**European Aviation Safety Agency**

# COMMENT RESPONSE DOCUMENT (CRD) TO NOTICE OF PROPOSED AMENDMENT (NPA) 2009-02B

**for an Agency Opinion on a Commission Regulation establishing the Implementing Rules for air operations of Community operators**

**and**

**draft Decision of the Executive Director of the European Aviation Safety Agency on Acceptable Means of Compliance and Guidance Material related to the Implementing Rules for air operations of Community operators**

***"Part-OPS"***

## CRD b.2 – Annex I - Definitions for terms used in Annexes II - VI

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## Scope

This document contains the resultant clean text for Annex I – Definitions for terms used in Annexes II – VI.

## Annex I - Definitions for terms used in Annexes II-VI

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

- 'Fuel ERA aerodrome' means an ERA aerodrome selected for the purpose of reducing contingency fuel.
- '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.
- 'Adequate aerodrome' means an aerodrome on which the aircraft can be operated, taking account of the applicable performance requirements and runway characteristics.
- 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; and
  (c) 'infant' means a person under the age of two years.
- '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.
- 'Aided night vision imaging system (aided 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).
- '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.
- 'Anti-icing' 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).
- 'Balloon' means a lighter-than-air aircraft which is not engine-driven and sustains flight through the use of either gas or an airborne heater.
- 'Category I (CAT I) approach operation' means a precision instrument approach and landing using an instrument landing system (ILS), microwave landing system (MLS), ground-based augmentation (GBAS) landing system (GLS) or precision approach radar (PAR) 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.
- '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
  (b) RVR of not less than 300 m.
- '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.

- ‘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.

- ‘Category A with respect to helicopters’ means multi-engined helicopters designed with engine and system isolation features specified in the applicable airworthiness codes and aircraft flight manual performance information based on a critical engine failure concept which assures adequate designated surface area and adequate performance capability for continued safe flight in the event of an engine failure.

- ‘Category B with respect to helicopters’ means single-engine or multi-engined helicopters which do not meet all Category A standards. Category B helicopters have no guaranteed stay-up ability in the event of engine failure and unscheduled landing is assumed.

- ‘Circling’ means the visual phase of an instrument approach to bring an aircraft into position for landing on a runway/FATO which is not suitably located for a straight-in approach.

- ‘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.

- ‘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.

- ‘Commercial air transport (CAT) operation’ means an aircraft operation to transport passengers, cargo or mail for remuneration or other valuable consideration.

- ‘Congested area’ means in relation to a city, town or settlement, any area which is substantially used for residential, commercial or recreational purposes.

- ‘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.

- ‘Contingency fuel’ means the fuel required to compensate for unforeseen factors which could have an influence on the fuel consumption to the destination aerodrome.

- ‘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.

- ‘Converted meteorological visibility (CMV)’ means a value, equivalent to an RVR, which is derived from the reported meteorological visibility.
- ‘Crew member’ means a person assigned by an operator to perform duties on board an aircraft.
- ‘Critical phases of flight’ in the case of aeroplanes mean 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.
- ‘Critical phases of flight’ in the case of helicopters mean those phases specified by the pilot-in-command or commander and include taxiing, hovering, take-off, final approach, missed approach and landing.
- ‘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.
- ‘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.
- ‘Dangerous goods incident’ means 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. 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.
- ‘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.
- ‘De-icing’ means a procedure by which frost, ice, snow or slush is removed from an aircraft in order to provide uncontaminated surfaces.
- ‘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.
- ‘Distance DR’ means the horizontal distance that the helicopter has travelled from the end of the take-off distance available.
- ‘Dry operating mass’ means the total mass of the aircraft ready for a specific type of operation, excluding usable fuel and traffic load.
- ‘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.
- ‘Elevated final approach and take-off area (elevated FATO)’ means a FATO which is at least 3 m above the surrounding surface.

