



MALDIVES CIVIL AVIATION AUTHORITY
Republic of Maldives

AIR SAFETY CIRCULAR

ASC AIR OPS - 01

Additional Requirements for Air Operations

Issue 2-0, 01 May 2025

[ICAO Annex 6 -1- 40A; 6 -2 - 34A & 6 -3 - 20A]

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AIR SAFETY CIRCULAR

ASC AIR OPS - 01

Additional Requirements for Air Operations

1 Regulatory Compliance

- 1.1 Compliance with this Circular is mandatory for all relevant Maldivian Air Operators.

2 Related Regulations

- 2.1 Related regulations include MCAR Aircrew, and MCAR Air Operations.

3 Purpose

- 3.1 The purpose of this Circular is to establish additional minimum requirements that shall be met and satisfied by Air Operators.

4 Commercial Air Transport — Aeroplanes

CHAPTER 1. Definitions

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CHAPTER 2. Applicability

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CHAPTER 3. General

3.1 COMPLIANCE WITH LAWS, REGULATIONS AND PROCEDURES

- 3.1.4 Responsibility for operational control shall be delegated only to the pilot-in-command and to a flight operations officer/flight dispatcher if the operator's approved method of control and supervision of flight operations requires the use of flight operations officer/flight dispatcher personnel.

- 3.1.5 If an emergency situation which endangers the safety of the aeroplane or persons becomes known first to the flight operations officer/flight dispatcher, action by that person shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.

3.2 COMPLIANCE BY A FOREIGN OPERATOR WITH LAWS, REGULATIONS AND PROCEDURES OF A STATE

- 3.2.1 When a case of non-compliance or suspected non-compliance by a foreign operator with laws, regulations and procedures applicable within Maldives, or a similar serious safety issue with that operator, CAA shall immediately notify the operator and, if the

issue warrants it, the State of the Operator. Where the State of the Operator and the State of Registry are different, such notification shall also be made to the State of Registry, if the issue falls within the responsibilities of that State and warrants a notification.

- 3.2.2 In the case of notification to States as specified in 3.2.1, if the issue and its resolution warrant it, CAA shall engage in consultations with the State of the Operator and the State of Registry, as applicable, concerning the safety standards maintained by the operator.

3.5 AIRCRAFT TRACKING
(Applicable on and after 8 November 2018)

- 3.5.1 *The operator shall establish an aircraft tracking capability to track aeroplanes throughout its area of operations.*

- 3.5.2 *The operator should track the position of an aeroplane through automated reporting at least every 15- minutes for the portion(s) of the in-flight operation(s) under the following conditions:*

- a) the aeroplane has a maximum certificated take-off mass of over 27 000 kg and a seating capacity greater than 19; and*
- b) where an ATS unit obtains aeroplane position information at greater than 15-minute intervals.*

- 3.5.3 *The operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) that is planned in an oceanic area(s) under the following conditions:*

- a) the aeroplane has a maximum certificated take-off mass of over 45 500 kg and a seating capacity greater than 19; and*
- b) where an ATS unit obtains aeroplane position information at greater than 15-minute intervals.*

- 3.5.4 *Notwithstanding the provisions in 3.5.2 and 3.5.3, the State of the Operator may, based on the results of an approved risk assessment process implemented by the operator, allow for variations to automated reporting intervals. The process shall demonstrate how risks to the operation, resulting from such variations, can be managed and shall include at least the following:*

- a) capability of the operator's operational control systems and processes, including those for contacting ATS units;*
- b) overall capability of the aeroplane and its systems;*
- c) available means to determine the position of, and communicate with, the aeroplane;*
- d) frequency and duration of gaps in automated reporting;*
- e) human factors consequences resulting from changes to flight crew procedures; and*
- f) specific mitigation measures and contingency procedures..*

CHAPTER 4. Flight operations

4.2.11 Crew

- 4.2.11.2 For each flight of an aeroplane above 15 000 m (49 000 ft), the operator shall maintain records so that the total cosmic radiation dose received by each crew member over a period of 12 consecutive months can be determined.

4.3 Flight preparations

- 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; or
- c) for aeroplanes engaged in extended diversion time operations (EDTO) where an alternate aerodrome meeting the distance criteria of a) or b) is not available, the first available alternate aerodrome located within the distance of the operator's specified maximum diversion time considering the actual take-off mass.

