



Brunei Department of Civil Aviation
Brunei Darussalam
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Brunei Aviation Requirements

BAR 6 Part DEF Definitions

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Control of this Document

DC.1 Introduction

DC.1.1 Pursuant to Civil Aviation Order 2016 and the Civil Aviation (General) Regulations 2016 and their subsequent amendments, the following requirements are hereby established for compliance by all persons concerned, the Director of Civil Aviation is empowered to adopt and amend Brunei Aviation Requirements. In accordance herewith, the following requirement is hereby established for compliance by all persons concerned. This requirement shall be known as BAR 6 Part DEF Definitions and any reference to this title shall mean referring to the requirements to be met for civil aviation in Brunei Darussalam.

DC.2 Authority for this Requirement

DC.2.1 This BAR 6 Part DEF Definitions is issued on the authority of the Director of Civil Aviation.

DC.3 Applicability

DC.3.1 This BAR 6 Part DEF Definitions is applicable to the aviation industry of Brunei Darussalam.

DC.4 Scope

DC.4.1 BAR 6 Operation of Aircraft contains the operation of aircraft requirements of Brunei Darussalam, and shows compliance with ICAO Annex 6. The requirements in BAR 6 are separated into the following parts with cross references between parts where applicable.

Part Air Operations Cover Requirement

Part ARO Authority Requirements for Air Operations

Part ORO Organisation Requirements for Air Operations

Part DEF Definitions

Part CAT Commercial Air Transport

Part SPA Specific Approvals

Part SPO Special Operations

Part NCC Non Commercial with Complex Motor-Powered Aircraft

Part NCO Non Commercial other than Complex Motor-Powered Aircraft

DC.5 Definitions

DC.5.1 Terms not defined shall have the meaning given to them in the relevant legal instruments or international legal instruments in which they appear, especially as they appear in the Convention and its Annexes.

Amendment

Amendment Number	Date of Issue	Remarks
V01	1 st February 2017	Initial Issue
V02	1 st February 2018	First Amendment
V03	1 st May 2018	Second Amendment
V04	1 st May 2019	Third Amendment

Part DEF Definitions for terms used in Parts ARO, ORO, CAT, SPA, NCC, SPO and NCO

For the purpose of this requirement, 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 Brunei DCA to illustrate means to establish compliance with the Requirements;
- (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) 'adequate aerodrome' means an aerodrome on which the aircraft can be operated, taking account of the applicable performance requirements and runway characteristics;
- (5) 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;
- (6) 'aeroplane' means an engine-driven fixed-wing aircraft heavier than air that is supported in flight by the dynamic reaction of the air against its wings;
- (7) '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);
- (8) '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;
- (9) '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 Requirements for which no associated AMC have been adopted by the Brunei DCA;
- (10) '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);
- (11) '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;
- (11a) 'balloon empty mass' means the mass determined by weighing the balloon with all the installed equipment as specified in the AFM;

- (12) 'cabin crew member' means an appropriately qualified crew member, other than a flight crew or technical crew member, who is assigned by an operator to perform duties related to the safety of passengers and flight during operations;
- (13) 'category I (CAT I) approach operation' means a precision instrument approach and landing using an instrument landing system (ILS), microwave landing system (MLS), GLS (ground-based augmented global navigation satellite system (GNSS/GBAS) landing system), precision approach radar (PAR) or GNSS using a satellite-based augmentation system (SBAS) with a decision height (DH) not lower than 200 ft and with a runway visual range (RVR) not less than 550 m for aeroplanes and 500 m for helicopters;
- (14) 'category II (CAT II) operation' means a precision instrument approach and landing operation using ILS or MLS with:
 - (a) DH below 200 ft but not lower than 100 ft; and
 - (a) RVR of not less than 300 m;
- (15) 'category IIIA (CAT IIIA) operation' means a precision instrument approach and landing operation using ILS or MLS with:
 - (a) DH lower than 100 ft; and
 - (b) RVR not less than 200 m;
- (16) 'category IIIB (CAT IIIB) operation' means a precision instrument approach and landing operation using ILS or MLS with:
 - (a) DH lower than 100 ft, or no DH; and
 - (b) RVR lower than 200 m but not less than 75 m.
- (17) 'category A with respect to helicopters' means a multi-engined helicopter designed with engine and system isolation features specified in the applicable airworthiness codes and capable of operations using take-off and landing data scheduled under a critical engine failure concept that assures adequate designated surface area and adequate performance capability for continued safe flight or safe rejected take-off in the event of engine failure;
- (18) '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;
- (19) 'certification specifications' (CS) means technical standards adopted by the Brunei DCA indicating means to show compliance with the Requirements and which can be used by an organisation for the purpose of certification;
- (20) 'circling' means the visual phase of an instrument approach to bring an aircraft into position for landing on a runway/FATO that is not suitably located for a straight-in approach;
- (21) '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;
- (22) '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;

