

CAR-OPS 2

GENERAL AVIATION (AEROPLANES)

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FOREWORD

- (a) CAR-OPS 2 has been issued by the Civil Aviation Affairs of Oman (hereinafter called the Authority) under the provisions of the Civil Aviation Law of the Sultanate of Oman.
- (b) ICAO Annex 6 has been selected to provide the basic structure of CAR-OPS 2, the CAR for General Aviation (Aeroplane), but with additional sub-division where considered appropriate. The content of Annex 6 has been used and added to where necessary by making use of existing European regulations (EU-OPS)
- (c) CAR-OPS 2 has been developed to provide requirements for General Aviation Aeroplane operators, and prescribes additions, alleviations and exceptions to CAR OPS 0.
- (d) Amendments to the text in CAR-OPS 2 are issued as amendment pages containing revised paragraphs.
New, amended and corrected text will be enclosed within brackets until a subsequent 'Change' is issued
- (e) The editing practices used in this document are as follows:
 - (1) 'Shall' is used to indicate a mandatory requirement and may appear in CARs.
 - (2) 'Should' is used to indicate a recommendation
 - (3) 'May' is used to indicate discretion by the Authority, the industry or the applicant, as appropriate.
 - (4) 'Will' indicates a mandatory requirement and is used to advise pilots of action incumbent on the Authority.
- (f) Subparts of CAR-OPS 1 that have identical requirements for CAR-OPS 2 have been incorporated by reference.
- (g) Where applicable, CAR-OPS 1 AMC's, ACJ's and IEM's have been incorporated by reference

NOTE: The use of the male gender implies the female gender and vice versa.

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SUBPART A – APPLICABILITY**CAR-OPS 2.001 Applicability**

(See Appendix 1 to CAR-OPS 2.001)

CAR-OPS 2 prescribes requirements for the purpose of general aviation air transportation by any operator whose principal place of business is in the Sultanate of Oman, and is applicable to the operation of:

- (1) Any civil aeroplane, registered in the Sultanate of Oman, having a maximum take-off mass of 5,700 kg. or more; and
- (2) Any civil aeroplane, registered in the Sultanate of Oman, having a seating configuration of 10 or more seats, excluding any required flight crew member seat; and
- (3) Any turbine powered pressurized aeroplane, registered in the Sultanate of Oman.

CAR-OPS 2.003 Operating rules

The holder of a general aviation aeroplane operating certificate shall comply with the requirements of CAR-OPS 0, unless otherwise specified in this CAR.

CAR-OPS 2.004 Terminology

For the purpose of this CAR *General Aviation* means:

An aeroplane operation other than:

- (1) a commercial air transport operation,
- (2) an aerial work operation
- (3) an agricultural operation.

Appendix 1 to CAR-OPS 2.001 Operations of performance class B aeroplanes.**(a) Terminology**

- (1) A to A operations – Take-off and landing are made at the same place.
- (2) A to B operations – Take-off and landing are made at different places.
- (3) 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 Authority.

(b) Operations, to which this Appendix is applicable, may be conducted in accordance with the following alleviations:

See Appendix 1 to CAR-OPS 1.005 for alleviations related to Subpart G,H,I,K,L,N,O,P and S.

(1) CAR-OPS 2.100 Admission to the flight deck:

- (i) An operator must establish rules for the carriage of passengers in a pilot seat.
- (ii) The commander must ensure that;
 - (A) Carriage of passengers in a pilot seat does not cause distraction and/or interference with the operation of the flight; and
 - (B) The passenger occupying a pilot seat is made familiar with the relevant restrictions and safety procedures.

(2) CAR-OPS 2.135 Additional information and forms to be carried:

- (i) For A to A VFR operations of single engine aeroplanes by day, the following documents need not be carried:
 - (A) Operational Flight Plan;
 - (B) Aeroplane Technical Log;
 - (C) NOTAM/AIS briefing documentation;
 - (D) Meteorological Information;
 - (E) Notification of special categories of passengers and:
 - (F) Notification of special loads including dangerous goods.
- (ii) For A to B VFR operations of single engine aeroplanes by day. Notification of special categories of passengers as described in CAR-OPS 2.135 (a)(7) does not need to be carried.
- (iii) For A to B VFR operations by day, the Operational Flight Plan may be in a simplified form and must meet the needs of the type of operation.

(3) CAR-OPS 2.215 Use of Air Traffic

For VFR operations of single engine aeroplanes by day, non-mandatory contact with ATS shall be maintained to the extent appropriate to the nature of the operation. Search and rescue services must be ensured in accordance with CAR-OPS 2.300.

(4) CAR-OPS 2.225 Aerodrome Operating Minima:

For VFR operations, the standard VFR operating minima will normally cover this requirement. Where necessary, the operator shall specify additional requirements taking into account such factors as radio coverage, terrain, nature of sites for take-off and landing, flight conditions and ATS capacity

(5) CAR-OPS 2.235 Noise abatement procedures:

Not applicable to VFR operations of single engine aeroplanes.

(6) CAR-OPS 2.240 Routes and Areas of Operation:

Subparagraph (a)(1) is not applicable to A to A VFR operations of single engine aeroplanes by day

(7) *CAR-OPS 2.250 Establishment of minimum flight altitudes:*

For VFR operations by day, this requirement is applicable as follows. An operator shall ensure that operations are only conducted along such routes or within such areas for which a safe terrain clearance can be maintained and shall take account of such factors as temperature, terrain, unfavourable meteorological conditions (e.g. severe turbulence and descending air currents, corrections for temperature and pressure variations from standard values).

(8) *CAR-OPS 2.255 Fuel Policy:*

(i) For A to A Flights - An operator shall specify the minimum fuel contents at which a flight must end. This minimum, final reserve, fuel must not be less than the amount needed to fly for a period of 45 minutes.

(ii) For A to B Flights – An operator shall ensure that the pre-flight calculation of usable fuel required for a flight includes;

(A) Taxi fuel - Fuel consumed before take-off, if significant; and

(B) Trip fuel (Fuel to reach the destination); and

(C) Reserve fuel -

(1) Contingency fuel -Fuel that is not less than 5% of the planned trip fuel or, in the event of in-flight re-planning, 5% of the trip fuel for the remainder of the flight; and

(2) Final reserve fuel - Fuel to fly for an additional period of 45 minutes (piston engines) or 30 minutes (turbine engines); and

(D) Alternate fuel - Fuel to reach the destination alternate via the destination, if a destination alternate is required

(E) Extra fuel – Fuel that the commander may require in addition to that required under subparagraphs (A) – (D) above.

(9) *CAR-OPS 2.290 Flight Preparation:*

(i) Operational Flight Plan for A to A operations - Not Required.

(ii) A to B operations under VFR by day - An operator shall ensure that a simplified form of an operational flight plan which is relevant to the type of operation is completed for each flight.

(10) *CAR-OPS 2.295 Selection of aerodromes:*

Not applicable to VFR operations. The necessary instructions for the use of aerodromes and sites for take-off and landing are to be issued with reference to CAR-OPS 2.220.

(11) *CAR-OPS 2.375 In-flight fuel management:*

Appendix 1 to CAR-OPS 2.375 is not required to be applied to VFR operations of single engine aeroplanes by day.

(12) *CAR-OPS 2.405 Commencement and continuation of approach:*

Not applicable to VFR operations.

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13) *CAR-OPS 2.410 Operating procedures- threshold crossing height:*

Not applicable to VFR operations.

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SUBPART B – GENERAL

In addition to the requirements of CAR-OPS 0, Subpart B, the following requirements are applicable:

CAR-OPS 2.005 General

All Synthetic Training Devices (STD), such as Flight Simulators or Flight Training Devices (FTD), replacing an aeroplane for training and/or checking purposes are to be qualified in accordance with CAR-STD requirements and user approved by the Authority for the exercises to be conducted.

CAR-OPS 2.020 Laws, Regulations and Procedures – Operator’s Responsibilities

- (a) An operator must ensure that:
- (1) all employees are made aware that they shall comply with the laws, regulations and procedures of those States in which operations are conducted and which are pertinent to the performance of their duties; and
 - (2) all crew members are familiar with the laws, regulations and procedures pertinent to the performance of their duties.

CAR-OPS 2.025 Common Language

(a) An operator must ensure that all crew members can communicate in a common language.

(b) An operator must ensure that all operations personnel are able to understand the language in which those parts of the Operations Manual which pertain to their duties and responsibilities are written.

CAR-OPS 2.030 Minimum Equipment Lists – Operator’s Responsibilities

(a) An operator shall establish, for each aeroplane, a Minimum Equipment List (MEL) approved by the Authority. This shall be based upon, but no less restrictive than, the relevant Master Minimum Equipment List (MMEL) (if this exists) accepted by the Authority.

(b) An operator shall not operate an aeroplane other than in accordance with the MEL unless permitted by the Authority. Any such permission will in no circumstances permit operation outside the constraints of the MMEL.

CAR-OPS 2.035 Quality system

(a) An operator shall establish one Quality System and designate one Quality Manager to monitor compliance with, and the adequacy of, procedures required to ensure safe operational

practices and airworthy aeroplanes. Compliance monitoring must include a feed-back system to the Accountable Manager to ensure corrective action as necessary.

(b) The Quality System must include a Quality Assurance Programme that contains procedures designed to verify that all operations are being conducted in accordance with all applicable requirements, standards and procedures.

(c) The Quality System and the Quality Manager must be acceptable to the Authority.

