CAASL Doc. No: SLCAIS 011

Democratic Socialist Republic of Sri Lanka



Civil Aviation Authority of Sri Lanka Implementing Standards

(Issued under Section 120, Civil Aviation Act No. 14 of 2010)

Title: Compliance to Annex 6 Part 1- Chapter 1 – Definitions

IS Reference Code: CA-IS-6-(i)-1 Date of Issue: 28.11.2022

Pursuant to Section 120 of the Civil Aviation Act No.14 of 2010 (hereinafter referred to as the CA Act), Director General of Civil Aviation (hereinafter referred to as the DGCA) shall have the power to issue, whenever he considers it necessary or appropriate to do so, such Implementing Standards for the Purpose of giving effect to any provision in the CA Act, Regulations or Rules made thereunder including the Articles of the Convention on International Civil Aviation specified in the Schedule to the CA Act,

Accordingly, I, being the DGCA do hereby issue the Implementing Standards on Compliance to Annex 6 - Part (I) - Chapter 1 – Definitions as mentioned in the Attachment hereto (Ref: Attachment No IS-6-(i)-1) elaborating the requirements to be satisfied for the effective implementation of the International Standards and Recommended Practices contained in ICAO Annex 6.

This implementing Standard shall be applicable to holders of Air Operator Certificate, Foreign Air Operator Certificate issued by DGCA and any applicant seeking an Air Operator Certificate or Foreign Air Operator Certificate and shall come in to force with effect from 28th of November 2022 and remain force unless revised/revoked.

This Implementing Standard will supersede 01st Edition, Rev 02 of Implementing Standard 011 dated 09th February 2018 issued by the DGCA.

Attention is also drawn to Section 103 of the CA Act, which states inter alia that failure to comply with any Implementing Standard is an offence. Further, if any standard stipulated in this Implementing Standard is not complied with or violated, an appropriate enforcement action will be taken as per the Aviation Enforcement Policy and Procedures Manual, SLCAP 0005 by the DGCA under Section 102 of the CA Act,

F

Civil Aviation Authority of Sri Lanka 152/1, Minuwangoda Road Katunayake Sri Lanka. P A Jayakantha Director General of Civil Aviation and Chief Executive Officer

Enclosure: Attachment No. IS-6-(i)-1-Att-01

Page 1 of 1 02nd Edition Rev. 00 Date: 28th November 2022

PREAMBLE

1. Notice to the Recipient

- 1.1. The requirements in this Implementing Standard are based on the Standards and Recommended Practices (SARPs) adopted by the International Civil Aviation Organization (ICAO) and incorporated in the 12th Edition to Annex 06 Part I Definition.
- 1.2. In pursuance of the obligation cast under Article 38 of the Convention which requires the Contracting States to notify the ICAO of any differences between the national regulations of the States and practices and the International Standards contained in the respective Annex and any amendments thereto, the CAASL will be taking steps to notify ICAO of such differences relating to either a Standard or a Recommended Practice, if any. The CAASL will also keep the ICAO currently informed of any differences which may subsequently occur, or of the withdrawal of any differences previously notified. Furthermore, the CAASL will take steps for the publication of differences between the national regulations and practices and the related ICAO Standards and Recommended Practices through the Aeronautical Information Service, which is published in accordance with the provisions in the Annex-15 to the Convention.
- 1.3. Taking into account of the ICAO council resolution dated 13 April 1948 which invited the attention of Contracting States of the desirability of using in the State's national regulations, as far as is practicable, the precise language of those ICAO Standards that are of a regulatory character, to the greatest extent possible the CAASL has attempted to retain the ICAO texts in the Annex in drafting this Implementing Standard.
- 1.4. <u>Status of ICAO Annex components in the Implementing Standard</u>
 Some of the components in an ICAO Annex are as follows and they have the status as indicated:
- 1.4.1. Standard: Any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38. The ICAO Standards are reflected in the Implementing Standards if they are locally implemented using the normal fonts and recipients are required to conform to such requirements invariably.
- 1.4.2. Recommended Practice: Any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interest of safety, regularity, efficiency or environmentally responsiveness of international air navigation, and to which Contracting States will endeavor to conform in accordance with the Convention. The ICAO Recommended Practices are reflected in the Implementing Standards in italic fonts and the Recipients are encouraged to implement them to the greatest extent possible.
- 1.4.3. **Appendices**: Comprising material grouped separately for convenience but forming part of the Standards and Recommended Practices adopted by the Council. Enforcement action on such matters will be as in the case of Standards or Recommended Practices.
- 1.4.4. **Definitions**: A definition does not have independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.
- 1.4.5. **Tables and Figures**: add to or illustrate a Standard or Recommended Practice, and which are referred to therein, form part of the associated Standard or Recommended Practice and have the same status.