- (23) '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;
- (24) 'congested area' means in relation to a city, town or settlement, any area which is substantially used for residential, commercial or recreational purposes;
- (25) 'contaminated runway' means a runway of which more than 25 % of the runway surface area within the required length and width being used is covered by the following:
 - (a) surface water more than 3 mm (0,125 in) deep, or by slush, or loose snow, equivalent to more than 3 mm (0,125 in) of water;
 - (b) snow which has been compressed into a solid mass which resists further compression and will hold together or break into lumps if picked up (compacted snow); or
 - (c) ice, including wet ice;
- (26) 'contingency fuel' means the fuel required to compensate for unforeseen factors that could have an influence on the fuel consumption to the destination aerodrome;
- (27) 'continuous descent final approach (CDFA)' means a technique, consistent with stabilised approach procedures, for flying the final-approach segment of a non-precision instrument approach procedure as a continuous descent, without level-off, from an altitude/height at or above the final approach fix altitude/height to a point approximately 15 m (50 ft) above the landing runway threshold or the point where the flare manoeuvre shall begin for the type of aircraft flown;
- (28) 'converted meteorological visibility (CMV)' means a value, equivalent to an RVR, which is derived from the reported meteorological visibility;
- (29) 'crew member' means a person assigned by an operator to perform duties on board an aircraft;
- (30) '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;
- (31) '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;
- (32) 'damp runway' means a runway where the surface is not dry, but when the moisture on it does not give it a shiny appearance;
- (33) 'dangerous goods (DG)' means 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;
- (34) '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 damage;
- (35) '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 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;
- (36) '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;
- (37) '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;
- (38) '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;
- (39) 'distance DR' means the horizontal distance that the helicopter has travelled from the end of the take-off distance available;
- (40) '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;
- (41) 'dry operating mass' means the total mass of the aircraft ready for a specific type of operation, excluding usable fuel and traffic load;
- (42) 'dry runway' means a runway which is neither wet nor contaminated, and includes those paved runways which have been specially prepared with grooves or porous pavement and maintained to retain 'effectively dry' braking action even when moisture is present;
- (43) 'ELA1 aircraft' means the following manned European Light Aircraft:
- (a) an aeroplane with a Maximum Take-off Mass (MTOM) of 1 200 kg or less that is not classified as complex motor-powered aircraft;
 - (b) a sailplane or powered sailplane of 1 200 kg MTOM or less;
 - (c) a balloon with a maximum design lifting gas or hot air volume of not more than 3 400 m³ for hot air balloons, 1 050 m³ for gas balloons, 300 m³ for tethered gas balloons;
- (44) 'ELA2 aircraft' means the following manned European Light Aircraft:
- (a) an aeroplane with a Maximum Take-off Mass (MTOM) of 2 000 kg or less that is not classified as complex motor-powered aircraft;
 - (b) a sailplane or powered sailplane of 2 000 kg MTOM or less;
 - (c) a balloon;
 - (d) a Very Light Rotorcraft with a MTOM not exceeding 600 kg which is of a simple design, designed to carry not more than two occupants, not powered by turbine and/or rocket engines; restricted to VFR day operations;
- (45) 'elevated final approach and take-off area (elevated FATO)' means a FATO that is at least 3 m above the surrounding surface;
- (46) 'en-route alternate (ERA) aerodrome' means an adequate aerodrome along the route, which may be required at the planning stage;

- (47) 'enhanced vision system (EVS)' means a system to display electronic real-time images of the external scene achieved through the use of imaging sensors;
- (48) '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;
- (49) 'flight data monitoring (FDM)' means the proactive and non-punitive use of digital flight data from routine operations to improve aviation safety;
- (50) '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);
- (51) 'fuel ERA aerodrome' means an ERA aerodrome selected for the purpose of reducing contingency fuel;
- (52) '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;
- (53) '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;
- (54) 'grounding' means the formal prohibition of an aircraft to take-off and the taking of such steps as are necessary to detain it;
- (55) 'head-up display (HUD)' means a display system which presents flight information to the pilot's forward external field of view and which does not significantly restrict the external view;
- (56) 'head-up guidance landing system (HUDLS)' means the total airborne system that provides head-up guidance to the pilot during the approach and landing and/or missed approach procedure. It includes all sensors, computers, power supplies, indications and controls;
- (57) '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;
- (58) 'helicopter hoist operation (HHO) crew member' means a technical crew member who performs assigned duties relating to the operation of a hoist;
- (59) 'helideck' means a FATO located on a floating or fixed offshore structure;
- (60) '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;
- (61) '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;
- (62) 'HEMS operating base' means an aerodrome at which the HEMS crew members and the HEMS helicopter may be on stand-by for HEMS operations;
- (63) 'HEMS operating site' means a site selected by the commander during a HEMS flight for helicopter hoist operations, landing and take-off;
- (64) '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;
- (65) '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;
- (66) 'HHO passenger' means a person who is to be transferred by means of a helicopter hoist;
- (67) 'HHO site' means a specified area at which a helicopter performs a hoist transfer;
- (68) '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;
- (69) 'hostile environment' means:
- (a) an area in which:
 - (i) a safe forced landing cannot be accomplished because the surface is inadequate;
 - (ii) the helicopter occupants cannot be adequately protected from the elements;
 - (iii) search and rescue response/capability is 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;
- (70) '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;
- (71) '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;
- (72) 'landplane' means a fixed wing aircraft which is designed for taking off and landing on land and includes amphibians operated as landplanes;

- (73) '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;
- (74) 'low visibility procedures (LVP)' means procedures applied at an aerodrome for the purpose of ensuring safe operations during lower than standard category I, other than standard category II, category II and III approaches and low visibility take-offs;
- (75) 'low visibility take-off (LVTO)' means a take-off with an RVR lower than 400 m but not less than 75 m;
- (76) 'lower than standard category I (LTS CAT I) operation' means a category I instrument approach and landing operation using category I DH, with an RVR lower than would normally be associated with the applicable DH but not lower than 400 m;
- (77) '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;
- (78) 'medical passenger' means a medical person carried in a helicopter during a HEMS flight, including but not limited to doctors, nurses and paramedics;
- (78a) '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;';
- (79) '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 Brunei DCA;
- (80) 'night vision goggles (NVG)' means a head-mounted, binocular, light intensification appliance that enhances the ability to maintain visual surface references at night;
- (81) '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;
- (82) '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;