(d) The quality system must be described in relevant documentation.

(e) Notwithstanding sub-paragraph (a) above, the Authority may accept the nomination of two Quality Managers, one for operations and one for maintenance, provided that the operator has designated one Quality Management Unit to ensure that the Quality System is applied uniformly throughout the entire operation.

Note 1: See CAR-OPS 1, AMC OPS 1.035 for acceptable means of compliance

Note 2: This requirement does not apply to operators with a full time employed staff of less than 20 employees directly connected to the operation.

Note 3: The Quality system must, as a minimum, meet the CAR-OPS 1 requirements for small operators as specified in CAR-OPS 1, AMC OPS 1.035 par. 7.

[CAR-OPS 2.037 Safety Management System]

(a) An operator shall establish a [Safety Management System in accordance with ICAO SMS Document 9859], which may be integrated with the Quality System, including:

- (1) Programmes to achieve and maintain risk awareness by all persons involved in operations; and
- (2) An occurrence reporting scheme to enable the collation and assessment of relevant incident and accident reports in order to identify adverse trends or to address deficiencies in the interests of flight safety. The scheme shall protect the identity of the reporter and include the possibility that reports may be submitted anonymously and
- (3) Evaluation of relevant information relating to incidents and accidents and the promulgation of related information, but not the attribution of blame; and
- (4) The appointment of a person accountable for managing the programme.

(b) Proposals for corrective action resulting from the accident prevention and flight safety programme shall be the responsibility of the person accountable for managing the programme.

(c) The effectiveness of changes resulting from proposals for corrective action identified by the accident and flight safety programme shall be monitored by the Quality Manager.

Note 1: This requirement does not apply to operators with a full time employed staff of less than 20 employees directly connected to the operation.

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CAR-OPS 2.040 Additional crew members

An operator shall ensure that crew members who are not required flight or cabin crew members, have also been trained in, and are proficient to perform, their assigned duties.

CAR-OPS 2.050 Search and rescue information

An operator shall ensure that essential information pertinent to the intended flight concerning search and rescue services is easily accessible on the flight deck.

CAR-OPS 2.055 Information on emergency and survival equipment carried

An operator shall ensure that there are available for immediate communication to rescue coordination centres, lists containing information on the emergency and survival equipment carried on board all of his aeroplanes. The information shall include, as applicable, the number, colour and type of life-rafts and pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of emergency portable radio equipment.

CAR-OPS 2.060 Ditching

An operator shall not operate an aeroplane with an approved passenger seating configuration of more than 30 passengers on overwater flights at a distance from land suitable for making an emergency landing, greater than 120 minutes at cruising speed, or 400 nautical miles, whichever is the lesser, unless the aeroplane complies with the ditching requirements prescribed in the applicable airworthiness code.

CAR-OPS 2.085 Crew responsibilities

- (a) A crew member shall be responsible for the proper execution of his duties that:
 - (1) are related to the safety of the aeroplane and its occupants; and
 - (2) are specified in the instructions and procedures laid down in the Operations Manual.
- (b) A crew member shall:
 - (1) report to the commander any fault, failure, malfunction or defect which he believes may affect the airworthiness or safe operation of the aeroplane including emergency systems.
 - (2) report to the commander any incident that endangered, or could have endangered, the safety of operation; and
- (c) Nothing in paragraph (b) above shall oblige a crew member to report an occurrence which has already been reported by another crew member.
- (d) A crew member shall not perform duties on an aeroplane:

- (1) While under the influence of any drug that may affect his faculties in a manner contrary to safety;
 - (2) Until 24 hours has elapsed after deep water diving;
 - (3) Following blood donation except when 24 hours has elapsed;
 - (4) If he is in any doubt of being able to accomplish his assigned duties; or
 - (5) If he knows or suspects that he is suffering from fatigue, or feels unfit to the extent that the flight may be endangered.
- (e) A crew member shall not:
- (1) Consume alcohol less than 12 hours prior to the specified reporting time for flight duty or the commencement of standby;
 - (2) Commence a flight duty period with a blood alcohol level in excess of 0.2 promille;
 - (3) Consume alcohol during the flight duty period or whilst on standby.
- (f) The commander shall:
- (1) Be responsible for the safe operation of the aeroplane and safety of its occupants during flight time;
 - (2) Have authority to give all commands he deems necessary for the purpose of securing the safety of the aeroplane and of persons or property carried therein;
 - (3) Have authority to disembark any person, or any part of the cargo, which, in his opinion, may represent a potential hazard to the safety of the aeroplane or its occupants;
 - (4) Not allow a person to be carried in the aeroplane who appears to be under the influence of alcohol or drugs to the extent that the safety of the aeroplane or its occupants is likely to be endangered;
 - (5) Have the right to refuse transportation of inadmissible passengers, deportees or persons in custody if their carriage poses any risk to the safety of the aeroplane or its occupants;
 - (6) Ensure that all passengers are briefed on the location of emergency exits and the location and use of relevant safety and emergency equipment;
 - (7) Ensure that all operational procedures and check lists are complied with in accordance with the Operations Manual;
 - (8) Not permit any crew member to perform any activity during take-off, initial climb, final approach and landing except those duties required for the safe operation of the aeroplane;
 - (9) Not permit:
 - (i) A flight data recorder to be disabled, switched off or erased during flight nor permit recorded data to be erased after flight in the event of an accident or an incident subject to mandatory reporting;
 - (ii) A cockpit voice recorder to be disabled or switched off during flight unless he believes that the recorded data, which otherwise would be erased automatically, should be preserved for incident or accident investigation nor permit recorded data to be manually erased during or after flight in the event of an accident or an incident subject to mandatory reporting;
 - (10) Decide whether or not to accept an aeroplane with unserviceabilities allowed by the CDL or MEL; and

(11) Ensure that the pre-flight inspection has been carried out.

(g) The commander or the pilot to whom conduct of the flight has been delegated shall, in an emergency situation that requires immediate decision and action, take any action he considers necessary under the circumstances. In such cases he may deviate from rules, operational procedures and methods in the interest of safety.

CAR-OPS 2.100 Admission to flight deck

(a) An operator must ensure that no person, other than a flight crew member assigned to a flight, is admitted to, or carried in, the flight deck unless that person is:

- (1) An operating crew member;
- (2) A representative of the Authority responsible for certification, licensing or inspection if this is required for the performance of his official duties; or
- (3) Permitted by, and carried in accordance with instructions contained in the Operations Manual.

(b) The commander shall ensure that:

- (1) In the interests of safety, admission to the flight deck does not cause distraction and/or interfere with the flight's operation; and
- (2) All persons carried on the flight deck are made familiar with the relevant safety procedures.

(c) The final decision regarding the admission to the flight deck shall be the responsibility of the commander.

CAR-OPS 2.120 Endangering safety

(a) An operator shall take all reasonable measures to ensure that no person recklessly or negligently acts or omits to act:

- (1) So as to endanger an aeroplane or person therein;
- (2) So as to cause or permit an aeroplane to endanger any person or property.

CAR-OPS 2.130 Manuals to be carried

(a) An operator shall ensure that:

- (1) The current parts of the Operations Manual relevant to the duties of the crew are carried on each flight;
- (2) Those parts of the Operations Manual which are required for the conduct of a flight are easily accessible to the crew on board the aeroplane; and
- (3) The current Aeroplane Flight Manual is carried in the aeroplane unless the Authority has accepted that the Operations Manual prescribed in CAR-OPS 2.1045, Appendix 1, Part B contains relevant information for that aeroplane.

CAR-OPS 2.135 Additional information and forms to be carried

(a) An operator shall ensure that, in addition to the documents and manuals prescribed in CAR-OPS 2.125 and CAR-OPS 2.130, the following information and forms, relevant to the type and area of operation, are carried on each flight:

- (1) Operational Flight Plan containing the information required in CAR-OPS 0.285/0.335;
- (2) Aeroplane Technical Log
- (3) Details of the filed ATS flight plan;
- (4) Appropriate NOTAM/AIS briefing documentation;
- (5) Appropriate meteorological information;
- (6) Mass and balance documentation as specified in Subpart J;
- (7) Notification of special categories of passenger such as security personnel, if not considered as crew, handicapped persons, inadmissible passengers, deportees and persons in custody;
- (8) Notification of special loads including dangerous goods including written information to the commander.
- (9) Current maps and charts and associated documents as prescribed in CAR-OPS 2.290(b)(7);
- (10) Any other documentation which may be required by the States concerned with this flight, such as cargo manifest, passenger manifest etc; and
- (11) Forms to comply with the reporting requirements of the Authority and the operator.

(b) The Authority may permit the information detailed in sub-paragraph (a) above, or parts thereof, to be presented in a form other than on printed paper. An acceptable standard of accessibility, usability and reliability must be assured.

Note 1: Operational Flight Plan.

The flight plan may be in a simplified form, relevant to the kind of operations conducted and acceptable to the Authority.

Note 2: Notification of special passengers is not required for local flights.

CAR-OPS 2.140 Information retained on the ground

(a) An operator shall ensure that:

- (1) At least for the duration of each flight or series of flights;
 - (i) Information relevant to the flight and appropriate for the type of operation is preserved on the ground; and
 - (ii) The information is retained until it has been duplicated at the place at which it will be stored in accordance with CAR-OPS 2.1065; or, if this is impracticable,

- (iii) The same information is carried in a fireproof container in the aeroplane.
- (b) The information referred to in subparagraph (a) above includes:
 - (1) A copy of the operational flight plan where appropriate;
 - (2) Copies of the relevant part(s) of the aeroplane technical log;
 - (3) Route specific NOTAM documentation if specifically edited by the operator;
 - (4) Mass and balance documentation if required (CAR-OPS 2.625 refers); and
 - (5) Special loads notification.

