified in the operations manual. Taking as a baseline the maximum passenger seating configuration established during the certification process conducted for the type certificate (TC), supplemental type certificate (STC) or change to the TC or STC as relevant to the individual aircraft, the MOPSC may establish an equal or lower number of seats, depending on the operational constraints;

(157) 'medical passenger' means a medical person carried in a helicopter during a HEMS flight, including but not limited to doctors, nurses and paramedics;

(158) 'minimum descent altitude (MDA) or minimum descent height (MDH)' means 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.

(159) 'Minimum equipment list (MEL)' means a list which provides for the operation of the 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;

(160) 'minor' means a person who has not attained the age of majority as determined under the law applicable to the person.

(161) 'minor failure condition' means a failure condition that would not significantly reduce aircraft safety, and which involves flight crew actions that are well within their capabilities;

(162) 'misuse of substances' means the use of one or more psychoactive substances by flight crew, cabin crew members and other safety-sensitive personnel in a way that:

(a) constitutes a direct hazard to the user or endangers the lives, health or welfare of others, and/or

(b) causes or worsens an occupational, social, mental or physical problem or disorder;

(163) 'mixed EBT programme' means an operator's recurrent training and checking programme as per ORO.FC.230, a portion of which is dedicated to the application of EBT but which does not replace proficiency checks as per Appendix 9 to TCAR PEL Part FCL;

(164) 'modification' means a change to the type design of an aircraft, engine, propeller or rotor.

(165) '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:

(a) *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.

(b) *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: The Performance-based Navigation (PBN) Manual (Doc 9613), Volume II, contains detailed guidance on navigation specifications.

(166) 'night' means the period 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, as defined by the Member State;

(167) 'night vision goggles (NVG)' means a head-mounted, binocular, light intensification appliance that enhances the ability to maintain visual surface references at night;

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

(169) 'non-hostile environment' means an environment in which:

(a) a safe forced landing can be accomplished;

(b) the helicopter occupants can be protected from the elements; and

(c) search and rescue response/capability is provided consistent with the anticipated exposure.

In any case, those parts of a congested area with adequate safe forced landing areas shall be considered non-hostile;

(170) 'non-precision approach (NPA) operation' means an instrument approach with a minimum descent height (MDH), or DH when flying a CDFA technique, not lower than 250 ft and an RVR/CMV of not less than 750 m for aeroplanes and 600 m for helicopters;

(171) 'NVIS crew member' means a technical crew member assigned to an NVIS flight;

(172) 'NVIS flight' means a flight under night visual meteorological conditions (VMC) with the flight crew using NVGs in a helicopter operating under an NVIS approval;

(173) 'Obstacle clearance altitude (OCA) or obstacle clearance height (OCH)' means 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 the appropriate obstacle clearance criteria.

(174) 'offshore operation' means a helicopter operation that has a substantial proportion of any flight conducted over open sea areas to or from an offshore location. Such operations include, but are not limited to, support of offshore oil, gas and mineral exploitation and sea-pilot transfer;

(175) 'offshore location' means a facility intended to be used for helicopter operations on a fixed or floating offshore structure or a vessel;

(176) 'open sea area' means the area of water to seaward of the coastline;

(177) 'operating site' means a site, other than an aerodrome, selected by the operator or pilot-in-command or commander for landing, take-off and/or external load operations;

(178) 'operation in performance class 1' means an operation that, in the event of failure of the critical engine, the helicopter is able to land within the rejected take-off distance available or safely continue the flight to an appropriate landing area, depending on when the failure occurs;

(179) 'operation in performance class 2' means an operation that, in the event of failure of the critical engine, performance is available to enable the helicopter to safely continue the flight, except when the failure occurs early during the take-off manoeuvre or late in the landing manoeuvre, in which cases a forced landing may be required;

(180) 'operation in performance class 3' means an operation that, in the event of an engine failure at any time during the flight, a forced landing may be required in a multi-engined helicopter and will be required in a single-engined helicopter;

(181) 'operational control' means the responsibility for the initiation, continuation, termination or diversion of a flight in the interest of safety of the aircraft and the regularity and efficiency of the flight ;

(182) 'operational credit' means a credit for operations with an advanced aircraft enabling lower aerodrome operating minima than would normally be established by the operator for a basic aircraft, based upon the performance of advanced aircraft systems utilising the available external infrastructure. Lower operating minima may include a lower decision height/altitude or minimum descent height/altitude, reduced visibility requirements or reduced ground facilities or a combination of these.