- (83) '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;
- (84) 'NVIS crew member' means a technical crew member assigned to an NVIS flight;
- (85) '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;
- (86) '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.'
- '(86a) 'offshore location' means a facility intended to be used for helicopter operations on a fixed or floating offshore structure or a vessel.'
- '(86b) 'open sea area' means the area of water to seaward of the coastline.'
- (87) '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;
- (88) '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;
- (89) '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;
- (90) '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;
- (91) 'operational control' means the responsibility for the initiation, continuation, termination or diversion of a flight in the interest of safety;
- (92) 'other than standard category II (OTS CAT II) operation' means a precision instrument approach and landing operation using ILS or MLS where some or all of the elements of the precision approach category II light system are not available, and with:
- (a) DH below 200 ft but not lower than 100 ft; and
 - (b) RVR of not less than 350 m;
- (93) '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;
- (94) '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;
- (95) '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;
- (96) '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';

- (97) '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 requirement are exercised;
- (98) 'prioritisation of ramp inspections' means the dedication of an appropriate portion of the total number of ramp inspections conducted by or on behalf of a competent authority on an annual basis as provided in Part-ARO;
- (98a) 'psychoactive substances' means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, with the exception of caffeine and tobacco;';
- (99) 'public interest site (PIS)' means a site used exclusively for operations in the public interest;
- (100) '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;
- (101) 'rectification interval' means a limitation on the duration of operations with inoperative equipment;
- (102) '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;
- (103) '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;
- (103a) 'required navigation performance (RNP) specification' means a navigation specification for PBN operations which includes a requirement for on-board navigation performance monitoring and alerting.
- (104) '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;
- (105) '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;
- (105a) '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;';
- (106) 'seaplane' means a fixed wing aircraft which is designed for taking off and landing on water and includes amphibians operated as seaplanes;
- (107) '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;
- (108) 'special VFR flight' means a VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC;
- (109) '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;
- (109a) '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;
- (110) 'take-off alternate aerodrome' means an alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and if it is not possible to use the aerodrome of departure;
- (111) '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;
- (112) '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;
- (113) '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;
- (114) 'take-off distance required (TODRH)' in the case of helicopters means the horizontal distance required from the start of the take-off to the point at which take-off safety speed (VTOSS), a selected height and a positive climb gradient are achieved, following failure of the critical engine being recognised at the TDP, the remaining engines operating within approved operating limits;
- (115) '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;
- (116) '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;
- (117) '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;
- 117a) '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.'
- (118) '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;
- (119) '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;
- (120) 'traffic load' means the total mass of passengers, baggage, cargo and carry-on specialist equipment including any ballast;
- (121) '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;

- (122) 'undertaking' means any natural or legal person, whether profit-making or not, or any official body whether having its own personality or not;
- (123) 'V1' 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. V1 also means the minimum speed in the take-off, following a failure of the critical engine at VEF, at which the pilot can continue the take-off and achieve the required height above the take-off surface within the take-off distance;
- (124) 'VEF' means the speed at which the critical engine is assumed to fail during take-off;
- (125) 'visual approach' means an approach when either part or all of an instrument approach procedure is not completed and the approach is executed with visual reference to the terrain;
- (126) 'weather-permissible aerodrome' means an adequate aerodrome where, for the anticipated time of use, weather reports, or forecasts, or any combination thereof, indicate that the weather conditions will be at or above the required aerodrome operating minima, and the runway surface condition reports indicate that a safe landing will be possible;
- (127) "wet lease agreement" means an agreement:
 - (a) in the case of CAT operations, between air carriers pursuant to which the aircraft is operated under the AOC of the lessor; or
 - (b) in the case of commercial operations other than CAT, between operators pursuant to which the aircraft is operated under the responsibility of the lessor.'.
- (128) 'wet runway' means a runway of which the surface is covered with water, or equivalent, less than specified by the 'contaminated runway' definition or when there is sufficient moisture on the runway surface to cause it to appear reflective, but without significant areas of standing water.

GM 1 Definitions for terms used in acceptable means of compliance and guidance material

For the purpose of Acceptable Means of Compliance and Guidance Material the following definitions should apply:

- (a) 'abnormal flight behaviour' means, in the context of an aircraft tracking system, an event affecting a flight:
 - (1) which is outside of the parameters defined by the operator for normal operation or which indicates an obvious deviation from normal operation; and
 - (2) for which the operator has determined that it poses a risk for the safe continuation of the flight or for third parties.
- (a) 'Accuracy' means, in the context of PBN operations, the degree of conformance between the estimated, measured or desired position and/or the velocity of a platform at a given time, and its true position or velocity. Navigation performance accuracy is usually presented as a statistical measure of system error and is specified as predictable, repeatable and relative.
- (b) 'Aircraft-based augmentation system (ABAS)' means a system that augments and/or integrates the information obtained from the other GNSS elements with information available on board the aircraft. The most common form of ABAS is receiver autonomous integrity monitoring (RAIM).