CAR-OPS 2.145 Power to inspect

An operator shall ensure that any person authorised by the Authority is permitted at any time to board and fly in any aeroplane operated in accordance with an AOC issued by the Authority and to enter and remain on the flight deck provided that the commander may refuse access to the flight deck if, in his opinion, the safety of the aeroplane would thereby be endangered.

CAR-OPS 2.150 Production of documentation and records

- (a) An operator shall:
 - (1) Give any person authorised by the Authority access to any documents and records which are related to flight operations or maintenance; and
 - (2) Produce all such documents and records, when requested to do so by the Authority, within a reasonable period of time.
- (b) The commander shall, within a reasonable time of being requested to do so by a person authorised by an Authority, produce to that person the documentation required to be carried on board.

CAR-OPS 2.155 Preservation of documentation

- (a) An operator shall ensure that:
 - (1) Any original documentation, or copies thereof, that he is required to preserve is preserved for the required retention period even if he ceases to be the operator of the aeroplane; and
 - (2) Where a crew member, in respect of whom an operator has kept a record in accordance with Subpart Q, becomes a crew member for another operator, that record is made available to the new operator.

CAR-OPS 2.160 Preservation, production and use of flight recorder recordings*(a) Preservation of recordings*

- (1) Following an accident, the operator of an aeroplane on which a flight recorder is carried shall, to the extent possible, preserve the original recorded data pertaining to that accident, as retained by the recorder for a period of 60 days unless otherwise directed by the investigating Authority.
- (2) Unless prior permission has been granted by the Authority, following an incident that is subject to mandatory reporting, the operator of an aeroplane on which a flight recorder is carried shall, to the extent possible, preserve the original recorded data pertaining to that incident, as retained by the recorder for a period of 60 days unless otherwise directed by the Authority.
- (3) Additionally, when the Authority so directs, the operator of an aeroplane on which a flight recorder is carried shall preserve the original recorded data for a period of 60 days unless otherwise directed by the investigating Authority.
- (4) When a flight data recorder is required to be carried aboard an aeroplane, the operator of that aeroplane shall:
 - (i) Save the recordings for the period of operating time as required by CAR-OPS 2.715, 2.720 and 2.725 except that, for the purpose of testing and maintaining flight data recorders, up to one hour of the oldest recorded material at the time of testing may be erased; and
 - (ii) Keep a document which presents the information necessary to retrieve and convert the stored data into engineering units.

(b) Production of recordings. The operator of an aeroplane on which a flight recorder is carried shall, within a reasonable time after being requested to do so by the Authority, produce any recording made by a flight recorder which is available or has been preserved.

(c) Use of recordings

- (1) The cockpit voice recorder recordings may not be used for purposes other than for the investigation of an accident or incident subject to mandatory reporting except with the consent of all crew members concerned.
- (2) The flight data recorder recordings may not be used for purposes other than for the investigation of an accident or incident subject to mandatory reporting except when such records are:
 - (i) Used by the operator for airworthiness or maintenance purposes only; or
 - (ii) De-identified; or
 - (iii) Disclosed under secure procedures.

SUBPART C – CERTIFICATION

The requirements of CAR-OPS 1 Subpart C are applicable

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SUBPART D – OPERATIONAL PROCEDURES

In addition to the requirements of CAR-OPS 0, Subpart D, the following requirements are applicable:

CAR-OPS 2.195 Operational Control

An operator shall:

- (a) Establish and maintain a method of exercising operational control approved by the Authority; and
- (b) Exercise operational control over any flight operated under the terms of his AOC.

For the purpose of this paragraph operational control means the exercise by the operator, in the interest of safety, of responsibility for the initiation, continuation, termination or diversion of a flight. This does not imply a requirement for licensed flight dispatchers or a full flight watch system.

The organisation and methods established to exercise operational control shall be included in the operations manual and must cover at least a description of responsibilities concerning the initiation, continuation, termination or diversion of each flight.

CAR-OPS 2.200 Operations manual

An operator shall provide an Operations Manual in accordance with Subpart P for the use and guidance of operations personnel.

CAR-OPS 2.205 Competence of operations personnel

An operator shall ensure that all personnel assigned to, or directly involved in, ground and flight operations are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

CAR-OPS 2.210 Establishment of procedures

(a) An operator shall establish procedures and instructions, for each aeroplane type, containing ground staff and crew members' duties for all types of operation on the ground and in flight.

(b) An operator shall establish a check-list system to be used by crew members for all phases of operation of the aeroplane under normal, abnormal and emergency conditions as applicable, to ensure that the operating procedures in the Operations Manual are followed.

(c) An operator shall not require a crew member to perform any activities during critical phases of the flight other than those required for the safe operation of the aeroplane.

Note: See CAR-OPS 1, AMC OPS 1.210(a), IEM OPS 1.210(b) & (c) for acceptable means of compliance

[CAR-OPS 2.225 Aerodrome Operating Minima

See CAR-OPS 1.430

(a) An operator shall specify aerodrome operating minima, established in accordance with Appendix 1 to CAR-OPS 1.430 for each departure, destination or alternate aerodrome authorised to be used in accordance with CAR-OPS 0.130

(b) Any increment imposed by the AUTHORITY must be added to the minima specified in accordance with sub-paragraph (a) above.

(c) The minima for a specific type of approach and landing procedure are considered applicable if:

- (1) The ground equipment shown on the respective chart required for the intended procedure is operative;
- (2) The aeroplane systems required for the type of approach are operative;
- (3) The required aeroplane performance criteria are met; and
- (4) The crew is qualified accordingly.]

Rev 1

CAR-OPS 2.235 Noise abatement procedures

(a) An operator shall establish operating procedures for noise abatement during instrument flight operations in compliance with ICAO PANS OPS Volume 1 (Doc 8168-OPS/611).

(b) Take-off climb procedures for noise abatement specified by an operator for any one aeroplane type should be the same for all aerodromes.

CAR-OPS 2.240 Routes and areas of operation

(a) An operator shall ensure that operations are only conducted along such routes or within such areas, for which:

- (1) ground facilities and services, including meteorological services, are provided which are adequate for the planned operation;
- (2) the performance of the aeroplane intended to be used is adequate to comply with minimum flight altitude requirements;
- (3) the equipment of the aeroplane intended to be used meets the minimum requirements for the planned operation;
- (4) Appropriate maps and charts are available (CAR-OPS 2.135(a)(9) refers);
- (5) if two-engined aeroplanes are used, adequate aerodromes are available within the time/distance limitations of CAR-OPS 2.245.

(6) if single-engine aeroplanes are used, surfaces are available which permit a safe forced landing to be executed.

(b) An operator shall ensure that operations are conducted in accordance with any restriction on the routes or the areas of operation, imposed by the Authority.

[CAR OPS 2.243 Operations in areas with Performance Based Navigation (PBN) requirements

(See AC OPS 1.243)

(a) An operator shall ensure that an aeroplane operated in areas, or through portions of airspace, or on routes where navigation performance requirements have been specified, is certified according to these requirements, and, if required, that the Authority has granted the relevant operational approval. (See also OPS 1.865 (c)(2), OPS 1.870 and OPS 1.872).

(b) An operator of an aeroplane operating in areas referred to in (a) shall ensure that all contingency procedures, specified by the Authority responsible for the airspace concerned, have been included in the Operations Manual.

(c) AC OPS 1.243 provides for PBN guidance and approval procedures]

Rev 1

CAR-OPS 2.245 Maximum distance from an adequate aerodrome for two-engined aeroplanes without an ETOPS Approval

(a) Unless specifically approved by the AUTHORITY in accordance with CAR-OPS 2.246(a) (ETOPS Approval), an operator shall not operate a two-engined aeroplane over a route which contains a point further from an adequate aerodrome than, in the case of:

(1) Performance Class A aeroplanes with either:

- (i) A maximum approved passenger seating configuration of 20 or more; or
- (ii) A maximum take-off mass of 45 360kg or more, the distance flown in 60 minutes at the one-engine-inoperative cruise speed determined in accordance with subparagraph (b) below;

(2) Performance Class A aeroplanes with:

- (i) A maximum approved passenger seating configuration of 19 or less; and
- (ii) A maximum take-off mass less than 45 360 kg,

the distance flown in 120 minutes or, if approved by the AUTHORITY, up to 180 minutes for turbo-jet aeroplanes, at the one-engine-inoperative cruise speed determined in accordance with subparagraph (b) below (See AMC OPS 1.245(a)(2));

(3) Performance Class B or C aeroplanes:

- (i) The distance flown in 120 minutes at the one-engine-inoperative cruise speed determined in accordance with subparagraph (b) below; or
- (ii) 300 nautical miles, whichever is less.