Page 1 of 22 02nd Edition Rev. 00 Date: 28th November 2022

RECORD OF REVISION

Rev No.	Date Entered	Entered By
Rev No. 02 nd Edition	28.11.2022	Entered By D/OPS

Page 2 of 22 02nd Edition Rev. 00 Date: 28th November 2022

LIST OF EFFECTIVE PAGES

Page No.	Rev. No	Effective Date
1	00	28.11.2022
2	00	28.11.2022
3	00	28.11.2022
4	00	28.11.2022
5	00	28.11.2022
6	00	28.11.2022
7	00	28.11.2022
8	00	28.11.2022
9	00	28.11.2022
10	00	28.11.2022
11	00	28.11.2022
12	00	28.11.2022
13	00	28.11.2022
14	00	28.11.2022
15	00	28.11.2022
16	00	28.11.2022
17	00	28.11.2022
18	00	28.11.2022
19	00	28.11.2022
20	00	28.11.2022
21	00	28.11.2022
22	00	28.11.2022

Page 3 of 22 02nd Edition Rev. 00 Date: 28th November 2022

HISTORY OF REVISIONS

Source	Areas Subjected to Change	Effective Date
ICAO Annex 06 Part 1 Chapter 1	All IS	09.02.2018
	ICAO Annex 06 Part 1	ICAO Annex 06 Part 1 All IS

Page 4 of 22 02nd Edition Rev. 00 Date: 28th November 2022

TABLE OF CONTENTS

PREAMBLE	1
RECORD OF REVISION	2
LIST OF EFFECTIVE PAGES	3
HISTORY OF REVISIONS	4
TABLE OF CONTENTS	5
Implementing Standards	6
REQUIREMENTS FOR DEFINITIONS	6
ABBREVIATIONS	6
SYMBOLS	9
DEFINITIONS	10

Date: 28th November 2022

Implementing Standards

REQUIREMENTS FOR DEFINITIONS

ABBREVIATIONS

Page 6 of 22

AC	_Alternating Current
ACAS	_Airborne Collision Avoidance System
ADRS	Aircraft Data Recording System
	Automatic Dependent Surveillance
ADS-C	_Automatic Dependent Surveillance — Contract
AEO	_All Engines Operative
AFCS	_Automatic Flight Control System
AGA	_Aerodromes, Air Routes and Ground Aids
AIG	Accident Investigation and Prevention
	Airborne Image Recorder
AIRS	_Airborne Image Recording System
AOC	_Air Operator Certificate
APCH	
	Auxiliary Power Unit
AR	_Authorization Required
ARINC	Aeronautical Radio, Incorporated
ASDA	Accelerate Stop Distance Available
ASE	Altimetry System Error
ASIA/PAC	_Asia/Pacific
ATC	_Air Traffic Control
ATM	_Air Traffic Management
ATN	_Aeronautical Telecommunication Network
ATS	_Air Traffic Services
CARS	Cockpit Audio Recording System
CAS	Calibrated Airspeed
CAT I	Category I
CAT II	_Category II
CAT III	_Category III
CAT IIIA	_Category IIIA
CAT IIIB	_Category IIIB
CAT IIIC	_Category IIIC
CDL_	Configuration Deviation List
CFIT	Controlled Flight into Terrain
Cm	Centimeter
COMAT	Operator Material
	Controller-Pilot Data Link Communications
CVR	Cockpit Voice Recorder
	Combined Vision System
6 622	oand Filt.