- (ba) 'Airport moving map display (AMMD)' means a software application that displays an airport map on a display device and uses data from a navigation source to depict the aircraft current position on this map while the aircraft is on the ground.
- (c) 'Area navigation (RNAV)' means a method of navigation which permits aircraft operation on any desired flight path within the coverage of station-referenced navigation aids or within the limits of the capability of self-contained aids, or a combination of these.
- (d) 'Availability' means, in the context of PBN operations, an indication of the ability of the system to provide usable service within the specified coverage area and is defined as the portion of time during which the system is to be used for navigation during which reliable navigation information is presented to the crew, autopilot or other system managing the flight of the aircraft.
- (e) 'Committal point' means the point in the approach at which the pilot flying decides that, in the event of an engine failure being recognised, the safest option is to continue to the elevated final approach and take-off area (elevated FATO).
- (f) 'Continuity of function' means, in the context of PBN operations, the capability of the total system, comprising all elements necessary to maintain aircraft position within the defined airspace, to perform its function without non-scheduled interruptions during the intended operation.
- (fa) 'Controlled portable electronic device (C-PED)' means a PED subject to administrative control by the operator that uses it. This includes, inter alia, tracking the allocation of the devices to specific aircraft or persons and ensuring that no unauthorised changes are made to the hardware, software, or databases. C-PEDs can be assigned to the category of non-intentional transmitters or T-PEDs.
- (fb) 'EFB installed resources' means certified EFB hardware components external to the EFB host platform itself, such as input/output components (installed remote displays, keyboards, pointing devices, switches, etc.) or a docking station.
- (fc). 'EFB mounting device' means an aircraft certified part that secures a portable or installed EFB, or EFB system components.
- (fd) 'EFB system supplier' means the company responsible for developing, or for having developed, the EFB system or part of it.
- (g) 'Emergency locator transmitter' is a generic term describing equipment that broadcasts distinctive signals on designated frequencies and, depending on application, may be activated by impact or may be manually activated.
- (h) 'Exposure time' means the actual period during which the performance of the helicopter with the critical engine inoperative in still air does not guarantee a safe forced landing or the safe continuation of the flight.
- (i) 'Fail-operational flight control system' means a flight control system with which, in the event of a failure below alert height, the approach, flare and landing can be completed automatically. In the event of a failure, the automatic landing system will operate as a fail-passive system.
- (j) 'Fail-operational hybrid landing system' means a system that consists of a primary fail-passive automatic landing system and a secondary independent guidance system enabling the pilot to complete a landing manually after failure of the primary system.

- (k) 'Fail-passive flight control system': a flight control system is fail-passive if, in the event of a failure, there is no significant out-of-trim condition or deviation of flight path or attitude but the landing is not completed automatically. For a fail-passive automatic flight control system the pilot assumes control of the aeroplane after a failure.
- (l) 'Flight control system' in the context of low visibility operations means a system that includes an automatic landing system and/or a hybrid landing system.
- (m) 'HEMS dispatch centre' means a place where, if established, the coordination or control of the helicopter emergency medical service (HEMS) flight takes place. It may be located in a HEMS operating base.
- (n) 'Hybrid head-up display landing system (hybrid HUDLS)' means a system that consists of a primary fail-passive automatic landing system and a secondary independent HUD/HUDLS enabling the pilot to complete a landing manually after failure of the primary system.
- (na) 'Installed EFB' means an EFB host platform installed in an aircraft, capable of hosting type A and/or type B EFB applications. It may also host certified applications. It is an aircraft part, and, is therefore, covered by the aircraft airworthiness approval.
- (o) 'Integrity' means, in the context of PBN operations, the ability of a system to provide timely warnings to users when the system should not be used for navigation.
- (p) 'Landing distance available (LDAH)' means the length of the final approach and take-off area plus any additional area declared available by the State of the aerodrome and suitable for helicopters to complete the landing manoeuvre from a defined height.
- (q) 'Landing distance required (LDRH)', in the case of helicopters, means the horizontal distance required to land and come to a full stop from a point 15 m (50 ft) above the landing surface.
- (r) 'Lateral navigation' means a method of navigation which permits aircraft operation on a horizontal plane using radio navigation signals, other positioning sources, external flight path references, or a combination of these.
- (ra) 'mass' and 'weight': In accordance with ICAO Annex 5 and the International System of Units (SI), both terms are used to indicate the actual and limiting masses of aircraft, the payload and its constituent elements, the fuel load, etc. These are expressed in units of mass (kg), but in most approved flight manuals and other operational documentation, these quantities are published as weights in accordance with the common language. In the ICAO standardised system of units of measurement, a weight is a force rather than a mass. Since the use of the term 'weight' does not cause any problem in the day-to-day handling of aircraft, its continued use in operational applications and publications is acceptable.
- (s) 'Maximum structural landing mass' means the maximum permissible total aeroplane mass upon landing under normal circumstances.
- (t) 'Maximum zero fuel mass' means the maximum permissible mass of an aeroplane with no usable fuel. The mass of the fuel contained in particular tanks should be included in the zero fuel mass when it is explicitly mentioned in the aircraft flight manual.
- (ta) 'Miscellaneous (non-EFB) software applications' means non-EFB applications that support function(s) not directly related to the tasks performed by the flight crew in the aircraft.
- (u) 'Overpack', for the purpose of transporting dangerous goods, means 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.

- (v) 'Package', for the purpose of transporting dangerous goods, means the complete product of the packing operation consisting of the packaging and its contents prepared for transport.
- (w) 'Packaging', for the purpose of transporting dangerous goods, means receptacles and any other components or materials necessary for the receptacle to perform its containment function.
- (x) 'Personal locator beacon (PLB)' is an emergency beacon other than an ELT that broadcasts distinctive signals on designated frequencies, is standalone, portable and is manually activated by the survivors.
- (xa) 'Ramp inspection tool' means the IT application including a centralised database used by all stakeholders to store and exchange data related to ramp inspections.
- (y) 'Receiver autonomous integrity monitoring (RAIM)' means a technique whereby a GNSS receiver/processor determines the integrity of the GNSS navigation signals using only GNSS signals or GNSS signals augmented with altitude. This determination is achieved by a consistency check among redundant pseudo-range measurements. At least one satellite in addition to those required for navigation has to be in view for the receiver to perform the RAIM function.
- (z) 'Rotation point (RP)' means the point at which a cyclic input is made to initiate a nose-down attitude change during the take-off flight path. It is the last point in the take-off path from which, in the event of an engine failure being recognised, a forced landing on the aerodrome can be achieved.
- (aa) 'Space-based augmentation system (SBAS)' means a wide coverage augmentation system that augments and/or integrates the information obtained from the other GNSS elements with information from a satellite-based transmitter. The most common form of SBAS in Europe is the European Geostationary Navigation Overlay Service (EGNOS).
- (ab) 'Touch down and lift-off area (TLOF)' means a load-bearing area on which a helicopter may touch down or lift off.
- (ac) 'Transmitting PED (T-PED)' means a portable electronic device (PED) that has intentional radio frequency (RF) transmission capabilities.
- (ad) 'Vertical navigation' means a method of navigation which permits aircraft operation on a vertical flight profile using altimetry sources, external flight path references, or a combination of these.
- (ae) 'Viewable stowage' means a non-certified device that is attached to the flight crew member (e.g. with a kneeboard) or to an existing aircraft part (e.g. using suction cups), and is intended to hold charts or to hold low-mass portable electronic devices that are viewable by the flight crew members at their assigned duty stations.