(b) An operator shall determine a speed for the calculation of the maximum distance to an adequate aerodrome for each two-engined aeroplane type or variant operated, not exceeding

V_{MO} , based upon the true airspeed that the aeroplane can maintain with one-engine-inoperative under the following conditions:

- (1) International Standard Atmosphere (ISA);
- (2) Level flight:
 - (i) For turbojet aeroplanes at:
 - (A) FL 170; or
 - (B) At the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the AFM, whichever is less.
 - (ii) For propeller driven aeroplanes at:
 - (A) FL 80; or
 - (B) At the maximum flight level to which the aeroplane, with one engine inoperative, can climb, and maintain, using the gross rate of climb specified in the AFM, whichever is less.
- (3) Maximum continuous thrust or power on the remaining operating engine;
- (4) An aeroplane mass not less than that resulting from:
 - (i) Take-off at sea-level at maximum take-off mass; and
 - (ii) All engines climb to the optimum long range cruise altitude; and
 - (iii) All engines cruise at the long range cruise speed at this altitude, until the time elapsed since take-off is equal to the applicable threshold prescribed in subparagraph (a) above.

(c) An operator must ensure that the following data, specific to each type or variant, is included in the Operations Manual:

- (1) the one-engine-inoperative cruise speed determined in accordance with subparagraph (b) above; and
- (2) the maximum distance from an adequate aerodrome determined in accordance with subparagraphs (a) and (b) above.

Note: The speeds and altitudes (flight levels) specified above are only intended to be used for establishing the maximum distance from an adequate aerodrome.

CAR-OPS 2.246 Extended range operations with two-engined aeroplanes (ETOPS)

(a) An operator shall not conduct operations beyond the threshold distance determined in accordance with CAR-OPS 2.245 unless approved to do so by the Authority (ETOPS approval) (See, ACJ 20X6 for ETOPS requirements.)

(b) Prior to conducting an ETOPS flight, an operator shall ensure that a suitable ETOPS en-route alternate is available, within either the approved diversion time or a diversion time based on the MEL generated serviceability status of the aeroplane, whichever is shorter.)

CAR-OPS 2.255 Fuel policy

(a) An operator must establish a fuel policy for the purpose of flight planning and in-flight re-planning to ensure that every flight carries sufficient fuel for the planned operation and reserves to cover deviations from the planned operation.

(b) An operator shall ensure that the planning of flights is at least based upon (1) and (2) below:

- (1) Procedures contained in the Operations Manual and data derived from:
 - (i) Data provided by the aeroplane manufacturer; or
 - (ii) Current aeroplane specific data derived from a fuel consumption monitoring system.
- (2) The operating conditions under which the flight is to be conducted including:
 - (i) Realistic aeroplane fuel consumption data;
 - (ii) Anticipated masses;
 - (iii) Expected meteorological conditions; and
 - (iv) Air Traffic Services procedures and restrictions.

(c) An operator shall ensure that the pre-flight calculation of usable fuel required for a flight includes:

- (1) Taxi fuel;
- (2) Trip fuel;
- (3) Reserve fuel consisting of:
 - (i) Contingency fuel
 - (ii) Alternate fuel, if a destination alternate is required. (This does not preclude selection of the departure aerodrome as the destination alternate);
 - (iii) Final reserve fuel; and
 - (iv) Additional fuel, if required by the type of operation (e.g. ETOPS); and
- (4) Extra fuel if required by the commander.

(d) An operator shall ensure that in-flight re-planning procedures for calculating usable fuel required when a flight has to proceed along a route or to a destination other than originally planned includes:

- (1) Trip fuel for the remainder of the flight;
- (2) Reserve fuel consisting of:
 - (i) Contingency fuel;
 - (ii) Alternate fuel, if a destination alternate is required. (This does not preclude selection of the departure aerodrome as the destination alternate);
 - (iii) Final reserve fuel; and
 - (iv) Additional fuel, if required by the type of operation (e.g. ETOPS); and
- (3) Extra fuel if required by the commander.

Note: See CAR-OPS 1, AMC OPS 1.255 for acceptable means of compliance

CAR-OPS 2.290 Flight preparation

- (a) An operator shall ensure that an operational flight plan is completed for each intended flight.
- (b) The commander shall not commence a flight unless he is satisfied that:
- (1) the aeroplane is airworthy;
 - (2) the aeroplane is not operated contrary to the provisions of the Configuration Deviation List (CDL);
 - (3) the instruments and equipment required for the flight to be conducted, available;
 - (4) the instruments and equipment are in operable condition except as provided in the MEL;
 - (5) those parts of the operations manual which are required for the conduct of the flight are available;
 - (6) the documents, additional information and forms required to be available by CAR-OPS 2.125 and CAR-OPS 2.135 are on board;
 - (7) current maps, charts and associated documentation or equivalent data are available to cover the intended operation of the aeroplane including any diversion which may reasonably be expected;
 - (8) ground facilities and services required for the planned flight are available and adequate;
 - (9) the provisions specified in the operations manual in respect of fuel, oil and oxygen requirements, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes, where required, can be complied with for the planned flight;
 - (10) the load is properly distributed and safely secured;
 - (11) the mass of the aeroplane, at the commencement of take-off roll, will be such that the flight can be conducted in compliance with Subparts F to I as applicable; and
 - (12) any operational limitation in addition to those covered by sub-paragraphs (9) and (11) above can be complied with.

CAR-OPS 2.295 Selection of aerodromes

(a) An operator shall establish procedures for the selection of destination and/or alternate aerodromes in accordance with CAR-OPS 2.225 when planning a flight.

(b) An operator must select and specify in the operational flight plan a take-off alternate if it would not be possible to return to the aerodrome of departure for meteorological or performance reasons. The take-off alternate shall be located within:

- (1) For two-engined aeroplanes, either:

- (i) One hour flight time at a one-engine-inoperative cruising speed according to the AFM in still air standard conditions based on the actual take-off mass; or
 - (ii) The operator's approved ETOPS diversion time, subject to any MEL restriction, up to a maximum of two hours, at the one-engine-inoperative cruising speed according to the AFM in still air standard conditions based on the actual take-off mass for aeroplanes and crews authorized for ETOPS; or
- (2) Two hours flight time at a one-engine-inoperative cruising speed according to the AFM in still air standard conditions based on the actual take-off mass for three and four-engined aeroplanes; and
 - (3) If the AFM does not contain a one-engine-inoperative cruising speed, the speed to be used for calculation must be that which is achieved with the remaining engine(s) set at maximum continuous power.
- (c) An operator must select at least one destination alternate for each IFR flight unless:
 - (1) Both:
 - (i) The duration of the planned flight from take-off to landing does not exceed 6 hours; and
 - (ii) Two separate runways are available and useable at the destination and the appropriate weather reports or forecasts for the destination aerodrome, or any combination thereof, indicate that for the period from one hour before until one hour after the expected time of arrival at destination, the ceiling will be at least 2 000 ft or circling height + 500 ft, whichever is greater, and the visibility will be at least 5.5 km. or
 - (2) The destination is isolated and no adequate destination alternate exists.
 - (d) An operator shall specify any required alternate(s) in the operational flight plan.

CAR-OPS 2.305 Refuelling/defuelling with passengers embarking, on board or disembarking

(See Appendix 1 to CAR-OPS 2.305)

An operator shall ensure that no aeroplane is refuelled/defuelled with Avgas or wide cut type fuel (e.g. Jet-B or equivalent) or when a mixture of these types of fuel might occur, when passengers are embarking, on board or disembarking. In all other cases necessary precautions must be taken and the aeroplane must be properly manned by qualified personnel ready to initiate and direct an evacuation of the aeroplane by the most practical and expeditious means available.

CAR-OPS 2.307 Refuelling/defuelling with wide-cut fuel

An operator shall establish procedures for refuelling/defuelling with wide-cut fuel (e.g. Jet-B or equivalent) if this is required.

Note: See CAR-OPS 1, IEM OPS 1.307 for acceptable means of compliance

CAR-OPS 2.335 Smoking on board

- (a) The commander shall ensure that no person on board is allowed to smoke:
- (1) whenever deemed necessary in the interest of safety;
 - (2) while the aeroplane is on the ground unless specifically permitted in accordance with procedures defined in the Operations Manual;
 - (3) outside designated smoking areas, in the aisle(s) and in the toilet(s);
- (4) in cargo compartments and/or other areas where cargo is carried which is not stored in flame resistant containers or covered by flame resistant canvas; and
- (5) in those areas of the cabin where oxygen is being supplied.

CAR-OPS 2.345 Ice and other contaminants – ground procedures

- (a) An operator shall establish procedures to be followed when ground de-icing and anti-icing and related inspections of the aeroplane(s) are necessary.
- (b) A commander shall not commence take-off unless the external surfaces are clear of any deposit which might adversely affect the performance and/or controllability of the aeroplane except as permitted in the Aeroplane Flight Manual.

CAR-OPS 2.346 Ice and other contaminants – flight procedures

- (a) An operator shall establish procedures for flights in expected or actual icing conditions
- (b) A commander shall not commence a flight nor intentionally fly into expected or actual icing conditions unless the aeroplane is certificated and equipped to cope with such conditions.

CAR-OPS 2.350 Fuel and oil supply

A commander shall not commence a flight unless he is satisfied that the aeroplane carries at least the planned amount of fuel and oil to complete the flight safely, taking into account the expected operating conditions.

CAR-OPS 2.355 Take-off conditions

Before commencing take-off, a commander must satisfy himself that, according to the information available to him, the weather at the aerodrome and the condition of the runway intended to be used should not prevent a safe take-off and departure.

CAR-OPS 2.360 Application of take-off minima

Before commencing take-off, a commander must satisfy himself that the RVR or visibility in the take-off direction of the aeroplane is equal to or better than the applicable minimum.

CAR-OPS 2.370 Simulated abnormal situations in flight

An operator shall establish procedures to ensure that abnormal or emergency situations requiring the application of part or all of abnormal or emergency procedures and simulation of IMC by artificial means, are not simulated during transportation flights.

