



GOVERNMENT OF INDIA

OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION

TECHNICAL CENTRE, OPP SAFDURJUNG AIRPORT, NEW DELHI

CIVIL AVIATION REQUIREMENTS
SECTION 8 – AIRCRAFT OPERATIONS
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Subject: Operation of General Aviation Aeroplanes

1. INTRODUCTION

1.1 This CAR lays down provisions for an aircraft operation other than commercial air transport operation or an aerial work operation for aeroplanes registered in India and engaged in general aviation and lays down the minimum operational, equipment and instrument requirements.

1.2 This CAR has been issued under the provision of Rule 29 and Rule 133A of the Aircraft Rules 1937, for adoption of the minimum operational, equipment and instrument requirement of ICAO as per Annex 6 Part II up to Amendment 42.

1.3 This CAR is issued in supersession of CAR Section 8 Series 'O' Part III, Issue IV, dated 13th April 2022.

2. APPLICABILITY

2.1 The provisions of CAR are applicable to Indian registered aeroplanes engaged in general aviation which include aeroplanes to general Aviation such as certified in private or passenger category for state governments, corporate business houses, individual owner(s) or when such aeroplanes are not engaged in commercial air transport operations and aerial work.

2.2 The Section 2 of this CAR is applicable to all the general aviation operations of aeroplanes and Section 3 adds additional requirements when general aviation operations are conducted with the following:

a) Aeroplanes with a maximum certificated take-off mass exceeding 5700 kg;
or

b) Aeroplanes equipped with one or more turbine engines; or

Note 1. — Decision altitude (DA) is referenced to mean sea level and decision height (DH) is referenced to the threshold elevation.

Note 2. — The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In Category III operations with a decision height the required visual reference is that specified for the particular procedure and operation.

Note 3. — For convenience where both expressions are used, they may be written in the form “Decision altitude/height” and abbreviated “DA/H”.

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.

Note. — EVS does not include night vision imaging systems (NVIS).

Extended flight over water. A flight operated over water at a distance of more than 93 km (50 NM), or 30 minutes at normal cruising speed, whichever is the lesser, away from land suitable for making an emergency landing.

Filed flight plan (FPL or eFPL). The latest flight plan as submitted by the pilot, an operator or a designated representative for use by ATS units.

Note. — The FPL denotes a filed flight plan exchanged using aeronautical fixed service while eFPL denotes a filed flight plan exchanged using flight and flow – information for a collaborative environment (FF-ICE) services. The eFPL allows for the exchange of additional information not contained within the FPL.

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 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 plan. Specified information relative to an intended flight or portion of a flight of an aircraft.

Note 1.— The term flight plan may be prefixed by the words “preliminary”, “filed”, “current” or “operational” to indicate the context and different stages of a flight.

Note 2.— When the word “message” is used as a suffix to this term, it denotes the content and format of the flight plan data as transmitted.

Flight 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 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.

Note.— Flight time as here defined is synonymous with the term “block to block” time or “chock to chock” time in general usage which is measured from the time an aeroplane first moves for the purpose of taking off until it finally stops at the end of the flight.

and functionality needed for the proposed operation in the context of a particular airspace concept.

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

Note.— An RSP specification includes surveillance performance requirements that are allocated to system components in terms of the surveillance to be provided and associated data delivery time, continuity, availability, integrity, accuracy of the surveillance data, safety and functionality needed for the proposed operation in the context of a particular airspace concept.

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

Note 1.— The PBAOM is derived by considering the combined capabilities of the aircraft and available ground facilities. Additional guidance material on PBAOM may be found in the Manual of All-Weather Operations (Doc 9365).

Note 2.— PBAOM may be based on operational credits.

Note 3.— PBAOM are not limited to PBN operations.

Pilot-in-command. The pilot designated by the operator or 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 aircraft can proceed to the destination aerodrome as well as to an available en-route alternate aerodrome for a given flight.

Preliminary flight plan (PFP). The information related to a flight submitted by an operator or a designated representative to conduct collaborative planning of a flight, prior to filing a flight plan.

Psychoactive substances. Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psycho 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.

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

Required 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.

Runway visual range (RVR). The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

The requirements detailed in this section are applicable to all general aviation operation of aeroplanes.

Note. — The above applicability does not preclude a general aviation operator from satisfying the requirements of Section “3” where it may be to the operator’s advantage or in the interest of safety.