GM 2 Abbreviations and Acronyms

The following abbreviations and acronyms are used in the Annexes to this Regulation:

A	aeroplane
a/c	aircraft
AAC	aeronautical administrative communications
AAIM	aircraft autonomous integrity monitoring
AAL	above aerodrome level
ABAS	aircraft-based augmentation system
AC	advisory circular
AC	alternating current
ACAS	airborne collision avoidance system
ADF	automatic direction finder
ADG	air driven generator
ADS	automatic dependent surveillance
ADS-B	automatic dependent surveillance - broadcast
ADS-C	automatic dependent surveillance - contract
AEA	Association of European Airlines
AEO	all-engines-operative
AFFF	aqueous film forming foams
AFM	aircraft flight manual
AFN	aircraft flight notification
AFN	ATS facilities notification
AGL	above ground level
AHRS	attitude heading reference system
AIS	aeronautical information service
ALARP	as low as reasonably practicable
ALSF	approach lighting system with sequenced flashing lights
AMC	Acceptable Means of Compliance
AML	aircraft maintenance licence
AMSL	above mean sea level
ANP	actual navigation performance
AOC	aeronautical operational control
AOC	air operator certificate
APCH	approach
APU	auxiliary power unit
APV	approach procedure with vertical guidance

AR	authorisation required
ARA	airborne radar approach
ARA	Authority Requirements for Aircrew
A-RNP	advanced required navigation performance
ARO	Authority Requirements for Air Operations
ARP	Aerospace Recommended Practices
ASC	Air Safety Committee
ASDA	accelerate-stop distance available
ASE	altimeter system error
ATA	Air Transport Association
ATC	air traffic control
ATIS	automatic terminal information service
ATN	air traffic navigation
ATPL	airline transport pilot licence
ATQP	alternative training and qualification programme
ATS	air traffic services
ATSC	air traffic service communication
AVGAS	aviation gasoline
AVTAG	aviation turbine gasoline (wide-cut fuel)
AWO	all weather operations
BALS	basic approach lighting system
Baro-VNAV	barometric VNAV
BCAR	British civil airworthiness requirements
BITD	basic instrument training device
CAP	controller access parameters
CAT	commercial air transport
CAT I/II/III	category I/II/III
CBT	computer-based training
CC	cabin crew
CDFA	continuous descent final approach
CDL	configuration deviation list
CFIT	controlled flight into terrain
CG	centre of gravity
CM	context management
CMV	converted meteorological visibility
CofA	certificate of airworthiness

COP	code of practice
CoR	certificate of registration
COSPAS-SARSAT	cosmicheskaya sistyema poiska avariynich sudov - search and rescue satellite-aided tracking
CP	committal point
CPA	closest point of approach
CPDLC	controller pilot data link communication
CPL	commercial pilot licence
C-PED	controlled portable electronic device
CRE	class rating examiner
CRI	class rating instructor
CRM	crew resource management
CS	Certification Specifications
CVR	cockpit voice recorder
DA	decision altitude
DA/H	decision altitude/height
DAP	downlinked aircraft parameters
D-ATIS	digital automatic terminal information service
DC	direct current
DCL	departure clearance
D-FIS	data link flight information service
DG	dangerous goods
DH	decision height
DI	daily inspection
DIFF	deck integrated firefighting system
DLR	data link recorder
DME	distance measuring equipment
D-METAR	data link - meteorological aerodrome report
D-OTIS	data link - operational terminal information service
DPATO	defined point after take-off
DPBL	defined point before landing
DR	decision range
DSTRK	desired track
EC	European Commission
ECAC	European Civil Aviation Conference
EFB	electronic flight bag
EFIS	electronic flight instrument system

EGNOS	European geostationary navigation overlay service
EGT	exhaust gas temperature
ELT	emergency locator transmitter
ELT(AD)	emergency locator transmitter (automatically deployable)
ELT(AF)	emergency locator transmitter (automatic fixed)
ELT(AP)	emergency locator transmitter (automatic portable)
ELT(S)	survival emergency locator transmitter
EPE	estimated position error
EPR	engine pressure ratio
EPU	estimated position of uncertainty
ERA	en-route alternate (aerodrome)
ERP	emergency response plan
ETOPS	extended range operations with two-engined aeroplanes
EU	European Union
EUROCAE	European Organisation for Civil Aviation Equipment
EVS	enhanced vision system
FAA	Federal Aviation Administration
FAF	final approach fix
FALS	full approach lighting system
FANS	future air navigation systems
FAP	final approach point
FAR	Federal Aviation Regulation
FATO	final approach and take-off
FC	flight crew
FCL	flight crew licensing
FCOM	flight crew operating manual
FDM	flight data monitoring
FDO	flying display operation
FDR	flight data recorder
FFS	full flight simulator
FGS	flight control/guidance system
FI	flight instructor
FLIPCY	flight plan consistency
FLTA	forward-looking terrain avoidance
FMECA	failure mode, effects and criticality analysis
FMS	flight management system