CAR-OPS 2.375 In-flight fuel management

(a) An operator shall establish a procedure to ensure that in-flight fuel checks and fuel management are carried out.

(b) A commander shall ensure that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to an aerodrome where a safe landing can be made, with final reserve fuel remaining.

(c) The commander shall declare an emergency when the actual usable fuel on board is less than final reserve fuel.

CAR-OPS 2.395 Ground proximity detection

When undue proximity to the ground is detected by any flight crew member or by a ground proximity warning system, the commander or the pilot to whom conduct of the flight has been delegated shall ensure that corrective action is initiated immediately to establish safe flight conditions.

CAR-OPS 2.398 Use of Airborne Collision Avoidance System (ACAS)

An operator shall establish procedures to ensure that:

(a) When ACAS is installed and serviceable, it shall be used in flight in a mode that enables Resolution Advisories (RA) to be produced unless to do so would not be appropriate for conditions existing at the time.

(b) When undue proximity to another aircraft (RA) is detected by ACAS, the commander or the pilot to whom conduct of the flight has been delegated shall ensure that corrective action is initiated immediately to establish safe separation unless the intruder has been visually identified and has been determined not to be a threat.

(c) The ACAS operational procedures and training programmes established by the operator should take into account:

ICAO Annex 10 Volume 4;

- ICAO Doc 8168 PANS OPS Volume 1;
- ICAO Doc 4444 PANS RAC Part X paragraph 3.2.2; and
- ICAO guidance material “ACAS Performance - Based Training Objectives” (published under Attachment E to State letter AN 7/2.3.7.2-97/77.)

CAR-OPS 2.400 Approach and landing conditions

Before commencing an approach to land, the commander must satisfy himself that, according to the information available to him, the weather at the aerodrome and the condition of the runway intended to be used should not prevent a safe approach, landing or missed approach, having regard to the performance information contained in the Operations Manual.

CAR-OPS 2.405 Commencement and continuation of approach

(a) The commander or the pilot to whom conduct of the flight has been delegated may commence an instrument approach regardless of the reported RVR/Visibility but the approach shall not be continued beyond the outer marker, or equivalent position, if the reported RVR/visibility is less than the applicable minima.

The ‘equivalent position’ can be established by means of a DME distance, a suitably located NDB or VOR, SRE or PAR fix or any other suitable fix that independently establishes the position of the aeroplane.

(b) Where RVR is not available, RVR values may be derived by converting the reported visibility in accordance with the table below.

Lighting elements in operation	RVR= Reported Met. Visibility x	
	Day	Night
HI approach and runway lighting	1.5	2.0
Any type of lighting installation other than above	1.0	1.5
No lighting	1.0	Not applicable

(c) If, after passing the outer marker or equivalent position in accordance with (a) above, the reported RVR/visibility falls below the applicable minimum, the approach may be continued to DA/H or MDA/H.

(d) Where no outer marker or equivalent position exists, the commander or the pilot to whom conduct of the flight has been delegated shall make the decision to continue or abandon the approach before descending below 1000 ft above the aerodrome on the final approach segment. If the MDA/H is at or above 1000 ft above the aerodrome, the operator

shall establish a height, for each approach procedure, below which the approach shall not be continued if the RVR/visibility is less than the applicable minima.

(e) The approach may be continued below DA/H or MDA/H and the landing may be completed provided that the required visual reference is established at the DA/H or MDA/H and is maintained.

(f) The touch-down zone RVR is always controlling. If reported and relevant, the mid point and stop end RVR are also controlling. The minimum RVR value for the mid-point is 125 m or the RVR required for the touch-down zone if less, and 75 m for the stop-end. For aeroplanes equipped with a roll-out guidance or control system, the minimum RVR value for the mid-point is 75 m.

Note. "Relevant", in this context, means that part of the runway used during the high speed phase of the landing down to a speed of approximately 60 knots.

CAR-OPS 2.410 Operating procedures – Threshold crossing height

An operator must establish operational procedures designed to ensure that an aeroplane being used to conduct precision approaches crosses the threshold by a safe margin, with the aeroplane in the landing configuration and attitude.

CAR-OPS 2.420 Occurrence reporting

(a) *Terminology*

(1) *Incident* An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

(2) *Serious Incident* An incident involving circumstances indicating that an accident nearly occurred.

(3) *Accident* An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all persons have disembarked, in which:

(i) a person is fatally or seriously injured as a result of:

(A) being in the aircraft;

(B) direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or,

(C) direct exposure to jet blast;

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew: or

(ii) the aircraft sustains damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft; and would normally require major repair or replacement of the affected component; except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips,

antennas, tyres, brakes, fairings, small dents or puncture holes in the aircraft skin: or

(iii) the aircraft is missing or is completely inaccessible.

(b) *Incident Reporting* An operator shall establish procedures for reporting incidents taking into account responsibilities described below and circumstances described in sub-paragraph (d) below.

- (1) CAR-OPS 2.085(b) specifies the responsibilities of crew members for reporting incidents that endanger, or could endanger, the safety of operation.
- (2) The commander or the operator of an aeroplane shall submit a report to the Authority of any incident that endangers or could endanger the safety of operation.
- (3) Reports must be despatched within 72 hours of the time when the incident was identified unless exceptional circumstances prevent this.
- (4) A commander shall ensure that all known or suspected technical defects and all exceedances of technical limitations occurring while he was responsible for the flight are recorded in the aircraft technical log. If the deficiency or exceedance of technical limitations endangers or could endanger the safety of operation, the commander must in addition initiate the submission of a report to the Authority in accordance with paragraph (b)(2) above.
- (5) In the case of incidents reported in accordance with sub-paragraphs (b)(1), (b)(2) and (b)(3) above, arising from, or relating to, any failure, malfunction or defect in the aeroplane, its equipment or any item of ground support equipment, or which cause or might cause adverse effects on the continuing airworthiness of the aeroplane, the operator must also inform the organisation responsible for the design or the supplier or, if applicable, the organisation responsible for continued airworthiness, at the same time as a report is submitted to the Authority.

(c) *Accident and Serious Incident Reporting* An operator shall establish procedures for reporting accidents and serious incidents taking into account responsibilities described below and circumstances described in sub-paragraph (d) below.

- (1) A commander shall notify the operator of any accident or serious incident occurring while he was responsible for the flight. In the event that the commander is incapable of providing such notification, this task shall be undertaken by any other member of the crew if they are able to do so, note being taken of the succession of command specified by the operator.
- (2) An operator shall ensure that the Authority, the nearest appropriate Authority (if not the Authority), and any other organisation required by the Sultanate of Oman to be informed, are notified by the quickest means available of any accident or serious incident and - in the case of accidents only - at least before the aeroplane is moved unless exceptional circumstances prevent this.
- (3) The commander or the operator of an aeroplane shall submit a report to the Authority within 72 hours of the time when the accident or serious incident occurred.

(d) *Specific Reports.* Occurrences for which specific notification and reporting methods must be used are described below;

- (1) *Air Traffic Incidents* A commander shall without delay notify the air traffic service unit concerned of the incident and shall inform them of his intention to submit an air traffic incident report after the flight has ended whenever an aircraft in flight has been endangered by:
 - (i) A near collision with any other flying device;
 - (ii) Faulty air traffic procedures or lack of compliance with applicable procedures by air traffic services or by the flight crew;
 - (iii) Failure of air traffic services facilities.In addition, the commander shall notify the Authority of the incident.
- (2) *Airborne Collision Avoidance System Resolution Advisory* A commander shall notify the air traffic service unit concerned and submit an ACAS report to the Authority whenever an aircraft in flight has manoeuvred in response to an ACAS Resolution Advisory.
- (3) *Bird Hazards and Strikes*
 - (i) A commander shall immediately inform the local air traffic service unit whenever a potential bird hazard is observed.
 - (ii) If he is aware that a bird strike has occurred, a commander shall submit a written bird strike report after landing to the Authority whenever an aircraft for which he is responsible suffers a bird strike that results in significant damage to the aircraft or the loss or malfunction of any essential service. If the bird strike is discovered when the commander is not available, the operator is responsible for submitting the report.
- (4) *In-flight Emergencies with Dangerous Goods on Board* If an in-flight emergency occurs and the situation permits, a commander shall inform the appropriate air traffic service unit of any dangerous goods on board.
- (5) *Unlawful Interference* Following an act of unlawful interference on board an aircraft, the commander or, in his absence, the operator shall submit a report as soon as practicable to the local Authority and to the Authority.
- (6) *Encountering Potential Hazardous Conditions* A commander shall notify the appropriate air traffic services unit as soon as practicable whenever a potentially hazardous condition such as an irregularity in a ground or navigational facility, a meteorological phenomenon or a volcanic ash cloud is encountered during flight.

Appendix 1 to CAR-OPS 2.225 Aerodrome Operating Minima

(a) *Take-off Minima*

(1) *General*

(i) Take-off minima established by the operator must be expressed as visibility or RVR limits, taking into account all relevant factors for each aerodrome planned to be used and the aeroplane characteristics. Where there is a specific need to see and avoid obstacles on departure and/or for a forced landing, additional conditions (e.g. ceiling) must be specified.

(ii) The commander shall not commence take-off unless the weather conditions at the aerodrome of departure are equal to or better than applicable minima for landing at that aerodrome unless a suitable take-off alternate aerodrome is available.