(183) 'operational flight plan' means the operator's plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned;

(184) 'operator proficiency check' means a check conducted by the operator and completed by the pilot or the technical crew member to demonstrate competence in carrying out normal, abnormal and emergency procedures.

(185) 'Operations specifications' means the authorisations including specific approvals, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual;

(186) Passenger classification: For the purpose of passenger classification:

(a) 'adult' means a person of an age of 12 years and above;

(b) 'child/children' means persons who are of an age of two years and above but who are less than 12 years of age;

(c) 'infant' means a person under the age of two years;

(187) 'Performance-based communication (PBC)' means communication based on performance specifications applied to the provision of air traffic services.

(188) 'Performance-based navigation (PBN)' means 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 specifications, RNP specifications) 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.

(189) 'Performance-based surveillance (PBS)' means surveillance based on performance specifications applied to the provision of air traffic services.

(190) 'performance class A aeroplanes' means multi-engined aeroplanes powered by turbo-propeller engines with an MOPSC of more than nine or a maximum take-off mass exceeding 5 700 kg, and all multi-engined turbo-jet powered aeroplanes;

(191) 'performance class B aeroplanes' means aeroplanes powered by propeller engines with an MOPSC of nine or less and a maximum take-off mass of 5 700 kg or less;

(192) 'performance class C aeroplanes' means aeroplanes powered by reciprocating engines with an MOPSC of more than nine or a maximum take-off mass exceeding 5 700 kg;

(193) 'personnel-carrying device system (PCDS)' means a system including one or more devices that is either attached to a hoist or cargo hook or mounted to the rotorcraft airframe during human external cargo (HEC) or helicopter hoist operations (HHO). The devices have the structural capability and features needed to transport occupants external to the helicopter e.g. a life safety harness with or without a quick release and strop with a connector ring, a rigid basket or a cage;

(194) 'pilot-in-command' means the pilot designated as being in command and charged with the safe conduct of the flight. For the purpose of commercial air transport operations, the 'pilot-in-command' shall be termed the 'commander';

(195) 'point of no return' means the last possible geographic point at which an aircraft can proceed to the destination aerodrome as well as to an available en-route alternate for a given flight

(196) 'portable EFB' means a portable EFB host platform, used on the flight deck, which is not part of the configuration of the certified aircraft

(197) 'portable electronic device (PED)' means any kind of electronic device, typically but not limited to consumer electronics, brought on board the aircraft by crew members, passengers, or as part

of the cargo, that is not included in the configuration of the certified aircraft. It includes all equipment that is able to consume electrical energy. The electrical energy can be provided from internal sources such as batteries (chargeable or non-rechargeable) or the devices may also be connected to specific aircraft power sources;

(198) 'Pressure-altitude' means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.

(199) 'principal place of business' means the head office or registered office of the organisation within which the principal financial functions and operational control of the activities referred to in this Regulation are exercised;

(200) 'prioritisation of ramp inspections' means the dedication of an appropriate portion of the total number of ramp inspections conducted by or on behalf of The CAAT on an annual basis as provided in Part Ramp of this Regulation;

(201) 'proficient' means having demonstrated the necessary skills, knowledge and attitudes that are required to perform any defined tasks to the prescribed standard;

(202) 'psychoactive substances' means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, with the exception of caffeine and tobacco

(203) 'public interest site (PIS)' means a site used exclusively for operations in the public interest;

(204) 'ramp inspection' means the inspection of aircraft, of flight and cabin crew qualifications and of flight documentation in order to verify the compliance with the applicable requirements;

(205) 'rectification interval' means a limitation on the duration of operations with inoperative equipment;

(206) 'rejected take-off distance available (RTODAH)' means the length of the final approach and take-off area declared available and suitable for helicopters operated in performance class 1 to complete a rejected take-off;