02nd Edition

Rev. 00

DA	Decision Altitude
	Decision Altitude/Height
DC	
	Data Link-Flight Information Services
DH	
DLR	
	Data Link Recording System
	Distance Measuring Equipment
DSTRK	
EDTO	Extended Diversion Time Operations
	Electronic Flight Bag
	Electronic Flight Instrument System
EGT	Exhaust Gas Temperature
ELT	Emergency Locator Transmitter
	_Automatic Deployable ELT
	Automatic Fixed ELT
	_Automatic Portable ELT
ELT(S)	
EPR	Engine Pressure Ratio
	European Organization for Civil Aviation Equipment
EVS	Enhanced Vision System
FANS	Future Air Navigation System
FDAP	Flight Data Analysis Programmes
	Flight Data Recorder
FL	
	Frequency Modulation
Ft	
Ft/Min	Feet per Minute
	Normal Acceleration
	Ground Collision Avoidance System
GNSS	Global Navigation Satellite System
GPWS	Ground Proximity Warning System
Hpa	Hectopascal
HUD	
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
Inhg	Inch of Mercury
INS	Inertial Navigation System
ISA	International Standard Atmosphere
Kg	_Kilogram
Kg/M2	Kilogram per Metre Squared
Km	Kilometer
Km/H_	
Kt	_Knot
Kt/S	Knots per Second

Page 7 of 22 02nd Edition Rev. 00 Date: 28th November 2022

Date: 28th November 2022

	Attachment no. 13-0-(1)-1-Att-01
Lb	Pound Pound
Lbf	
LDA	Landing Distance Available
LED	Light Emitting Diode
M	
Mb	Millibar
	Minimum Descent Altitude
MDA/H	Minimum Descent Altitude/Height
	Minimum Descent Height
	Minimum Equipment List
Mhz	
MLS	Microwave Landing System
	Master Minimum Equipment List
MNPS	Minimum Navigation Performance Specification
MOPS	Minimum Operational Performance Specification
M/S	Metres per Second
	Metres per Second Squared
N	
N1	Low Pressure Compressor Speed (Two-Stage Compressor); Fan Speed
	(Three Stage Compressor)
N2	High Pressure Compressor Speed (Two-Stage Compressor); Intermediate
	Pressure Compressor Speed (Three-Stage Compressor)
N3	High Pressure Compressor Speed (Three Stage Compressor)
NAV	Navigation
NM	Nautical Mile
	Night Vision Imaging Systems
OCA	Obstacle Clearance Altitude
OCA/H	Obstacle Clearance Altitude/Height
OCH	Obstacle Clearance Height
OEI	One Engine Inoperative
PANS	Procedures for Air Navigation Services
PBC	Performance-Based Communication
PBN	Performance-Based Navigation
PBS	Performance-Based Surveillance
RCP	Required Communication Performance
RNAV	Area Navigation
	Required Navigation Performance
	Required Surveillance Performance
RTCA	Radio Technical Commission for Aeronautics
RVR	Runway Visual Range
RVSM	Reduced Vertical Separation Minima
	Standard Operating Procedure
	Supersonic Transport
	Short Take-Off and Landing
	Synthetic Vision System
TAS	True Airspeed

Rev. 00

 02^{nd} Edition

Page 8 of 22

Attachment No. IS-6-(i)-1-Att-01

TAWS	Terrain Awareness Warning System
TCAS	Traffic Alert and Collision Avoidance System
TLA	Thrust Lever Angle
TLS	_Target Level of Safety
TVE	Total Vertical Error
UTC	Coordinated Universal Time
VD	Design Diving Speed
VFR	Visual Flight Rules
VMC	_Visual Meteorological Conditions
VMC	Minimum Control Speed with the Critical Engine Inoperative
VOR	VHF Omnidirectional Radio Range
VO	Stalling Speed or the Minimum Steady Flight Speed in the Landing
	Configuration
VI	Stalling Speed or the Minimum Steady Flight Speed in a Specified
	Configuration
VTOL	Vertical Take-Off and Landing
WXR	Weather

SYMBOLS

°C Degrees Celsius
% Per Cent

Page 9 of 22 02nd Edition Rev. 00 Date: 28th November 2022

DEFINITIONS

When the following definitions are used by the DGCA for operation of aircraft in commercial air transport, they have the following meanings:

Accelerate-stop distance available (ASDA).