SECTION 2- GENERAL AVIATION OPERATIONS

2.1 GENERAL

Note 1.— Although the Convention on International Civil Aviation allocates to the DGCA certain functions which that State is entitled to discharge, or obligated to discharge, as the case may be, the Assembly recognized, in Resolution A23-13, that the DGCA may be unable to fulfil its responsibilities adequately in instances where aircraft are leased, chartered or interchanged — in particular without crew — by the operator of another State and that the Convention may not adequately specify the rights and obligations of the State of the operator in such instances until such time as Article 83 bis of the Convention enters into force. Accordingly, the Council urged that if, in the above-mentioned instances, the DGCA finds itself unable to discharge adequately the functions allocated to it by the Convention, it delegate to the State of the Operator, subject to acceptance by the latter State, those functions of the DGCA that can more adequately be discharged by the State of the Operator. It was understood that pending entry into force of Article 83 bis of the Convention the foregoing action would only be a matter of practical convenience and would not affect either the provisions of the Chicago Convention prescribing the duties of the DGCA or any third State. However, as Article 83 bis of the Convention entered into force on 20 June 1997, such transfer agreements will have effect in respect of Contracting States which have ratified the related Protocol (Doc 9318) upon fulfilment of the conditions established in Article 83 bis.

Note 2. — In the case of international operations effected jointly with aeroplanes not all of which are registered in the same Contracting State, nothing in this Part prevents the States concerned entering into an agreement for the joint exercise of the functions placed upon the DGCA by the provisions of the relevant Annexes and CARs

2.1.1 Compliance with laws, regulations and procedures

2.1.1.1 The pilot-in-command shall comply with the laws, regulations and procedures of those States in which operations are conducted.

2.1.1.2 The pilot-in-command shall be familiar with the laws, regulations and procedures, pertinent to the performance of pilot-in-command’s duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto. The pilot-in-command shall ensure that other members of the flight crew are familiar with such of these laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aeroplane.

Note.— Information for pilots on flight procedure parameters and operational procedures is contained in PANS-OPS (Doc 8168), Volume I. Criteria for the construction of visual and instrument flight procedures are contained in PANS-OPS (Doc 8168), Volume II. Obstacle clearance criteria and procedures used

in certain States may differ from PANS-OPS, and knowledge of these differences is important for safety reasons.

2.1.1.3 The pilot-in-command shall have responsibility for operational control.

Note. — The rights and obligations of a State with respect to the operation of aeroplanes registered in that State are not affected by this provision.

2.1.1.4 If an emergency situation which endangers the safety of the aeroplane or persons necessitates the taking of action which involves a violation of regulations or procedures, the pilot-in-command / operator shall notify the nearest Air Safety office of DGCA without delay in accordance with the procedure as prescribed in CAR, Section 5 Series C Part I. In the event such emergency situation occurs outside India, the pilot-in-command shall notify the appropriate local authority without delay and if required by the State in which the incident occurs, the pilot-in-command shall also submit a report of the occurrence on any such violation to the appropriate authority of such State. The pilot-in-command shall submit a copy of the occurrence to the DGCA marked attention of Director of Air Safety (Hqrs) with a copy endorsed to the Regional Air Safety Office where the aeroplane is normally based. Such reports shall be submitted within 48 hours.

2.1.1.5 **Recommendation.**— *The pilot-in-command should have available on board the aeroplane the essential information concerning the search and rescue services in the area over which the aeroplane will be flown.*

2.1.1.6 The pilot-in-command shall ensure that flight crew members demonstrate the ability to speak and understand the language used for aeronautical radiotelephony communications as specified in CAR Section 7 Series G Part III.

2.1.2 Dangerous goods

Note 1. — Provisions for carriage of dangerous goods are contained in the Aircraft (Carriage of Dangerous Goods) Rules, 2003.

Note 2.— Article 35 of the Convention refers to certain classes of cargo restrictions.

2.1.3 Use of psychoactive substances

Note. — Provisions concerning the use of psychoactive substances are contained in Rule 24 of the Aircraft Rules, 1937.

2.1.4 Specific approvals

The pilot-in-command shall not conduct operations for which a specific approval is required unless such approval has been issued by the DGCA. Specific approvals shall follow the layout and contain at least the information listed in Appendix 2.4.

2.2 FLIGHT OPERATIONS

2.2.1.1 Operating facilities

2.2.3.1 A flight shall not be commenced until the pilot-in-command is satisfied that:

- a) the aeroplane is airworthy, duly registered and that appropriate certificates with respect thereto are aboard the aeroplane;
- b) the instruments and equipment installed in the aeroplane are appropriate, taking into account the expected flight conditions;
- c) any necessary maintenance has been performed in accordance with Chapter 2.6;
- d) the mass of the aeroplane and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected;
- e) any load carried is properly distributed and safely secured; and
- f) The aeroplane operating limitations, contained in the flight manual, or its equivalent, will not be exceeded.