- 4.3.6.3 The pre-flight calculation of usable fuel required shall include:

- a) *taxi fuel*, which shall be the amount of fuel expected to be consumed before take-off, taking into account local conditions at the departure aerodrome and auxiliary power unit (APU) fuel consumption;
- b) *trip fuel*, which shall be the amount of fuel required to enable the aeroplane to fly from take-off, or the point of inflight re-planning, until landing at the destination aerodrome taking into account the operating conditions of 4.3.6.2 b);
- c) *contingency fuel*, which shall be the amount of fuel required to compensate for unforeseen factors. It shall be five percent of the planned trip fuel or of the fuel required from the point of in-flight re-planning based on the consumption rate used to plan the trip fuel but, in any case, shall not be lower than the amount required to fly for five minutes at holding speed at 450 m (1 500 ft) above the destination aerodrome in standard conditions;

Note.— Unforeseen factors are those which could have an influence on the fuel consumption to the destination aerodrome, such as deviations of an individual aeroplane from the expected fuel consumption data, deviations from forecast meteorological conditions, extended delays and deviations from planned routings and/or cruising levels.

- d) *destination alternate fuel*, which shall be:
 - 1) where a destination alternate aerodrome is required, the amount of fuel required to enable the aeroplane to:
 - i) perform a missed approach at the destination aerodrome;
 - ii) climb to the expected cruising altitude;
 - iii) fly the expected routing;
 - iv) descend to the point where the expected approach is initiated; and
 - v) conduct the approach and landing at the destination alternate aerodrome; or
 - 2) where two destination alternate aerodromes are required, the amount of fuel, as calculated in 4.3.6.3 d) 1), required to enable the aeroplane to proceed to the

destination alternate aerodrome which requires the greater amount of alternate fuel; or

3) where a flight is operated without a destination alternate aerodrome, the amount of fuel required to enable the aeroplane to fly for 15 minutes at holding speed at 450 m (1 500 ft) above destination aerodrome elevation in standard conditions; or

4) where the aerodrome of intended landing is an isolated aerodrome:

i) for a reciprocating engine aeroplane, the amount of fuel required to fly for 45 minutes plus 15 per cent of the flight time planned to be spent at cruising level, including final reserve fuel, or two hours, whichever is less; or

ii) for a turbine-engined aeroplane, the amount of fuel required to fly for two hours at normal cruise consumption above the destination aerodrome, including final reserve fuel;

e) *final reserve fuel*, which shall be the amount of fuel calculated using the estimated mass on arrival at the destination alternate aerodrome, or the destination aerodrome when no destination alternate aerodrome is required:

1) for a reciprocating engine aeroplane, the amount of fuel required to fly for 45 minutes, under speed and altitude conditions specified by the State of the Operator; or

2) for a turbine-engined aeroplane, the amount of fuel required to fly for 30 minutes at holding speed at 450 m (1 500 ft) above aerodrome elevation in standard conditions;

f) *additional fuel*, which shall be the supplementary amount of fuel required if the minimum fuel calculated in accordance with 4.3.6.3 b), c), d) and e) is not sufficient to:

1) allow the aeroplane to descend as necessary and proceed to an alternate aerodrome in the event of engine failure or loss of pressurization, whichever requires the greater amount of fuel based on the assumption that such a failure occurs at the most critical point along the route;

i) fly for 15 minutes at holding speed at 450 m (1 500 ft) above aerodrome elevation in standard conditions; and

ii) make an approach and landing;

2) allow an aeroplane engaged in EDTO to comply with the EDTO critical fuel scenario as established by the State of the Operator;

3) meet additional requirements not covered above;

Note 1.— Fuel planning for a failure that occurs at the most critical point along a route (4.3.6.3 f) 1)) may place the aeroplane in a fuel emergency situation based on 4.3.7.2.

Note 2.— Guidance on EDTO critical fuel scenarios is contained in the Extended Diversion Time Operations (EDTO) Manual (Doc 10085).

g) *discretionary fuel*, which shall be the extra amount of fuel to be carried at the discretion of the pilot-in-command.

4.3.10 Time capability of cargo compartment fire suppression system

4.3.10.1 All flights should be planned so that the diversion time to an aerodrome where a safe landing could be made does not exceed the cargo compartment fire suppression time capability of the aeroplane, when one is identified in the relevant aeroplane documentation, reduced by an operational safety margin that may be specified by MCAA.

Note 1.— Cargo compartment fire suppression time capabilities will be identified in the relevant aeroplane documentation when they are to be considered for the operation.

Note 2.— Fifteen minutes is an operational safety margin commonly retained for that purpose.

Note 3.— Refer to 4.7 of this ASC for considerations of time capability of cargo compartment fire suppression systems for aeroplanes engaged in EDTO.