- ‘Enhanced vision system (EVS)’ means an electronic means of displaying a real-time image of the external scene through the use of imaging sensors.
- ‘En-route alternate (ERA) aerodrome’ means an adequate aerodrome along the route, which may be required at the planning stage.
- ‘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.
- ‘GBAS landing system (GLS)’ means an approach landing system using ground based augmented global navigation satellite system (GNSS) 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.
- ‘Ground emergency service personnel’ means any ground emergency service personnel (such as policemen, firemen, etc.) involved with helicopter emergency medical service (HEMS) and whose tasks are to any extent pertinent to helicopter operations.
- ‘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.
- ‘Head-up guidance landing system (HUDLS)’ means the total airborne system which 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.
- ‘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.
- ‘Helicopter emergency medical service (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.
- ‘Helicopter hoist operation (HHO) crew member’ means a technical crew member who performs assigned duties relating to the operation of a hoist.
- ‘Helicopter hoist operations (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.
- ‘Helideck’ means a FATO located on a floating or fixed offshore structure.
- ‘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.
- ‘HEMS operating base’ means an aerodrome at which the HEMS crew members and the HEMS helicopter may be on stand-by for HEMS operations.
- ‘HEMS operating site’ means a site selected by the commander during a HEMS flight for helicopter hoist operations, landing, and take-off.

- ‘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.
- ‘Helicopter hoist operation (HHO) passenger’ means a person who is to be transferred by means of a helicopter hoist.
- ‘Helicopter hoist operation (HHO) site’ means a specified area at which a helicopter performs a hoist transfer.
- ‘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.
- ‘Hostile environment’ means:

  (a) an environment 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 shall be considered hostile:

    i. for overwater operations, the open sea areas North of 45N and South of 45S designated by the authority of the State concerned; and

    ii. those parts of a congested area without adequate safe forced landing areas.
- ‘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.
- ‘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.
- ‘Landplane’ means a fixed wing aircraft which is designed for taking off and landing on land and includes amphibians operated as landplanes.
- ‘Local helicopter operation’ means a CAT operation of helicopters with a maximum certificated take-off mass (MCTOM) over 3 175 kg and a maximum passenger seating configuration (MPSC) 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.
- ‘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.
- ‘Low visibility take-off (LVTO)’ means a take-off with a runway visual range (RVR) lower than 400 m but not less than 75 m.

- ‘Lower than Standard Category I (LTS CAT I) operation’ means a Category I instrument approach and landing operation using Category I decision height, with an RVR lower than would normally be associated with the applicable DH but not lower than 400 m.
- ‘Maximum passenger seating configuration (MPSC)’ means the maximum passenger seating capacity of an individual aircraft excluding crew seats as established during the certification process.
- ‘Medical passenger’ means a medical person carried in a helicopter during a HEMS flight, including but not limited to doctors, nurses and paramedics.
- ‘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.
- ‘Night vision goggles (NVG)’ means a head-mounted, binocular, light intensification appliance that enhances the ability to maintain visual surface references at night.
- ‘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 (such as radio altimeter, visual warning system and audio warning system), training and continuing airworthiness.
- ‘Night vision imaging system (NVIS) crew member’ means a technical crew member assigned to an NVIS flight.
- ‘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.
- ‘Night vision imaging system (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.
- ‘Non-precision approach (NPA) operation’ means an instrument approach with a minimum descent height (MDH), or DH when not 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.
- ‘Offshore operations’ means operations which routinely have a substantial proportion of the flight conducted over sea areas to or from offshore locations. Such operations include, but are not limited to, support of offshore oil, gas and mineral exploitation and sea-pilot transfer.
- ‘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.
- ‘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.

- ‘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.
- ‘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-engine helicopter.
- ‘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.
- ‘Performance class A aeroplanes’ means multi-engined aeroplanes powered by turbo-propeller engines with a maximum passenger seating configuration of more than nine or a maximum take-off mass exceeding 5 700 kg, and all multi-engined turbo-jet powered aeroplanes.
- ‘Performance class B aeroplanes’ means aeroplanes powered by propeller engines with a maximum passenger seating configuration of nine or less and a maximum take-off mass of 5 700 kg or less.
- ‘Performance class C aeroplanes’ means aeroplanes powered by reciprocating engines with a maximum passenger seating configuration of more than nine or a maximum take-off mass exceeding 5 700 kg.
- ‘Pilot-in-command (PiC)’ 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’.
- ‘Powered sailplane’ means an aircraft, equipped with one or more engines having, with engine(s) inoperative, the characteristics of a sailplane.
- ‘Public interest site’ means a site used exclusively for operations in the public interest.
- ‘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.
- ‘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 anengine failure and rejection of the take-off at the take-off decision point.
- ‘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.
- ‘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.
- ‘Seaplane’ means a fixed wing aircraft which is designed for taking off and landing on water and includes amphibians operated as seaplanes.