The length of the take-off run available plus the length of stop way, if provided.

Advanced aircraft.

An aircraft with equipment in addition to that required for a basic aircraft for a given take-off, approach or landing operation.

Aerial work.

An aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement, etc.

Aerodrome.

A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aerodrome operating minima.

The limits of usability of an aerodrome for:

- a) **take-off**, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions;
- b) **landing in 2D instrument approach operations**, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions; and
- c) **Landing in 3D instrument approach operations**, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the type and/or category of the operation.

Aeroplane.

A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

Agreement summary

When an aircraft is operating under an Article 83 bis agreement between the State of Registry and another State, the agreement summary is a document transmitted with the Article 83bis Agreement registered with the ICAO Council that identifies succinctly and clearly which functions and duties are transferred by the State of Registry to that other State. The other State in the above definition refers to the State of the Operator for commercial air transport operations

Aircraft.

Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

Aircraft operating manual.

A manual, acceptable to the DGCA, containing normal, abnormal and emergency procedures, checklists, limitations, performance information, details of the aircraft systems and other material relevant to the operation of the aircraft. The aircraft operating manual is part of the operations manual.

Aircraft Tracking

A process, established by the operator, that maintains and updates, at standardized intervals, a ground-based record of the four dimensional position of individual aircraft in flight.

Air operator certificate (AOC)

A certificate authorizing an operator to carry out specified commercial air transport operations.

Air Traffic Services (ATS)

A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

Airworthy

The status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation.

Alternate aerodrome

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

- **I. Take-off alternate.** An alternate aerodrome at which an aircraft would be able to land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure
- **II. En-route alternate.** An alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while En route.
- **III. Destination alternate.** An alternate aerodrome at which an aircraft would be able to land should it become either impossible or inadvisable to land at the aerodrome of intended landing.

Altimetry system error (ASE)

The difference between the altitude indicated by the altimeter display, assuming a correct altimeter barometric setting, and the pressure altitude corresponding to the undisturbed ambient pressure

Appropriate airworthiness requirements The comprehensive and detailed airworthiness codes established, adopted or accepted by a contracting state for the class or aircraft, engine or propeller under consideration.

Area Navigation (RNAV)

A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground or space-based navigation aids or within the limits of the capability of self- contained aids, or a combination of these. Area navigation includes performance-based navigation as well as other operations that do not meet the definition of performance-based navigation.

Basic aircraft

An aircraft which has the minimum equipment required to perform the intended take-off, approach or landing operation.

Cabin crew member

A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.

Child (Chd)

A person who is older than two years up to twelve years of age.

COMAT

Operator material carried on an operator's aircraft for the operator's own purposes

Combined vision system (CVS)

A system to display images from a combination of an enhanced vision system (EVS) and a synthetic vision system (SVS).

Commercial air transport operation

An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.

Configuration deviation list (CDL)

A list established by the organization responsible for the type design with the approval of the State of Design which identifies any external parts of an aircraft type which may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction.

Contaminated runway

A runway is contaminated when a significant portion of the runway surface area (whether in isolated areas or not) within the length and width being used is covered by one or more of the substances listed in the runway surface condition descriptors.

Continuing airworthiness

The set of processes by which all aircraft comply with the applicable airworthiness requirements and remain in a condition for safe operation throughout their operating life.

Continuing airworthiness records

Records which are related to the continuing airworthiness status of an aircraft, engine, propeller or associated part.