4.4 In-flight procedures

4.4.8 Instrument flight procedures

4.4.8.1 One or more instrument approach procedures designed to support instrument approach operations shall be approved and promulgated by Maldives if the aerodrome is to serve each instrument runway or aerodrome utilized for instrument flight operations.

4.4.11 Aeroplane operating procedures for landing performance

An approach to land shall not be continued below 300 m (1 000 ft) above aerodrome elevation unless the pilot-in-command is satisfied that, with the runway surface condition information available, the aeroplane performance information indicates that a safe landing can be made.

4.6 DUTIES OF FLIGHT OPERATIONS OFFICER/FLIGHT DISPATCHER

4.6.1 A flight operations officer/flight dispatcher in conjunction with a method of control and supervision of flight operations shall:

- a) assist the pilot-in-command in flight preparation and provide the relevant information;
- b) assist the pilot-in-command in preparing the operational and ATS flight plans, sign when applicable and file the ATS flight plan with the appropriate ATS unit;
- c) furnish the pilot-in-command while in flight, by appropriate means, with information which may be necessary for the safe conduct of the flight; and
- d) notify the appropriate ATS unit when the position of the aeroplane cannot be determined by an aircraft tracking capability and attempts to establish communication are unsuccessful.

4.6.2 In the event of an emergency, a flight operations officer/flight dispatcher shall:

- a) initiate such procedures as outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and
- b) convey safety-related information to the pilot-in-command that may be necessary for the safe conduct of the flight, including information related to any amendments to the flight plan that become necessary in the course of the flight.

4.7 ADDITIONAL REQUIREMENTS FOR OPERATIONS BY AEROPLANES WITH MORE THAN TWO TURBINE ENGINES BEYOND 60 MINUTES TO AN EN-ROUTE ALTERNATE AERODROME INCLUDING EXTENDED DIVERSION TIME OPERATIONS (EDTO)

4.7.1 Requirements for operations beyond 60 minutes to an en-route alternate aerodrome

4.7.1.1 Operators conducting operations beyond 60 minutes from a point on a route to an en-route alternate aerodrome shall ensure that:

a) for all aeroplanes with more than two engines:

- 1) en-route alternate aerodromes are identified; and
- 2) the most up-to-date information is provided to the flight crew on identified en-route alternate aerodromes, including operational status and meteorological conditions;

b) for aeroplanes with more than two turbine engines, the most up-to-date information provided to the flight crew indicates that conditions at identified en-route alternate aerodromes will be at or above the operator's established aerodrome operating minima for the operation at the estimated time of use.

4.7.1.2 In addition to the requirements in 4.7.1.1, all operators shall ensure that the following are taken into account and provide the overall level of safety intended by the provisions of MCAR Air Operations and ASC AIR OPS - 01:

- a) operational control and flight dispatch procedures;
- b) operating procedures; and
- c) training programmes.

4.7.2 Requirements for extended diversion time operations (EDTO)

4.7.2.1 Unless the CAA has issued a specific approval for EDTO, an aeroplane with two or more turbine engines shall not be operated on a route where the diversion time to an en-route alternate aerodrome from any point on the route, calculated in ISA and still-air conditions at the one-engine-inoperative cruise speed for aeroplanes with two turbine engines and at the all engines operating cruise speed for aeroplanes with more than two turbine engines, exceeds a threshold time established for such operations by that State. The specific approval shall identify the applicable threshold time established for each particular aeroplane and engine combination.

4.7.2.2 On issuing the specific approval for extended diversion time operations, the State of the Operator shall specify the maximum diversion time granted to the operator for each particular aeroplane and engine combination.

4.7.2.3 When specifying the appropriate maximum diversion time for the operator of a particular aeroplane type engaged in extended diversion time operations, the State of the Operator shall ensure that:

- a) *for all aeroplanes*: the operator has in place procedures to prevent the aeroplane being dispatched on a route with diversion times beyond the capability of EDTO significant system time limitation, if any, indicated in the aeroplane flight manual (directly or by reference); and
- b) *for aeroplanes with two turbine engines*: the aeroplane is EDTO certified.

4.7.2.3.1 Notwithstanding the provisions in 4.7.2.3 a), the CAA may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve operations beyond the time limits of the most time-limited system. The specific safety risk assessment shall include at least the:

- a) capabilities of the operator;
- b) overall reliability of the aeroplane;
- c) reliability of each time-limited system;
- d) relevant information from the aeroplane manufacturer; and
- e) specific mitigation measures.

4.7.2.4 For aeroplanes engaged in EDTO, the additional fuel required by 4.3.6.3 f) 2) shall include the fuel necessary to comply with the EDTO critical fuel scenario as established by the CAA.