FNPT	flight and navigation procedures trainer
FOD	foreign object damage
FOSA	flight operational safety assessment
fpm	feet per minute
FRT	fixed radius transition
FSTD	flight simulation training device
ft	feet
FTD	flight training device
FTE	full time equivalent\
FTE	flight technical error
FTL	flight and duty time limitations
g	gram
GAGAN	GPS aided geo augmented navigation
GBAS	ground-based augmentation system
GCAS	ground collision avoidance system
GEN	general
GIDS	ground ice detection system
GLS	GBAS landing system
GM	Guidance Material
GMP	general medical practitioner
GNSS	global navigation satellite system
GPS	global positioning system
GPWS	ground proximity warning system
H	helicopter
HEMS	helicopter emergency medical service
HF	high frequency
Hg	mercury
HHO	helicopter hoist operation
HIALS	high intensity approach lighting system
HIGE	hover in ground effect
HLL	helideck limitations list
HOGE	hover out of ground effect
HoT	hold-over time
hPa	hectopascals
HPL	human performance and limitations
HUD	head-up display

HUDLS	head-up guidance landing system
HUMS	health usage monitor system
IAF	initial approach fix
IALS	intermediate approach lighting system
ICAO	International Civil Aviation Organization
IDE	instruments, data and equipment
IF	intermediate fix
IFR	instrument flight rules
IFSD	in-flight shutdown
IGE	in ground effect
ILS	instrument landing system
IMC	instrument meteorological conditions
in	inches
INS	inertial navigation system
IP	intermediate point
IR	Implementing Rule
IR	instrument rating
IRS	inertial reference system
ISA	international standard atmosphere
ISO	International Organization for Standardization
IV	intravenous
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirements
kg	kilograms
km	kilometres
kt	knots
LDA	landing distance available
LDP	landing decision point
LED	light-emitting diode
LHS	left hand seat
LIFUS	line flying under supervision
LNAV	lateral navigation
LoA	letter of acceptance
LOC	localiser
LOE	line-oriented evaluation
LOFT	line-oriented flight training

LOQE	line-oriented quality evaluation
LOS	limited obstacle surface
LP	localiser performance
LPV	localiser performance with vertical guidance
LRCS	long range communication system
LRNS	long range navigation system
LVO	low visibility operation
LVP	low visibility procedures
LVTO	low visibility take-off
m	metres
MALS	medium intensity approach lighting system
MALSF	medium intensity approach lighting system with sequenced flashing lights
MALSR	medium intensity approach lighting system with runway alignment indicator lights
MAPt	missed approach point
MCTOM	maximum certified take-off mass
MDA	minimum descent altitude
MDH	minimum descent height
MEA	minimum en-route altitude
MED	medical
MEL	minimum equipment list
METAR	meteorological aerodrome report
MGA	minimum grid altitude
MHA	minimum holding altitude
MHz	megahertz
MID	midpoint
MLR	manuals, logs and records
MLS	microwave landing system
MLX	millilux
mm	millimetres
MM	multi-mode
MMEL	master minimum equipment list
MNPS	minimum navigation performance specifications
MOC	minimum obstacle clearance
MOCA	minimum obstacle clearance altitude
MOPSC	maximum operational passenger seating configuration

MORA	minimum off-route altitude
MPSC	maximum passenger seating capacity
MSA	minimum sector altitude
MSAS	multi-functional satellite augmentation system
MTCA	minimum terrain clearance altitude
N	North
NADP	noise abatement departure procedure
NALS	no approach lighting system
NCC	non-commercial operations with complex motor-powered aircraft
NCO	non-commercial operations with other-than-complex motor-powered aircraft
NF	free power turbine speed
NG	engine gas generator speed
NM	nautical miles
NOTAM	notice to airmen
NOTECHS	non-technical skills evaluation
NOTOC	notification to captain
NPA	non-precision approach
NPA	Notice of Proposed Amendment
NSE	navigation system error
NVD	night vision device
NVG	night vision goggles
NVIS	night vision imaging system
OAT	outside air temperature
OCH	obstacle clearance height
OCL	oceanic clearance
ODALS	omnidirectional approach lighting system
OEI	one-engine-inoperative
OFS	obstacle-free surface
OGE	out of ground effect
OIP	offset initiation point
OM	operations manual
OML	operational multi-pilot limitation
ONC	operational navigation chart
OPS	operations
ORO	Organisation Requirements for Air Operations
OTS CAT II	other than standard category II

PAPI	precision approach path indicator
PAR	precision approach radar
PBE	protective breathing equipment
PBN	performance-based navigation
PCDS	personnel carrying device system
PC/PT	proficiency check/proficiency training
PDA	premature descent alert
PDP	predetermined point
PED	portable electronic device
PIC	pilot-in-command
PIN	personal identification number
PIS	public interest site
PLB	personal locator beacon
PNR	point of no return
POH	pilot's operating handbook
PRM	person with reduced mobility
QAR	quick access recorder
QFE	atmospheric pressure at aerodrome elevation / runway threshold
QNH	atmospheric pressure at nautical height
RA	resolution advisory
RAIM	receiver autonomous integrity monitoring
RAT	ram air turbine
RCC	rescue coordination centre
RCF	reduced contingency fuel
RCLL	runway centre line lights
RF	fixed radius
RF	radio frequency
RF	radius to fix
RFC	route facility chart
RI	ramp inspection
RI	rectification interval
RIE	rectification interval extension
RMA	regional monitoring agency
RNAV	area navigation
RNP	required navigation performance
RNP APCH	RNP approach