(207) 'rejected take-off distance required (RTODRH)' means the horizontal distance required from the start of the take-off to the point where the helicopter comes to a full stop following an engine failure and rejection of the take-off at the take-off decision point;

(208) 'required communication performance (RCP) specification' means A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication;

(209) 'required navigation performance (RNP) specification' means a navigation specification for PBN operations which includes a requirement for on-board navigation performance monitoring and alerting;

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

(211) 'runway condition report (RCR)' means a comprehensive standardised report relating to the conditions of the runway surface and their effect on the aeroplane landing and take-off performance, described by means of runway conditions code;

(212) 'runway visual range (RVR)' means 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;

(213) safe landing' means, in the context of the fuel/energy policy or fuel/energy schemes, a landing at an adequate aerodrome or operating site with no less than the final reserve fuel/energy remaining and in compliance with the applicable operational procedures and aerodrome operating minima.

(214) 'safe forced landing' means an unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface;

(215) 'safety management system (SMS)' A systematic approach to managing safety, including the necessary organisational structures, accountability, responsibilities, policies and procedures;

(216) 'safety-sensitive personnel' means persons who might endanger aviation safety if they perform their duties and functions improperly, including flight crew and cabin crew members, aircraft maintenance personnel and air traffic controllers;

(217) 'scenario-based training phase' means a phase of an EBT module which focuses on the development of competencies, whilst the pilot is trained to mitigate the most critical risks identified for the aircraft generation. It should include the management of specific operator's threats and errors in a real-time line- orientated environment;"

(218) 'seaplane' means a fixed wing aircraft which is designed for taking off and landing on water and includes amphibians operated as seaplanes;

(219) 'separate runways' means runways at the same aerodrome that are separate landing surfaces. These runways may overlay or cross in such a way that if one of the runways is blocked, it will not prevent the planned type of operations on the other runway. Each runway shall have a separate approach procedure based on a separate navigation aid;

(220) 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

(221) 'special VFR flight' means a VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC;

(222) 'specialised operation' means any operation other than commercial air transport where the aircraft is used for specialised activities such as agriculture, construction, photography, surveying, observation and patrol, aerial advertisement, maintenance check flights, it may also be called Aerial Work in other regulations;

(223) 'specially prepared winter runway' means a runway with a dry frozen surface of compacted snow or ice which has been treated with sand or grit or has been mechanically treated to improve runway friction;

(224) 'Specific approval' means 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;

(225) 'simple personnel carrying device system (simple 'PCDS')' means a PCDS that complies with the following conditions:

(a) is designed to restrain no more than a single person (for instance, hoist or cargo hook operator, task specialist or photographer) inside the cabin, or to restrain no more than two persons outside the cabin;

(b) is not a rigid structure such as a cage, a platform or a basket;

(226) 'stabilised approach (SAp)' means an approach that is flown in a controlled and appropriate manner in terms of configuration, energy and control of the flight path from a pre-determined point or altitude/height down to a point 50 ft above the threshold or the point where the flare manoeuvre is initiated if higher;

(227) 'State of the Aerodrome' means The State in whose territory the aerodrome is located;

(228) 'State of the Operator' means 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;

(229) 'State of Registry' means The State on whose register the aircraft is entered;

(230) 'sterile flight crew compartment' means any period of time when the flight crew members are not disturbed or distracted, except for matters critical to the safe operation of the aircraft or the safety of the occupants;

(231) 'synthetic vision system (SVS)' means a system to display data-derived synthetic images of the external scene from the perspective of the flight deck;

(232) 'take-off decision point (TDP)' means the point used in determining take-off performance from which, an engine failure having been recognised at this point, either a rejected take-off may be made or a take-off safely continued;

(233) 'take-off distance available (TODA)' in the case of aeroplanes means the length of the take-off run available plus the length of the clearway, if provided;

(234) 'take-off distance available (TODAH)' in the case of helicopters means the length of the final approach and take-off area plus, if provided, the length of helicopter clearway declared available and suitable for helicopters to complete the take-off;

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

(236) 'take-off flight path' means the vertical and horizontal path, with the critical engine inoperative, from a specified point in the take-off for aeroplanes to 1 500 ft above the surface and for helicopters to 1 000 ft above the surface;