4.7.2.5 A flight shall not proceed beyond the threshold time in accordance with 4.7.2.1 unless the identified en-route alternate aerodromes have been re-evaluated for availability and the most up-to-date information indicates that, during the estimated time of use, conditions at those aerodromes will be at or above the operator's established aerodrome operating minima for the operation. If any conditions are identified that would preclude a safe approach and landing at that aerodrome during the estimated time of use, an alternative course of action shall be determined.

4.7.2.6 When specifying maximum diversion times for aeroplanes with two turbine engines, the CAA ensures that the following are taken into account in providing the overall level of safety intended by the provisions of MCAR-CAMO:

- a) reliability of the propulsion system;
- b) airworthiness certification for EDTO of the aeroplane type; and
- c) EDTO maintenance programme.

4.9 ADDITIONAL REQUIREMENTS FOR SINGLE PILOT OPERATIONS UNDER THE INSTRUMENT FLIGHT RULES (IFR) OR AT NIGHT

4.9.2 An aeroplane shall not be operated under the IFR or at night by a single pilot unless:

- a) the flight manual does not require a flight crew of more than one;
- b) the aeroplane is propeller-driven;
- c) the maximum approved passenger seating configuration is not more than nine;
- d) the maximum certificated take-off mass does not exceed 5 700 kg;
- e) the aeroplane is equipped as described in MCAR-CAT CAT.IDE.A135, CAT.IDE.A 325 and CAT.IDE.A 130 (j) and
- f) the pilot-in-command has satisfied requirements of experience, training, checking and recency described in MCAR-ORO, ORO.FC.200 (C.2), ORO.FC.202, FCL.060 (b.1)

CHAPTER 5. Aeroplane performance operating limitations

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CHAPTER 6. Aeroplane instruments, equipment and flight documents

6.3.2 Cockpit voice recorders and cockpit audio recording systems

6.3.2.1.2 *All turbine-engined aeroplanes of a maximum certificated take-off mass of 5 700 kg or less for which the individual certificate of airworthiness is first issued on or after 1 January 2016 and required to be operated by more than one pilot should be equipped with either a CVR or a CARS.*

6.3.4 Flight recorders — general

6.3.4.1 *Applicability*

6.3.4.1.1 All aeroplanes of a maximum take-off mass of over 27 000 kg for which the application for type certification is submitted to a Contracting State on or after 1 January 2023 shall be equipped with a crash-protected flight recorder which shall record the information displayed to the flight crew from electronic displays, as well as the operation of switches and selectors by the flight crew as defined in Appendix 8.

6.3.4.2 The minimum flight crew-machine interface recording duration shall be at least for the last two hours.

6.3.4.2.1 Flight recorders shall not be switched off during flight time.

6.3.4.2.2 To preserve flight recorder records, flight recorders shall be deactivated upon completion of flight time following an accident or incident. The flight recorders shall not be reactivated before their disposition as determined in accordance with MCAR 12.

6.3.4.4 *Flight recorder electronic documentation*

The documentation requirement concerning FDR and ADRS parameters provided by operators to accident investigation authorities should be in electronic format and take account of industry specifications.

6.3.4.5 *Combination recorders*

6.3.4.5.1 *All aeroplanes of a maximum certificated take-off mass of over 5 700 kg for which the application for type certification is submitted on or after 1 January 2016, and which are required to be equipped with both a CVR and an FDR, should be equipped with two combination recorders (FDR/CVR).*

6.3.4.5.2 All aeroplanes of a maximum certificated take-off mass of over 15 000 kg for which the application for type certification is submitted on or after 1 January 2016, and which are required to be equipped with both a CVR and an FDR, shall be equipped with two combination recorders (FDR/CVR). One recorder shall be located as close to the cockpit as practicable and the other recorder located as far aft as practicable.

6.3.4.5.3 *All aeroplanes of a maximum certificated take-off mass over 5 700 kg, required to be equipped with an FDR and a CVR, may alternatively be equipped with two combination recorders (FDR/CVR).*

6.3.4.5.4 *All multi-engined turbine-powered aeroplanes of a maximum certificated take-off mass of 5 700 kg or less, required to be equipped with an FDR and/or a CVR, may alternatively be equipped with one combination recorder (FDR/CVR).*

6.3.5.1 Flight recorders construction and installation - Flight recorders shall be constructed, located and installed so as to provide maximum practical protection for the recordings in order that the recorded information may be preserved, recovered and transcribed. Flight recorders shall meet the prescribed crashworthiness and fire protection specifications.