RNP AR APCH	RNP approach for which authorisation is required
ROD	rate of descent
RP	rotation point
RTCA	Radio Technical Commission for Aeronautics
RTODAH	rejected take-off distance available (helicopters)
RTODRH	rejected take-off distance required (helicopters)
RTOM	reduced take-off mass
RTZL	runway touchdown zone lights
RVR	runway visual range
RVSM	reduced vertical separation minima
S	South
SAFA	safety assessment of foreign aircraft
SALS	simple approach lighting system
SALSF	simple approach lighting system with sequenced flashing lights
SAP	stabilised approach
SAP	system access parameters
SAR	search and rescue
SAS	stability augmentation system
SBAS	satellite-based augmentation system
SCC	senior cabin crew
SCP	special category of passenger
SDCM	system of differential correction and monitoring
SFE	synthetic flight examiner
SFI	synthetic flight instructor
SID	standard instrument departure
SMM	safety management manual
SMS	safety management system
SNAS	satellite navigation augmentation system
SOP	standard operating procedure
SPA	operations requiring specific approvals
SPECI	aviation selected special weather report
SPO	specialised operations
SRA	surveillance radar approach
SSALF	simplified short approach lighting system with sequenced flashing lights
SSALR	simplified short approach lighting system with runway alignment indicator lights

SSALS	simplified short approach lighting system
SSEC	static source error correction
SSR	secondary surveillance radar
STAR	standard terminal arrival route
STC	supplemental type certificate
TA	traffic advisory
TAC	terminal approach chart
TAS	true airspeed
TAWS	terrain awareness warning system
TC	technical crew
TC	type certificate
TCAS	traffic collision avoidance system
TCCA	Transport Canada Civil Aviation
TCH	type certificate holder
TDP	take-off decision point
TDZ	touchdown zone
THR	threshold
TI	Technical Instructions
TIT	turbine inlet temperature
TLS	target level of safety
TMG	touring motor glider
TODA	take-off distance available (aeroplanes)
TODAH	take-off distance available (helicopters)
TODRH	take-off distance required (helicopters)
TOGA	take-off/go around
TORA	take-off run available
T-PED	transmitting portable electronic device
TRE	type rating examiner
TRI	type rating instructor
TSE	total system error
TVE	total vertical error
TWIP	terminal weather information for pilots
UMS	usage monitoring system
UTC	coordinated universal time
V ₂	take-off safety speed
V _{s0}	stalling speed

V _{AT}	indicated airspeed at threshold
VDF	VHF direction finder
VFR	visual flight rules
VHF	very high frequency
VIS	visibility
VMC	visual meteorological conditions
V _{MO}	maximum operating speed
VNAV	vertical navigation
VOR	VHF omnidirectional radio range
V _T	threshold speed
VTOL	vertical take-off and landing
V _{TOSS}	take-off safety speed
WAAS	wide area augmentation system
WAC	world aeronautical chart
WIFI	wireless fidelity
ZFTT	zero flight-time training

GM 3 Annex I Definitions

Helideck

The term 'helideck' includes take-off and landing operations on ships and vessels and covers 'shipboard final approach and take off areas (FATOs)'.

GM 4 Head-up Guidance Landing System (HUDLS)

A HUDLS is typically used for primary approach guidance to decision heights of 50 ft.

GM 5 Helicopter Emergency Medical Services (HEMS) Flight

- (a) A HEMS flight normally starts and ends at the HEMS operating base following tasking by the 'HEMS dispatch centre'. Tasking can also occur when airborne, or on the ground at locations other than the HEMS operating base.
- (b) The following elements should be regarded as integral parts of the HEMS mission:
 - (1) flights to and from the HEMS operating site when initiated by the HEMS dispatch centre;
 - (2) flights to and from an aerodrome/operating site for the delivery or pick-up of medical supplies and/or persons required for completion of the HEMS mission; and
 - (3) flights to and from an aerodrome/operating site for refuelling required for completion of the HEMS mission.

GM 6 Hostile Environment

Those parts of an open-sea area not considered to constitute a hostile environment should be designated by the appropriate authority in the appropriate aeronautical information publication (AIP) or other suitable documentation.

GM 7 Night Vision Imaging System (NVIS)

Helicopter components of the NVIS include the radio altimeter, visual warning system and audio warning system.

GM 8 Offshore Location

'Offshore location' includes, but is not limited to:

- (a) helidecks;
- (b) shipboard heliports; and
- (c) winching areas on vessels or renewable-energy installations.

GM 9 Offshore Operations

An offshore operation is considered to be a helicopter flight for the purpose of:

- (a) support of offshore oil, gas and mineral exploration, production, storage and transport;
- (b) support to offshore wind turbines and other renewable-energy sources; or
- (c) support to ships including sea pilot transfer.

GM 10 Coastline

The national definition of coastline should be included by the appropriate authority in the aeronautical information publication (AIP) or other suitable documentation.

GM 11 Public Interest Site

An example of a public interest sites is a landing site based at a hospital located in a hostile environment in a congested area, which due to its size or obstacle environment does not allow the application of performance class 1 requirements that would otherwise be required for operations in a congested hostile environment.

GM 12 Technical Instructions

The ICAO document number for the Technical Instructions is Doc 9284-AN/905.

GM 13 V₁

The first action includes for example: apply brakes, reduce thrust, deploy speed brakes.

GM 14 Task Specialists

For the purpose of this Regulation, persons that are carried in a specialised operation, e.g. on a parachute flight, sensational flight or scientific research flight, are considered to be task specialists.

GM 15 Upset Prevention and Recovery Training (UPRT) Definitions

Aeroplane upset prevention and recovery training (UPRT) refers to training consisting of:

- aeroplane upset prevention training: a combination of theoretical knowledge and flying training with the aim of providing flight crew with the required competencies to prevent aeroplane upsets; and
- aeroplane upset recovery training: a combination of theoretical knowledge and flying training with the aim of providing flight crew with the required competencies to recover from aeroplane upsets.

'Aeroplane upset' refers to an undesired aircraft state characterised by unintentional divergences from parameters normally experienced during operations. An aeroplane upset may involve pitch and/or bank angle divergences as well as inappropriate airspeeds for the conditions.

'Angle of attack (AOA)' means the angle between the oncoming air, or relative wind, and a defined reference line on the aeroplane or wing.

'Approach-to-stall' means flight conditions bordered by the stall warning and stall.