(237) 'take-off mass' means the mass including everything and everyone carried at the commencement of the take-off for helicopters and take-off run for aeroplanes;

(238) 'take-off run available (TORA)' means the length of runway that is declared available by the State of the aerodrome and suitable for the ground run of an aeroplane taking off;

(239) 'target level of safety (TLS)' a generic term representing the level of risk which is considered acceptable in particular circumstances;

(240) 'task specialist' means a person assigned by the operator or a third party, or acting as an undertaking, who performs tasks on the ground directly associated with a specialised task or performs specialised tasks on board or from the aircraft;

(241) 'technical crew member' means a crew member in commercial air transport HEMS, HHO or NVIS operations other than a flight or cabin crew member, assigned by the operator to duties in the aircraft or on the ground for the purpose of assisting the pilot during HEMS, HHO or NVIS operations, which may require the operation of specialised on-board equipment;

(242) 'technical instructions (TI)' means the latest effective edition of the 'Technical instructions for the safe transport of dangerous goods by air', including the supplement and any addenda, approved and published by the International Civil Aviation Organisation;

(243) 'total vertical error (TVE)' the vertical geometric difference between the actual pressure altitude flown by an aircraft and its assigned pressure altitude (flight level)

(244) 'traffic load' means the total mass of passengers, baggage, cargo and carry-on specialist equipment, including any ballast;

(245) 'type A EFB application'' means an EFB application whose malfunction or misuse has no safety effect

(246) 'type B EFB application' means an EFB application:

(a) whose malfunction or misuse is classified as minor failure condition or below; and

(b) which neither replaces nor duplicates any system or functionality required by airworthiness regulations, airspace requirements, or operational rules;

(247) 'training to proficiency' means training designed to achieve end-state performance objectives, providing sufficient assurance that the trained individual is capable of consistently carrying out specific tasks safely and effectively.

(248) 'Type A instrument approach operation' means an instrument approach operation with an MDH or a DH at or above 250 ft.

(249) 'Type B instrument approach operation' means an operation with a DH below 250 ft. Type B instrument approach operations are categorised as:

(a) Category I (CAT I): a DH not lower than 200 ft and with either a visibility not less than 800 m or an RVR not less than 550 m;

(b) Category II (CAT II): a DH lower than 200 ft but not lower than 100 ft, and an RVR not less than 300 m;

(c) Category III (CAT III): a DH lower than 100 ft or no DH, and an RVR less than 300 m or no RVR limitation.

(250) 'unaided NVIS flight' means, in the case of NVIS operations, that portion of a VFR flight performed at night when a crew member is not using NVG;

(251) 'undertaking' means any natural or legal person, whether profit-making or not, or any official body whether having its own personality or not;

(252) 'V_1' means the maximum speed in the take-off at which the pilot must take the first action to stop the aeroplane within the accelerate-stop distance. V_1 also means the minimum speed in the take-off, following a failure of the critical engine at V_{EF}, at which the pilot can continue the take-off and achieve the required height above the take-off surface within the take-off distance;

(253) 'VEF' means the speed at which the critical engine is assumed to fail during take-off;

(254) 'visibility (VIS)' means visibility for aeronautical purposes, which is the greater of:

(a) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognised when observed against a bright background; and

(b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.

(255) 'visual approach operation' means an approach operation by an IFR flight when either a part or all parts of an IAP is (are) not completed and the approach operation is executed with visual reference to terrain.

(256) 'visual meteorological conditions (VMC)' means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than the specified minima;

(257) 'weather-permissible aerodrome' means an adequate aerodrome where, for the anticipated time of use, meteorological reports, or forecasts, or any combination thereof, indicate that the meteorological conditions will be at or above the required aerodrome operating minima, and the runway surface condition reports indicate that a safe landing will be possible.

(258) 'wet lease agreement' means an agreement:

- in the case of CAT operations, between air carriers pursuant to which the aircraft is operated under the AOC of the lessor; or
- in the case of commercial operations other than CAT, between operators pursuant to which the aircraft is operated under the responsibility of the lessor;

(259) 'wet runway' means a runway whose surface is covered by any visible dampness or water up to and including 3 mm deep within the area intended to be used;