2.2.3.2 The pilot-in-command should have sufficient information on climb performance with all engines operating to enable determination of the climb gradient that can be achieved during the departure phase for the existing take-off conditions and intended take-off technique.

2.2.3.3 Flight planning

Before commencing a flight the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for a flight away from the vicinity of the place of departure, and for every flight under the instrument flight rules, shall include:

- a) a study of available current weather reports and forecasts; and
- b) the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions.

Note 1. — It is the practice in some States to declare, for flight planning purposes, higher minima for an aerodrome when nominated as an alternate, than for the same aerodrome when planned as that of intended landing.

Note 2.— The requirements for flight plans are contained in CAR Section 9 Series C Part I — Rules of the Air and the procedures relating to flight plans and associated services are contained in the Procedures for Air Navigation Services- Air Traffic Management (PANS-ATM, Doc 4444).

Note 3.— Detailed guidance on the use of the FF-ICE services, including the use of a preliminary flight plan, can be found in the Manual on Flight and Flow — Information for a Collaborative Environment (FF-ICE) (Doc 9965).

2.2.3.4 Meteorological conditions

2.2.3.4.1 A flight to be conducted in accordance with VFR shall not be commenced unless current meteorological reports or a combination of current reports and

3.4.3.3 Operational flight planning

The operator shall specify flight planning procedures to provide 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. These procedures shall be included in the operations manual.

Note 1. — It is the practice in some States to declare, for flight planning purposes, higher minima for an aerodrome nominated as an alternate, than for the same aerodrome planned as that of intended landing.

Note 2. — The requirements for flight plans are contained in CAR Section 9 Series C part I — Rules of the Air and the procedures relating to flight plans and associated services are contained in the Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM, Doc 4444).

Note 3.— Detailed guidance on the use of the FF-ICE services, including the use of a preliminary flight plan, can be found in the Manual on Flight and Flow — Information for a Collaborative Environment (FF-ICE) (Doc 9965).

3.4.3.4 Alternate aerodromes

3.4.3.4.1 Take-off alternate aerodrome

3.4.3.4.1.1 A take-off alternate aerodrome shall be selected and specified in the flight plan if either the meteorological conditions at the aerodrome of departure are below the applicable aerodrome landing minima for that operation or if it would not be possible to return to the aerodrome of departure for other reasons.

3.4.3.4.1.2 The take-off alternate aerodrome shall be located within the following flight time from the aerodrome of departure:

- a) for aeroplanes with two engines, one hour of flight time at a one-engine-inoperative cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; or
- b) for aeroplanes with three or more engines two hours of flight time at an all engines operating cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass.

3.4.3.4.1.3 For an aerodrome to be selected as a take-off alternate the available information shall indicate that, at the estimated time of use, the conditions will be at or above the applicable aerodrome operating minima for that operation.

3.4.3.5 Fuel requirements

3.4.3.5.1 An aeroplane shall carry a sufficient amount of usable fuel to complete the planned flight safely and to allow for deviations from the planned operation.

3.4.3.5.2 The amount of usable fuel to be carried shall, as a minimum, be based on:

- a) fuel consumption data:

and, if necessary, the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with Annex 13.

3.12 CABIN CREW

3.12.1 Assignment of emergency duties

The requirement for cabin crew for each type of aeroplane shall be determined by the operator, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aeroplane, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation. The operator shall assign these functions for each type of aeroplane.

3.12.2 Cabin crew at emergency evacuation stations

When cabin crew are required by a State authority, each cabin crew member assigned to emergency evacuation duties shall occupy a seat provided in accordance with 3.6.8 during take-off and landing and whenever the pilot-in-command so directs.

3.12.3 Protection of cabin crew during flight

Each cabin crew member shall be seated with seat belt or, when provided, safety harness fastened during take-off and landing and whenever the pilot-in-command so directs.

3.12.4 Training

3.12.4.1 The operator shall ensure that a training programme is completed by all persons before being assigned as a cabin crew member.

3.12.4.2 *The operator should establish and maintain a cabin crew training programme that is designed to ensure that persons who receive training acquire the competency to perform their assigned duties and includes or makes reference to a syllabus for the training programme in the company operations manual. The training programme should include Human Factors training.*

Note. Details on training programme of cabin crew is available in CAR, Section-7, Series 'M', Part I

3.13 SECURITY

3.13.1 Security programme

Each entity conducting general aviation operations, including corporate operator aviation operations, using aircraft with a maximum take-off mass greater than 5700 kg shall establish, implement and maintain a written operator security programme that meets the requirements of the "Bureau of Civil Aviation Security" (BCAS).

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