(iii) When the reported meteorological visibility is below that required for take-off and RVR is not reported, a take-off may only be commenced if the commander can determine that the RVR/visibility along the take-off runway is equal to or better than the required minimum.

(iv) When no reported meteorological visibility or RVR is available, a take-off may only be commenced if the commander can determine that the RVR/visibility along the take-off runway is equal to or better than the required minimum.

(2) *Visual reference.* The take-off minima must be selected to ensure sufficient guidance to control the aeroplane in the event of both a discontinued take-off in adverse circumstances and a continued take-off after failure of the critical power unit.

(3) *Required RVR/Visibility*

(i) For multi-engined aeroplanes, whose performance is such that, in the event of a critical power unit failure at any point during take-off, the aeroplane can either stop or continue the take-off to a height of 1 500 ft above the aerodrome while clearing obstacles by the required margins, the take-off minima established by an operator must be expressed as RVR/Visibility values not lower than those given in Table 1 below:

Table 1 – RVR/Visibility for take-off

Take-off RVR/Visibility	
Facilities	RVR/Visibility (Note 1)
Nil (Day only)	500 m
Runway edge lighting and/or centreline marking	400 m (Note 2)

Note1: The reported RVR/Visibility value representative of the initial part of the take-off run can be replaced by pilot assessment.

Note2: For night operations at least runway edge and runway end lights are required.

(b) *Non-Precision approach*

(1) *System minima*

- (i) An operator must ensure that system minima for non-precision approach procedures, which are based upon the use of ILS without glide path (LLZ only), VOR, NDB, SRA and VDF are not lower than the MDH values given in Table 3 below.

Table 3 – System minima for non-precision approach aids

System minima	
Facility	Lowest MDH
ILS (no glide path – LLZ)	250 ft
SRA (terminating at ½ NM)	250 ft
SRA (terminating at 1 NM)	300 ft
SRA (terminating at 2 NM)	350 ft
VOR	300 ft
VOR/DME	250 ft
NDB	300 ft
VDF (QDM & QGH)	300 ft

- (2) *Minimum Descent Height.* An operator must ensure that the minimum descent height for a non-precision approach is not lower than either:
- (i) The OCH/OCL for the category of aeroplane; or
 - (ii) The system minimum.
- (3) *Visual Reference.* A pilot may not continue an approach below MDA/MDH unless at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:
- (i) Elements of the approach light system;
 - (ii) The threshold;
 - (iii) The threshold markings;
 - (iv) The threshold lights;
 - (v) The threshold identification lights;

- (vi) The visual glide slope indicator;
 - (vii) The touchdown zone or touchdown zone markings;
 - (viii) The touchdown zone lights;
 - (ix) Runway edge lights; or
 - (x) Other visual references accepted by the Authority.
- (4) *Required RVR.* The lowest minima to be used by an operator for non-precision approaches are:

Table 4a – RVR for non-precision approach – full facilities

Non-precision approach minima Full facilities (Notes (1), (5), (6) and (7))				
MDH	RVR/Aeroplane Category			
	A	B	C	D
250–299 ft	800 m	800 m	800 m	1 200 m
300–449 ft	900 m	1 000 m	1 000 m	1 400 m
450–649 ft	1 000 m	1 200 m	1 200 m	1 600 m
650 ft and above	1 200 m	1 400 m	1 400 m	1 800 m

Table 4b – RVR for non-precision approach – intermediate facilities

Non-precision approach minima Intermediate facilities (Notes (2),(5),(6) and (7))				
MDH	RVR/Aeroplane Category			
	A	B	C	D
250–299 ft	1 000 m	1 100 m	1 200 m	1 400 m
300–449 ft	1 200 m	1 300 m	1 400 m	1 600 m
450–649 ft	1 400 m	1 500 m	1 600 m	1 800 m
650 ft and above	1 500 m	1 500 m	1 800 m	2 000 m

Table 4c – RVR for non-precision approach – basic facilities

Non-precision approach minima Basic facilities (Notes (3),(5),(6) and (7))				
MDH	RVR/Aeroplane Category			
	A	B	C	D
250–299 ft	1 200 m	1 300 m	1 400 m	1 600 m
300–449 ft	1 300 m	1 400 m	1 600 m	1 800 m
450–649 ft	1 500 m	1 500 m	1 800 m	2 000 m
650 ft and above	1 500 m	1 500 m	2 000 m	2 000 m

Table 4d – RVR for non-precision approach – Nil approach light facilities

Non-precision approach minima Nil approach light facilities (Notes (4),(5),(6) and (7))				
MDH	RVR/Aeroplane Category			
	A	B	C	D
250–299 ft	1 500 m	1 500 m	1 600 m	1 800 m
300–449 ft	1 500 m	1 500 m	1 800 m	2 000 m
450–649 ft	1 500 m	1 500 m	2 000 m	2 000 m
650 ft and above	1 500 m	1 500 m	2 000 m	2 000 m

Note 1: Full facilities comprise runway markings, 720 m or more of HI/MI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.

Note 2: Intermediate facilities comprise runway markings, 420–719 m of HI/MI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.

Note 3: Basic facilities comprise runway markings, <420 m of HI/MI approach lights, any length of LI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.

Note 4: Nil approach light facilities comprise runway markings, runway edge lights, threshold lights, runway end lights or no lights at all.

Note 5: The tables are only applicable to conventional approaches with a nominal descent slope of not greater than 4°. Greater descent slopes will usually require that visual glide slope guidance (e.g. PAPI) is also visible at the Minimum Descent Height.

Note 6: The above figures are either reported RVR or meteorological visibility converted to RVR as in CAR-OPS 2.405.

Note 7: The MDH mentioned in Table 4a, 4b, 4c and 4d refers to the initial calculation of MDH. When selecting the associated RVR, there is no need to take account of a rounding up to the nearest ten feet, which may be done for operational purposes, e.g. conversion to MDA.

(5) *Night operations.* For night operations at least runway edge, threshold and runway end lights must be on.

(c) *Precision approach – Category I operations*

- (1) *General.* A Category I operation is a precision instrument approach and landing using ILS, MLS or PAR with a decision height not lower than 200 ft and with a runway visual range not less than 550 m.
- (2) *Decision Height.* An operator must ensure that the decision height to be used for a Category I precision approach is not lower than:
 - (i) The minimum decision height specified in the Aeroplane Flight Manual (AFM) if stated;
 - (ii) The minimum height to which the precision approach aid can be used without the required visual reference;
 - (iii) The OCH/OCL for the category of aeroplane; or
 - (iv) 200 ft.
- (3) *Visual Reference.* A pilot may not continue an approach below the Category I decision height, determined in accordance with sub-paragraph (c)(2) above, unless at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:
 - (i) Elements of the approach light system;
 - (ii) The threshold;
 - (iii) The threshold markings;
 - (iv) The threshold lights;
 - (v) The threshold identification lights;
 - (vi) The visual glide slope indicator;
 - (vii) The touchdown zone or touchdown zone markings;
 - (viii) The touchdown zone lights; or
 - (ix) Runway edge lights.
- (4) *Required RVR.* The lowest minima to be used by an operator for Category I operations are:

Table 5 – RVR for Cat I approach vs. facilities and DH

Category I minima				
Decision height (Note 7)	Facilities/RVR (Note 5)			
	Full (Notes 1&6)	Interm. (Notes 2&6)	Basic (Notes 3&6)	Nil (Notes 4&6)
200 ft	550 m	700 m	800 m	1 000 m
201–250 ft	600 m	700 m	800 m	1 000 m
251–300 ft	650 m	800 m	900 m	1 200 m
301 ft and above	800 m	900 m	1 000 m	1 200 m

Note 1: Full facilities comprise runway markings, 720 m or more of HI/MI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.

Note 2: Intermediate facilities comprise runway markings, 420–719 m of HI/MI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.

Note 3: Basic facilities comprise runway markings, <420 m of HI/MI approach lights, any length of LI approach lights, runway edge lights, threshold lights and runway end lights. Lights must be on.

Note 4: Nil approach light facilities comprise runway markings, runway edge lights, threshold lights, runway end lights or no lights at all.

Note 5: The above figures are either the reported RVR or meteorological visibility converted to RVR in accordance with in CAR-OPS 2.405).

Note 6: The Table is applicable to conventional approaches with a glide slope angle up to and including 4°.

Note 7: The DH mentioned in the Table 5 refers to the initial calculation of DH. When selecting the associated RVR, there is no need to take account of a rounding up to the nearest ten feet, which may be done for operational purposes, (e.g. conversion to DA).

(5) *Single pilot operations.* For single pilot operations, an operator must calculate the minimum RVR for all approaches in accordance with this Appendix. An RVR of less than 800 m is not permitted except when using a suitable autopilot coupled to an ILS or MLS, in which case normal minima apply. The Decision Height applied must not be less than 1.25 x the minimum use height for the autopilot.

(6) *Night operations.* For night operations at least runway edge, threshold and runway end lights must be on.