- ‘Sailplane’ means a heavier-than-air aircraft that is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the free flight of which does not depend on an engine.
- ‘Special VFR flight’ means a VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.
- ‘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.
- ‘Stabilised approach (SAp)’ means an approach which 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.
- ‘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.
- ‘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.
- ‘Take-off distance available (TODA)’ means the length of the take-off run available plus the length of the clearway, if provided.
- ‘Take-off distance available (TODAH)’ means the length of the final approach and take-off area plus, if provided, the length of helicopter clearway declared available and suitable for helicopters to complete the take-off.
- ‘Take-off distance required helicopters (TODRH)’ 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.
- ‘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.
- ‘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.
- ‘Take-off run available (TORA)’ means the length of runway which is declared available by the State of the aerodrome and suitable for the ground run of an aeroplane taking off.
- ‘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.
- ‘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.

- ‘Touring motor glider’ means a specific class of powered sailplane having an integrally mounted, non-retractable engine and a non-retractable propeller. It shall be capable of taking off and climbing under its own power according to its flight manual.
- ‘Traffic load’ means the total mass of passengers, baggage, cargo and carry-on specialist equipment, including any ballast.
- ‘Unaided 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 not using NVG.
- ‘$V_1$’ 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.
- ‘$V_{EF}$’ means the speed at which the critical engine is assumed to fail during take-off.
- ‘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.
- ‘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.

# AMC and GM to Annex I

## Definitions for terms used in Annexes II-VI

### AMC1-DEF.100 Definitions for terms used in Annexes II - VI

DEFINITIONS USED IN ACCEPTABLE MEANS OF COMPLIANCE AND GUIDANCE MATERIAL

For the purpose of Acceptable Means of Compliance and Guidance Material to Regulation xxx/xxxx [air operations], the following definitions should 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. '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 200 ft and a runway visual range (RVR) of not less than 550 m for aeroplanes and 500 m for helicopters.
3. '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).
4. 'Damp runway' means a runway where the surface is not dry, but when the moisture on it does not give it a shiny appearance.
5. '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.
6. '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.
7. 'Fail-operational hybrid landing system' means a system which 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.
8. '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.
9. 'Flight control system' in the context of low visibility operations means a system which includes an automatic landing system and/or a hybrid landing system.
10. '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.
11. 'Hybrid head-up display landing system (hybrid HUDLS)' means a system which 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.

12. ‘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.

13. ‘Landing distance required (LDRH)’ means the horizontal distance required to land and come to a full stop from a point 15 m (50 ft) above the landing surface.

14. ‘Maximum structural landing mass’ means the maximum permissible total aeroplane mass upon landing under normal circumstances.

15. ‘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 must be included in the zero fuel mass when it is explicitly mentioned in the aircraft flight manual.

16. ‘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.

17. ‘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.

18. ‘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.

19. ‘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.

20. ‘Touch down and lift-off area (TLOF)’ means a load-bearing area on which a helicopter may touch down or lift off.

## GM1-Annex I Definitions for terms used in Annexes II - VI

HELICOPTER EMERGENCY MEDICAL SERVICES (HEMS) FLIGHT

1. A HEMS flight (or more commonly referred to as HEMS mission) 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.

2. The following elements should be regarded as integral parts of the HEMS mission:

   a. flights to and from the HEMS operating site when initiated by the HEMS dispatch centre;

   b. 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

   c. flights to and from an aerodrome/operating site for refuelling required for completion of the HEMS mission.

## GM2-Annex I Definitions for terms used in Annexes II - VI

HEAD-UP GUIDANCE LANDING SYSTEM (HUDLS)

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

## GM3-Annex I Definitions for terms used in Annexes II - VI

HOSTILE ENVIRONMENT

The open sea areas considered to constitute a hostile environment should be designated by the appropriate authority in the appropriate Aeronautical Information Publication or other suitable documentation.

## GM4-Annex I Definitions for terms used in Annexes II - VI

TECHNICAL INSTRUCTIONS

The ICAO document number for the Technical Instructions is Doc 9284.

## GM5-Annex I Definitions for terms used in Annexes II - VI

$V_1$

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