Continuous descent final approach (CDFA)

A technique, consistent with stabilized approach procedures, for flying the final approach segment (FAS) of an instrument non-precision approach (NPA) procedure as a continuous descent, without level-off, from an altitude/height at or above the final approach fix altitude/height to a point approximately 15 m (50 ft) above the landing runway threshold or the point where the flare maneuver begins for the type of aircraft flown; for the FAS of an NPA procedure followed by a circling approach, the CDFA technique applies until circling approach minima (circling OCA/H) or visual flight maneuver altitude/height are reached.

Crew member

A person assigned by an operator to duty on an aircraft during a flight duty period.

Cruise relief pilot

A flight crew member who is assigned to perform pilot tasks during cruise flight, to allow the pilot-in-command or a co-pilot to obtain planned rest.

Cruising level

A level maintained during a significant portion of a flight.

Dangerous goods

Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

(Dangerous Goods are classified IS 009)

Decision altitude (DA) or decision height (DH)

A specified altitude or height in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

- Decision altitude (DA) is referenced to mean sea level and decision height (DH) is referenced to the threshold elevation.
- The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In Category III operations with a decision height the required visual reference is that specified for the particular procedure and operation.
- For convenience where both expressions are used they may be written in the form "decision altitude/height "and abbreviated "DA/H"

Dry Runway

A runway considered dry if its surface is free of visible moisture and not contaminated within the area intended to be used.

Duty

Any task that flight or cabin crew members are required by the operator to perform, including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue.

Duty period.

A period which starts when a flight or cabin crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties.

EDTO critical fuel

The fuel quantity necessary to fly to an en-route alternate aerodrome considering, at the most critical point on the route, the most limiting system failure.

EDTO-significant system

An aeroplane system whose failure or degradation could adversely affect the safety particular to an EDTO flight, or whose continued functioning is specifically important to the safe flight and landing of an aeroplane during an EDTO diversion.

Electronic flight bag (EFB)

An electronic information system, comprised of equipment and applications for flight crew, which allows for the storing, updating, displaying and processing of EFB functions to support flight operations or duties.

Emergency locator transmitter (ELT)

A generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated. An ELT may be any of the following:

Automatic fixed ELT (ELT (AF)).

An automatically activated ELT which is permanently attached to an aircraft.

Automatic portable ELT (ELT (AP)).

An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft.

Automatic deployable ELT (ELT (AD)).

An ELT which is rigidly attached to an aircraft and which is automatically deployed and activated by impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided.

Survival ELT (ELT(S)).

An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors.

Engine.

A unit used or intended to be used for aircraft propulsion. It consists of at least those components and equipment necessary for functioning and control, but excludes the propeller/rotors (if applicable).

Enhanced vision system (EVS)

A system to display electronic real-time images of the external scene achieved through the use of image sensors.

Extended diversion time operations (EDTO)

Any operation by an aeroplane with two or more turbine engines where the diversion time to an En-route alternate aerodrome is greater than the threshold time established by the DGCA.

Fatigue

A physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase, or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety-related operational duties.

Fatigue risk management system (FRMS)

A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.

Final approach segment (FAS)

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

Flight crew member

A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Flight Data Analysis

A process of analyzing recorded flight data in order to improve the safety of flight operations.

Flight duty period

A period which commences when a flight or cabin crew member is required to report for duty that includes a flight or a series of flights and which finishes when the aircraft finally comes to rest and the engines are shut down at the end of the last flight on which he/she is a crew member.

Flight Manual

A manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft.

Flight Operations Officer/ Flight dispatcher

A Person designated by the operator to engage in the control and supervision of flight operations, whether licensed or not, suitably qualified in accordance with Annex 1, who supports, briefs and/or assists the pilot-in-command in the safe conduct of the flight.

Flight plan

Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

Flight recorder

Any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation.

Automatic deployable flight recorder (ADFR).

A combination flight recorder installed on the aircraft which is capable of automatically deploying from the aircraft.

Flight safety documents system

A set of inter-related documentation established by the operator, compiling and organizing information necessary for flight and ground operations, and comprising, as a minimum, the operations manual and the operator's maintenance control manual.

Flight simulation training device

Any one of the following three types of apparatus in which flight conditions are simulated on the ground;

A flight simulator

Which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;

A flight procedures trainer

Which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;

A basic instrument flight trainer

Which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.