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

'Developed upset' means a condition meeting the definition of an aeroplane upset.

'Developing upset' means any time the aeroplane begins to unintentionally diverge from the intended flight path or airspeed.

'Energy state' means how much of each kind of energy (kinetic, potential or chemical) the aeroplane has available at any given time.

'Error' means an action or inaction by the flight crew that leads to deviations from organisational or flight crew intentions or expectations.

'Error management' means the process of detecting and responding to errors with countermeasures that reduce or eliminate the consequences of errors, and mitigate the probability of further errors or undesired aircraft states.

'First indication of a stall' means the initial aural, tactile or visual sign of an impending stall, which can be either naturally or synthetically induced.

'Flight crew resilience' means the ability of a flight crew member to recognise, absorb and adapt to disruptions.

'Fidelity level' means the level of realism assigned to each of the defined FSTD features.

'Flight path' means the trajectory or path of the aeroplane travelling through the air over a given space of time.

'Flight path management' means active manipulation, using either the aeroplanes automation or manual handling, to command the aeroplane flight controls to direct the aeroplane along a desired trajectory.

'FSTD Training Envelope' refers to the high and moderate confidence regions of the FSTD validation envelope.

'Load factor' factor means the ratio of a specified load to the weight of the aeroplane, the former being expressed in terms of aerodynamic forces, propulsive forces, or ground reactions.

‘Loss of control in flight (LOCI)’ means a categorisation of an accident or incident resulting from a deviation from the intended flight path.

‘Manoeuvre-based training’ means training that focuses on a single event or manoeuvre in isolation.

‘Negative training’ means training which unintentionally introduces incorrect information or invalid concepts, which could actually decrease rather than increase safety.

‘Negative transfer of training’ means the application (and ‘transfer’) of what was learned in a training environment (i.e., a classroom, an FSTD) to normal practice, i.e. it describes the degree to which what was learned in training is applied to actual normal practices. In this context, negative transfer of training refers to the inappropriate generalisation of knowledge and skill to a situation or setting in normal practice that does not equal the training situation or setting.

‘Post-stall regime’ means flight conditions at an angle of attack greater than the critical angle of attack.

‘Scenario-based training’ means training that incorporates manoeuvres into real-world experiences to cultivate practical flying skills in an operational environment.

‘Stall’ means a loss of lift caused by exceeding the aeroplane’s critical angle of attack.

Note: A stalled condition can exist at any attitude and airspeed, and may be recognised by continuous stall warning activation accompanied by at least one of the following:

- (a) buffeting, which could be heavy at times;
- (b) lack of pitch authority and/or roll control; and
- (c) inability to arrest the descent rate.

‘Stall Event’ means an occurrence whereby the aeroplane experiences conditions associated with an approach-to-stall or a stall.

‘Stall (event) recovery procedure’ means the manufacturer-approved aeroplane-specific stall recovery procedure. If an OEM-approved recovery procedure does not exist, the aeroplane-specific stall recovery procedure developed by the operator, based on the stall recovery template contained in GM5 ORO.FC.220&230, may be used.

‘Stall warning’ means a natural or synthetic indication provided when approaching a stall that may include one or more of the following indications:

- (a) aerodynamic buffeting (some aeroplanes will buffet more than others);
- (b) reduced roll stability and aileron effectiveness;
- (c) visual or aural cues and warnings;
- (d) reduced elevator (pitch) authority;
- (e) inability to maintain altitude or arrest rate of descent; and
- (f) stick shaker activation (if installed).

Note: A stall warning indicates an immediate need to reduce the angle of attack.

‘Startle’ means the initial short-term, involuntary physiological and cognitive reactions to an unexpected event that commence the normal human stress response.

‘Stick pusher’ means a device that, automatically applies a nose down movement and pitch force to an aeroplane’s control columns, to attempt to decrease the aeroplane’s angle of

attack. Device activation may occur before or after aerodynamic stall, depending on the aeroplane type.

Note: A stick pusher is not installed on all aeroplane types.

‘Stick shaker’ means a device that automatically vibrates the control column to warn the pilot of an approaching stall.

Note: A stick shaker is not installed on all aeroplane types.

‘Stress (response)’ means the response to a threatening event that includes physiological, psychological and cognitive effects. These effects may range from positive to negative and can either enhance or degrade performance.

‘Surprise’ means the emotionally-based recognition of a difference in what was expected and what is actual.

‘Threat’ means events or errors that occur beyond the influence of the flight crew, increase operational complexity and must be managed to maintain the margin of safety.

‘Threat management’ means the process of detecting and responding to threats with countermeasures that reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired aircraft states.

‘Train-to-proficiency’ means approved training designed to achieve end-state performance objectives, providing sufficient assurances that the trained individual is capable to consistently carry out specific tasks safely and effectively.

Note: In the context of this definition, ‘train-to-proficiency’ can be replaced by ‘training-to-proficiency’.

‘Undesired aircraft state’ means flight crew-induced aircraft position or speed deviation, misapplication of controls, or incorrect systems configuration, associated with a reduction in margins of safety.

Note: Undesired states can be managed effectively, restoring margins of safety, or flight crew response(s) can induce an additional error, incident, or accident.

Note: All countermeasures are necessary flight crew actions. However, some countermeasures to threats, errors and undesired aircraft states that flight crew employ, build upon ‘hard’/systemic-based resources provided by the aviation system.

‘Unsafe situation’ means a situation, which has led to an unacceptable reduction in safety margin.

GM16 Annex I Definitions

Minor Failure Condition

Minor failure conditions may include, for example, a slight reduction in safety margins or functional capabilities, a slight increase in crew workload, such as routine flight plan changes, or some physical discomfort to passengers or cabin crew. Further guidance can be found in AMC 25.1309.

Minor failure conditions are not considered to be unsafe conditions in accordance with AMC 21.A.3B(b).