(d) *Classification of aeroplanes*

The criteria taken into consideration for the classification of aeroplanes by categories is the indicated airspeed at threshold (V_{AT}) which is equal to the stalling speed (V_{SO}) multiplied

by 1.3 or V_{S1G} multiplied by 1.23 in the landing configuration at the maximum certificated landing mass. If both V_{SO} and V_{S1G} are available, the higher resulting V_{AT} shall be used. The aeroplane categories corresponding to V_{AT} values are in the Table below:

Aeroplane Category	V_{AT}
A	Less than 91 kt
B	From 91 to 120 kt
C	From 121 to 140 kt
D	From 141 to 165 kt
E	From 166 to 210 kt

Appendix 1 to CAR-OPS 2.305**Refuelling/defuelling with passengers embarking, on board or disembarking**

(a) An operator must establish operational procedures for re/defuelling with passengers embarking, on board or disembarking to ensure the following precautions are taken:

- (1) One qualified person must remain at a specified location during fuelling operations with passengers on board. This qualified person must be capable of handling emergency procedures concerning fire protection and fire-fighting, handling communications and initiating and directing an evacuation;
- (2) Crew, staff and passengers must be warned that re/defuelling will take place;
- (3) 'Fasten Seat Belts' signs must be off;
- (4) 'NO SMOKING' signs must be on, together with interior lighting to enable emergency exits to be identified;
- (5) Passengers must be instructed to unfasten their seat belts and refrain from smoking;
- (6) Sufficient qualified personnel must be on board and be prepared for an immediate emergency evacuation;
- (7) If the presence of fuel vapour is detected inside the aeroplane, or any other hazard arises during re/defuelling, fuelling must be stopped immediately;
- (8) The ground area beneath the exits intended for emergency evacuation and slide deployment areas must be kept clear; and
- (9) Provision is made for a safe and rapid evacuation.

(b) When re/defuelling with passengers on board, ground servicing activities and work inside the aeroplane, such as catering and cleaning, should be conducted in such a manner that they do not create a hazard and that the aisles and emergency doors are unobstructed.

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SUBPART E – ALL WEATHER OPERATIONS

For Low Visibility Take-off, Category II and Category III operations the requirements of CAR-OPS 0.355, CAR-OPS 0.360 and CAR-OPS 0.365 are applicable.

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SUBPART F – PERFORMANCE GENERAL**CAR-OPS 2.470 Applicability**

(a) An operator shall ensure that multi-engine aeroplanes powered by turbopropeller engines with a maximum approved passenger seating configuration of more than 9 or a maximum take-off mass exceeding 5700 kg, and all multi-engine turbojet powered aeroplanes are operated in accordance with CAR-OPS 1 Subpart G (Performance Class A).

(b) An operator shall ensure that propeller driven aeroplanes with a maximum approved passenger seating configuration of 9 or less, and a maximum take-off mass of 5700 kg or less are operated in accordance with Subpart H (Performance Class B).

(c) An operator shall ensure that aeroplanes powered by reciprocating engines with a maximum approved passenger seating configuration of more than 9 or a maximum take-off mass exceeding 5700 kg are operated in accordance with CAR-OPS 1 Subpart I (Performance Class C).

(d) Where full compliance with the requirements of the appropriate Subpart cannot be shown due to specific design characteristics (e.g. supersonic aeroplanes or seaplanes), the operator shall apply approved performance standards that ensure a level of safety equivalent to that of the appropriate Subpart.

CAR-OPS 2.475 General

(a) An operator shall ensure that the mass of the aeroplane:

(1) At the start of the take-off; or, in the event of in-flight re-planning

(2) At the point from which the revised operational flight plan applies, is not greater than the mass at which the requirements of the appropriate Subpart can be complied with for the flight to be undertaken, allowing for expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is provided for in the particular requirement.

(b) An operator shall ensure that the approved performance data contained in the Aeroplane Flight Manual is used to determine compliance with the requirements of the appropriate Subpart, supplemented as necessary with other data acceptable to the Authority as prescribed in the relevant Subpart. When applying the factors prescribed in the appropriate Subpart, account may be taken of any operational factors already incorporated in the Aeroplane Flight Manual performance data to avoid double application of factors.

(c) When showing compliance with the requirements of the appropriate Subpart, due account shall be taken of aeroplane configuration, environmental conditions and the operation of systems which have an adverse effect on performance.

(d) For performance purposes, a damp runway, other than a grass runway, may be considered to be dry.

(e) An operator shall take account of charting accuracy when assessing compliance with the takeoff requirements of the applicable subpart.

SUBPART G – PERFORMANCE CLASS A

The requirements of CAR-OPS 1 Subpart G are applicable, as well as applicable paragraphs of Appendix 1 to CAR-OPS 1.005.

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SUBPART H – PERFORMANCE CLASS B

The requirements of CAR-OPS 1 Subpart H are applicable, as well as applicable paragraphs of Appendix 1 to CAR-OPS 1.005.

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SUBPART I – PERFORMANCE CLASS C

The requirements of CAR-OPS 1 Subpart I are applicable, as well as applicable paragraphs of Appendix 1 to CAR-OPS 1.005.

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SUBPART J – MASS and BALANCE**CAR-OPS 2.605 General**

a) An operator shall ensure that during any phase of operation, the loading, mass and centre of gravity of the aeroplane complies with the limitations specified in the approved Aeroplane Flight Manual, or the Operations Manual if more restrictive.

(b) An operator must establish the mass and the centre of gravity of any aeroplane by actual weighing prior to initial entry into service and thereafter at intervals of 4 years if individual aeroplane masses are used and 9 years if fleet masses are used. The accumulated effects of modifications and repairs on the mass and balance must be accounted for and properly documented. Furthermore, aeroplanes must be reweighed if the effect of modifications on the mass and balance is not accurately known.

(c) An operator must determine the mass of all operating items and crew members included in the aeroplane dry operating mass by weighing or by using standard masses. The influence of their position on the aeroplane centre of gravity must be determined.

(d) An operator must establish the mass of the traffic load, including any ballast, by actual weighing or determine the mass of the traffic load in accordance with standard passenger and baggage masses as specified in CAR-OPS 2.620

(e) An operator must determine the mass of the fuel load by using the actual density or, if not known, the density calculated in accordance with a method specified in the Operations Manual.

CAR-OPS 2.607 Terminology

(a) *Dry Operating Mass.* The total mass of the aeroplane ready for a specific type of operation excluding all usable fuel and traffic load. This mass includes items such as:

- (1) Crew and crew baggage;
- (2) Catering and removable passenger service equipment; and
- (3) Potable water and lavatory chemicals.

(b) *Maximum Zero Fuel Mass.* 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 Aeroplane Flight Manual limitations.

(c) *Maximum Structural Landing Mass.* The maximum permissible total aeroplane mass upon landing under normal circumstances.

(d) *Maximum Structural Take Off Mass.* The maximum permissible total aeroplane mass at the start of the take-off run.

(e) *Passenger classification.*

- (1) Adults, male and female, are defined as persons of an age of 12 years and above.
- (2) Children are defined as persons of an age of two years and above but who are less than 12 years of age.
- (3) Infants are defined as persons who are less than 2 years of age.

(f) *Traffic Load*. The total mass of passengers, baggage and cargo, including any non-revenue load.

CAR-OPS 2.610 Loading, mass and balance

An operator shall specify, in the Operations Manual, the principles and methods involved in the loading and in the mass and balance system that meet the requirements of CAR-OPS 2.605. This system must cover all types of intended operations.

CAR-OPS 2.615 Mass values for crew

(a) An operator shall use the following mass values to determine the dry operating mass:

- (1) Actual masses including any crew baggage; or
- (2) Standard masses, including hand baggage, of 85 kg for flight crewmembers and 75 kg for cabin crewmembers; or
- (3) Other standard masses acceptable to the Authority.

(b) An operator must correct the dry operating mass to account for any additional baggage. The position of this additional baggage must be accounted for when establishing the centre of gravity of the aeroplane.

CAR-OPS 2.620 Mass values for passengers and baggage

(a) An operator shall compute the mass of passengers and checked baggage using either the actual weighed mass of each person and the actual weighed mass of baggage or the standard mass values specified in Tables 1 to 3 below except where the number of passenger seats available is less than 10. In such cases passenger mass may be established by use of a verbal statement by or on behalf of each passenger and adding to it a predetermined constant to account for hand baggage and clothing.

The procedure specifying when to select actual or standard masses and the procedure to be followed when using verbal statements must be included in the Operations manual.

- (1) When asking each passenger for his/her mass (weight), specific constants should be added to account for hand baggage and clothing. These constants should be determined by the operator on the basis of studies relevant to his particular routes, etc. and should not be less than:

For clothing 4 kg; and

For hand baggage 6 kg.

- (2) Personnel boarding passengers on this basis should assess the passenger's stated mass and the mass of passengers' clothing and hand baggage to check that they are reasonable. Such personnel should have received instruction on assessing

these mass values. Where necessary, the stated mass and the specific constants should be increased so as to avoid gross inaccuracies.

(b) If determining the actual mass by weighing, an operator must ensure that passengers' personal belongings and hand baggage are included. Such weighing must be conducted immediately prior to boarding and at an adjacent location.

(c) If determining the mass of passengers using standard mass values, the standard mass values in Tables 1 below must be used. The standard masses include hand baggage and the mass of any infant below 2 years of age carried by an adult on one passenger seat. Infants occupying separate passenger seats must be considered as children for the purpose of this sub-paragraph.

(d) Mass values for passengers – 20 passenger seats or more

Where the total number of passenger seats available on an aeroplane is 20 or more, the standard masses of male and female in Table 1 are applicable. As an alternative, in cases where the total number of passenger seats available is 30 or more, the 'All Adult' mass values in Table 1 are applicable.

Table 1

Passenger seats:	20 and more		30 and more
	Male	Female	All adult
All flights	88 kg	70 kg	84 kg
Children	35 kg	35 kg	35 kg

(e) Mass values for passengers – 19 passenger seats or less.