Flight time — aeroplanes

The total time from the moment an aeroplane first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight.

General aviation operation

An aircraft operation other than a commercial air transport operation or an aerial work operation.

Ground handling

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

Head-up display (HUD)

A display system that presents flight information into the pilot's forward external field of view.

Human Factors principles

Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

Human performance

Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Infant (Inf)

Is a person who has not attended two years of age.

Instrument approach operations

An approach and landing using instruments for navigation guidance based on an instrument approach procedure. There are two methods for executing instrument approach operations:

a) A two-dimensional (2D) instrument approach operation,

Using lateral navigation guidance only.

b) A three-dimensional (3D) instrument approach operation,

Using both lateral and vertical navigation guidance.

Lateral and vertical navigation guidance refers to the guidance provided either by:

- a) a ground-based radio navigation aid; or
- b) Computer-generated navigation data from ground-based, space-based, self-contained navigation aids or a combination of these.

Instrument approach procedure (IAP)

A series of predetermined maneuvers by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or En-route obstacle clearance criteria apply. Instrument approach procedures are classified as follows:

Non-precision approach (NPA) procedure

An instrument approach procedure designed for 2D instrument approach operations Type A. (Non-precision approach procedures may be flown using a continuous descent final approach (CDFA) technique. CDFAs with advisory VNAV guidance calculated by onboard3 equipment are considered 3D instrument approach operations. CDFAs with manual calculation of the required rate of descent are considered 2D instrument approach operations.).

Approach procedure with vertical guidance (APV)

A performance-based navigation (PBN) instrument approach procedure designed for 3D instrument approach operations Type A.

Precision approach (PA) procedure - An instrument approach procedure based on navigation systems (ILS, MLS, GLS and SBAS CAT I) designed for 3D instrument approach operations Type A or B.

Instrument Meteorological Conditions (IMC)

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

(The specified minima for visual meteorological conditions are contained in IS 026).

Isolated aerodrome

A destination aerodrome for which there is no destination alternate aerodrome suitable for a given aeroplane type.

Landing distance available (LDA)

The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

Large aeroplane

An aeroplane of a maximum certificated take-off mass of over 5 700 kg.

Low-visibility operations (LVO)

Approach operations in RVRs less than 550 m and/or with a DH less than 60 m (200 ft) or take-off operations in RVRs less than 400 m $\,$

Maintenance.††

The performance of tasks on an aircraft, engine, propeller or associated part required to ensure the continuing airworthiness of an aircraft, engine, propeller or associated part including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.

Maintenance organization's procedures manual.†

A document endorsed by the head of the maintenance organization which details the maintenance organization's structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems.

Maintenance programme

A document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of those aircraft to which it applies.

Maintenance release.††

A document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner, in accordance with appropriate airworthiness requirements.

Master minimum equipment list (MMEL)

A list established for a particular aircraft type by the organization responsible for the type design with the approval of the State of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures.

Maximum diversion time

Maximum allowable range, expressed in time from a point on a route to an En-route alternate aerodrome.

Maximum mass

Maximum certificated take-off mass.

Minimum descent altitude (MDA) or minimum descent height (MDH)

A specified altitude or height in a 2D instrument approach operation or circling approach below which descent must not be made without the required visual reference.

- Minimum descent altitude (MDA) is referenced to mean sea level and minimum descent height (MDH) is referenced to the aerodrome elevation or to the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. A minimum descent height for a circling approach is referenced to the aerodrome elevation.
- The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In the case of a circling approach the required visual reference is the runway environment.
- For convenience when both expressions are used they may be written in the form "minimum descent altitude/height" and abbreviated "MDA/H".

Minimum equipment list (MEL)

A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.

Modification.

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

Navigation Specification.

A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specification;

Required Navigation Procedure (RNP) Specification.

A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP. E.g. RNP 4, RNP APCH

Area Navigation (RNAV) specification.

A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV.

Night

The hours between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise, as may be prescribed by the DGCA.

Obstacle clearance altitude (OCA) or obstacle clearance height (OCH)

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

Obstacle clearance altitude is referenced to mean sea level and obstacle clearance height is referenced to the threshold elevation or in the case of non-precision approach procedures to the aerodrome elevation or the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. An obstacle clearance height for a circling approach procedure is referenced to the aerodrome elevation. For convenience when both expressions are used they may be written in the form "obstacle clearance altitude/height" and abbreviated "OCA/H".

Operational control

The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.

Operational credit

A credit authorized for operations with an advanced aircraft enabling a lower aerodrome operating minimum than would normally be authorized for a basic aircraft, based upon the performance of advanced aircraft systems utilizing the available external infrastructure.

Operational flight plan.

The operator's plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned.

Operations manual

A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operations Specifications.

The authorizations including specific approvals, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual.

Operator

A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Operator's maintenance control manual

A document which describes the operator's procedures necessary to ensure that all scheduled and unscheduled maintenance is performed on the operator's aircraft on time and in a controlled and satisfactory manner.

Passenger with Reduced Mobility (PRM)

A Person with Reduced Mobility is any person whose mobility when using transport is reduced due to any physical disability (sensory or motor, permanent or temporary) intellectual disability or impairment, or age or any other cause of disability that requires special attention and the adaptation to his or her particular needs of the services which are made available to all passengers.

Performance-based aerodrome operating minimum (PBAOM)

A lower aerodrome operating minimum, for a given take-off, approach or landing operation, than is available when using a basic aircraft.

Performance-based communication (PBC)

Communication based on performance specifications applied to the provision of air traffic services.

Performance-based navigation (PBN)

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

Performance-based surveillance (PBS).

Surveillance based on performance specifications applied to the provision of air traffic services.

Pilot-in-command

The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Point of no return

The last possible geographic point at which an aeroplane can proceed to the destination aerodrome as well as to an available en route alternate aerodrome for a given flight.

Pressure-altitude

An atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.

Psychoactive substances

Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psych stimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

Repair ††

The restoration of an aircraft, engine, propeller or associated part to an airworthy condition in accordance with the appropriate airworthiness requirements, after it has been damaged or subjected to wear.

Required communication performance (RCP)

A set of requirements for air traffic service provision and associated ground equipment, aircraft capability and operations needed to support performance-based communication.

Required communication performance type (RCP type)

A set of requirements for air traffic service provision and associated ground equipment, aircraft capability and operations needed to support performance-based surveillance.

Required surveillance performance (RSP) specification.

A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance.

Rest period

A continuous and defined period of time, subsequent to and/or prior to duty during which flight or cabin crew members are free of all duties.

Runway visual range (RVR)

The range over which the pilot of an aircraft on the center line of a runway can see the runway surface markings or the lights delineating the runway or identifying its center line.

Safe forced landing

Unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface.

Safety Management Systems (SMS)

A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

Small aeroplane

An aeroplane of a maximum certificated take-off mass of 5 700 kg or less.

Specific approval.

A specific approval is an approval which is documented in the Operations Specifications for commercial air transport operations or in the list of specific approvals for non-commercial operations.

State of the Aerodrome

The State in whose territory the aerodrome is located.

State of Registry.

The State on whose register the aircraft is entered.

State of the Operator

The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

Synthetic vision system (SVS)

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

Target level of safety (TLS)

A generic term representing the level of risk which is considered acceptable in particular circumstances.

Threshold time

The range, expressed in time established by the State of the Operator to an en-route alternate aerodrome, whereby any time beyond requires a specific approval for EDTO from DGCA.

Total vertical error (TVE)

The vertical geometric difference between the actual pressure altitude flown by an aircraft and its assigned pressure altitude (flight level).

Unaccompanied Minor (UM)

A person of 5 years up to 12 years who is permitted to travel alone with the responsibility of the airline operator.

Visual meteorological conditions (VMC)

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

(The specified minima are contained in IS 026)

Wet Runway

The runway surface is covered by any visible dampness or water up to and including 3 mm deep within the intended area of use.

Page 22 of 22 02nd Edition Rev. 00 Date: 28th November 2022