(1) Where the total number of passenger seats available on an aeroplane is 19 or less, the standard masses in Table 2 are applicable.

(2) On flights where no hand baggage is carried in the cabin or where hand baggage is accounted for separately, 6 kg may be deducted from the above male and female masses. Articles such as an overcoat, an umbrella, a small handbag or purse, reading material or a small camera are not considered as hand baggage for the purpose of this sub-paragraph.

Table 2

Passenger seats	1 – 5	6 – 9	10 – 19
Male	104 kg	96 kg	92 kg
Female	86 kg	78 kg	74 kg
Children	35 kg	35 kg	35 kg

(f) Mass values for baggage

Where the total number of passenger seats available on the aeroplane is 20 or more the standard mass values given in Table 3 are applicable for each piece of checked baggage. For aeroplanes with 19 passenger seats or less, the actual mass of checked baggage, determined by weighing, must be used.

Table 3 – 20 or more passenger seats

Type of flight	Baggage standard mass
Domestic	11 kg
Intercontinental	15 kg
All other	13 kg

(g) On any flight identified as carrying a significant number of passengers whose masses, including hand baggage, are expected to exceed the standard passenger mass, an operator must determine the actual mass of such passengers by weighing or by adding an adequate mass increment.

(h) If standard mass values for checked baggage are used and a significant number of passengers check in baggage that is expected to exceed the standard baggage mass, an operator must determine the actual mass of such baggage by weighing or by adding an adequate mass increment.

(i) An operator shall ensure that a commander is advised when a non-standard method has been used for determining the mass of the load and that this method is stated in the mass and balance documentation.

CAR-OPS 2.625 Mass and balance documentation

(a) An operator shall establish mass and balance documentation prior to each flight specifying the load and its distribution. The mass and balance documentation must enable the commander to determine that the load and its distribution is such that the mass and balance limits of the aeroplane are not exceeded. The person preparing the mass and balance documentation must be named on the document. The person supervising the loading of the aeroplane must confirm by signature that the load and its distribution are in accordance with the mass and balance documentation. This document must be acceptable to the commander, his acceptance being indicated by countersignature or equivalent

(b) An operator must specify procedures for Last Minute Changes to the load.

(c) Subject to the approval of the Authority, an operator may use an alternative to the procedures required by paragraphs (a) and (b) above.

SUBPART K – INSTRUMENTS AND EQUIPMENT

The requirements of CAR-OPS 1 Subpart K are applicable, as well as applicable paragraphs of Appendix 1 to CAR-OPS 1.005.

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SUBPART L – COMMUNICATION AND NAVIGATION EQUIPMENT

The requirements of CAR-OPS 1 Subpart L are applicable, as well as applicable paragraphs of Appendix 1 to CAR-OPS 1.005.

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SUBPART M – AEROPLANE MAINTENANCE

This Subpart has been entirely withdrawn due to the implementation of CAR M

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SUBPART N – FLIGHT CREW

(a) The requirements of CAR-OPS 1 Subpart N are applicable, as well as applicable paragraphs of Appendix 1 to CAR-OPS 1.005.

(b) Alleviation of CAR-OPS 1.965(b) (2):

“The period of validity of an operator proficiency check shall be 12 calendar months in addition to the remainder of the month of issue. If issued within the final 3 calendar months of validity of a previous operator proficiency check, the period of validity shall extend from the date of issue until 12 calendar months from the expiry date of that previous operator proficiency check.”

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SUBPART O – CABIN CREW

The requirements of CAR-OPS 1 Subpart O are applicable

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SUBPART P – MANUALS

The requirements of CAR-OPS 1 Subpart P are applicable, as well as applicable paragraphs of Appendix 1 to CAR-OPS 1.005.

SUBPART Q – FLIGHT and DUTY TIME LIMITATIONS**CAR-OPS 2.1080 Flight time limitations**

No operator shall assign a crew member for flight time, and no crew member shall accept such an assignment, if the crew member's total flight time in all flights conducted under this CAR will, as a result, exceed

- (1) 900 hours in any 12 consecutive months;
- (2) 110 hours in any one calendar month.
- (3) where the crew member conducts single-pilot IFR flights, 8 hours in any 24 consecutive hours.

CAR-OPS 2.1085 Flight duty time limitations and rest periods

(a) Subject to CAR-OPS 2.1090 and CAR-OPS 2.1095, no operator shall assign a crew member for flight duty time, and no crew member shall accept such an assignment, if the flight crew member's flight duty time will, as a result, exceed

- (1) 14 consecutive hours in any 24 consecutive hours; or
 - (2) 15 consecutive hours in any 24 consecutive hours, where
 - (i) the crew member's total flight time in the previous 30 consecutive days does not exceed 70 hours, or
 - (ii) the rest period prior to the flight is at least 24 hours.
- (b) An operator shall ensure that, prior to any flight duty period, a crew member has completed a rest period at least as long as the duty period preceding or 11 hours, whichever is the greater plus any additional rest period required by this CAR.
- (c) the crew member's rest shall not be interrupted by the operator during the rest period.
- (d) A crew member shall use the rest periods referred to in subsection (b) to obtain the necessary rest and shall be adequately rested prior to reporting for flight duty.
- (e) Where a flight crew is augmented by the addition of at least one flight crew member, the division of duty and rest is balanced between the flight crew members and a flight relief facility is provided, flight duty time may be extended if:

- (1) where a flight relief facility seat is provided, the flight duty time may be extended to 17 consecutive hours, in which case the maximum flight deck duty time for any flight crew member shall be 12 hours;
- (2) where a flight relief facility bunk is provided, the flight duty time may be extended to 20 consecutive hours, in which case the maximum flight deck duty time for any flight crew member shall be 14 hours; and
- (3) the subsequent minimum rest period shall be at least equal to the length of the preceding flight duty time.

(f) Where a flight crew is augmented by the addition of at least one flight crew member in accordance with subsection (a), the total flight time of the flight or series of flights shall be logged by each flight crew member for the purposes of calculating the maximum flight times in CAR-OPS 2.1080.

CAR-OPS 2.1090 Split flight duty time

(a) Where flight duty time includes a rest period, flight duty time may be extended beyond the maximum flight duty time referred to in CAR-OPS 2. 1085 (a) by one-half the length of the rest period, to a maximum of 4 hours, if

- (1) the operator provides the crew member with advance notice of the extension of flight duty time; and
- (2) the operator provides the crew member with a rest period of at least 4 consecutive hours in suitable accommodation
- (3) the crew member's rest is not interrupted by the operator during the rest period.

(b) The minimum rest period following flight duty time referred to in subsection (a) shall be increased by an amount at least equal to the extension to the flight duty time.

CAR-OPS 2.1095 Unforeseen operational circumstances

Flight duty time may be extended beyond the maximum flight duty times referred to in CAR-OPS 2. 1085 (a) and CAR-OPS 2. 1090 (a) with a maximum of 2 hours if:

- (1) the pilot-in-command, after consultation with the other crew members, considers it safe to do so;
- (2) the flight duty time is extended as a result of unforeseen operational circumstances.

CAR-OPS 2.1100 Delayed reporting time

Where a crew member is notified of a delay in reporting time within the two hours preceding that reporting time and the delay is in excess of three hours, the crew member's flight duty time starts three hours after the original reporting time.

CAR-OPS 2.1105 Requirements for time free from duty

An operator shall provide each crew member with the following time free from all duty:

- (1) at least one period of 36 consecutive hours within each 7 consecutive days; or
- (2) at least one period of 3 consecutive calendar days within each 17 consecutive days.

CAR-OPS 2.1110 Crew positioning

Where a crew member is required by an operator to travel for the purpose of positioning after the completion of flight duty time, the operator shall provide the crew member with an additional rest period at least equal to one-half the time spent travelling that is in excess of crew member's maximum flight duty time.

Note:**Terminology**

For the purpose of this Subpart:

- (a) *Augmented flight crew* - A flight crew which comprises more than the minimum number required for the operation of the aircraft and in which each flight crew member can leave his post and be replaced by another appropriately qualified flight crew member..
- (b) *Duty* - Any task that a crewmember is required to carry out and which is associated with the business of an AOC holder.
- (c) *Flight duty period (FDP)* - A period which commences when an operating crewmember is required to report for a duty period that includes a flight and which finishes at the end of the block time on the final flight on which the crew member is an operating crew member.
- (d) *Unforeseen operational circumstances delays* – Delays that are beyond the control of the operator such as those that would be caused by weather, aircraft equipment malfunction, and air traffic control delays. It would not include late arriving passengers, late food service, late fuel trucks, delays in loading baggage-freight-mail, or similar events.
- (e) *Positioning* - The transferring of a crewmember from place to place, excluding “travelling” as defined below, at the behest of an operator.

(f) *Rest period* - An uninterrupted and defined period of time during which a crewmember is free of all duties and/or standby.

(g) *Split duty* - A flight duty period, which consists of two duties separated by a break.

(h) *Suitable accommodation* - A suitably furnished bedroom, with single occupancy if required by the crew member, which is subject to minimum noise, is well ventilated and should have the facility to control the levels of light and temperature.

SUBPART R – TRANSPORT OF DANGEROUS GOODS BY AIR

The requirements of CAR-OPS 1 Subpart R are applicable.

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SUBPART S – SECURITY

The requirements of CAR-OPS 1 Subpart S are applicable, as well as applicable paragraphs of Appendix 1 to CAR-OPS 1.005.

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