6.3.5.4 Flight recorder electronic documentation - *The documentation requirement concerning FDR and ADRS parameters provided by operators to accident investigation authorities should be in electronic format and take account of industry specifications.*

Note.— Industry specification for documentation concerning flight recorder parameters may be found in the ARINC 647A, Flight Recorder Electronic Documentation, or equivalent document.

6.3.5.5.1 Combination recorders - All Aeroplanes of a maximum certificated take-off mass of over 5 700 kg for which the application for type certification is submitted to CAA on or after 1 January 2016, and which are required to be equipped with both a CVR and an FDR, should be equipped with two combination recorders (FDR/CVR).

6.5.2.1 All landplanes on flights over water shall carry one life jacket or equivalent individual floatation device for each person onboard, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided,
a) when flying over water and at a distance of more than 93 km (50 NM) away from the shore, in the case of one engine inoperative as mentioned in MCAR-CAT CAT.POL.A205(c) (6) or in the case of two engines inoperative as mentioned in MCAR-CAT CAT.POLA 215 (c).

6.12 ALL AEROPLANES OPERATED ABOVE 15 000 M (49 000 FT) — RADIATION INDICATOR

All aeroplanes intended to be operated above 15 000 m (49 000 ft) shall carry equipment to measure and indicate continuously the dose rate of total cosmic radiation being received (i.e. the total of ionizing and neutron radiation of galactic and

solar origin) and the cumulative dose on each flight. The display unit of the equipment shall be readily visible to a flight crew member.

6.18 LOCATION OF AN AEROPLANE IN DISTRESS

6.18.1 *All aeroplanes of a maximum certificated take-off mass of over 27 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2021, shall autonomously transmit information from which a position can be determined by the operator at least once every minute, when in distress.*

6.18.2 *All aeroplanes of a maximum certificated take-off mass of over 5 700 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2021, should autonomously transmit information from which a position can be determined at least once every minute, when in distress.*

6.18.3 The operator shall make position information of a flight in distress available to the appropriate organizations.

6.22 TURBO-JET AEROPLANES — FORWARD-LOOKING WIND SHEAR WARNING SYSTEM

6.22.1 *All turbo-jet aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers should be equipped with a forward-looking wind shear warning system.*

6.22.2 *A forward-looking wind shear warning system should be capable of providing the pilot with a timely aural and visual warning of wind shear ahead of the aircraft, and the information required to permit the pilot to safely commence and continue a missed approach or go-around or to execute an escape manoeuvre if necessary. The system should also provide an indication to the pilot when the limits specified for the certification of automatic landing equipment are being approached, when such equipment is in use.*

6.25 ELECTRONIC FLIGHT BAGS (EFBS)

6.25.1 EFB equipment

Where portable EFBs are used on board an aeroplane, the operator shall ensure that they do not affect the performance of the aeroplane systems, equipment or the ability to operate the aeroplane.

6.25.2 EFB functions

6.25.2.1 Where EFBs are used on board an aeroplane the operator shall:

- a) assess the safety risk(s) associated with each EFB function;
- b) establish and document the procedures for the use of, and training requirements for, the device and each EFB function; and
- c) ensure that, in the event of an EFB failure, sufficient information is readily available to the flight crew for the flight to be conducted safely.

6.25.2.2 MCAA shall approve the operational use of EFB functions to be used for the safe operation of aeroplanes.

6.25.3 EFB operational approval

In approving the use of EFBs, MCAA shall ensure that:

- a) the EFB equipment and its associated installation hardware, including interaction with aeroplane systems if applicable, meet the appropriate airworthiness certification requirements;
- b) the operator has assessed the safety risks associated with the operations supported by the EFB function(s);
- c) the operator has established requirements for redundancy of the information (if appropriate) contained in and displayed by the EFB function(s);
- d) the operator has established and documented procedures for the management of the EFB function(s) including any database it may use; and
- e) the operator has established and documented the procedures for the use of, and training requirements for, the EFB and the EFB function(s).

6.26 TURBINE AEROPLANE - RUNWAY OVERRUN AWARENESS AND ALERTING SYSTEM (ROAAS)

6.26.1 All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 2026, shall be equipped with a runway overrun awareness and alerting system (ROAAS).

Note.— Guidance material for ROAAS design is contained in EUROCAE ED-250, Minimum Operational Performance Specification (MOPS) for Runway Overrun Awareness and Alerting Systems (ROAAS), or equivalent documents.

CHAPTER 7. Aeroplane communication, navigation and surveillance equipment

7.2 NAVIGATION EQUIPMENT

7.2.9 A minimum of two aeroplanes of each aircraft type grouping of the operator shall establish their height-keeping performance monitoring procedures, at least once every two years or within intervals of 1000 flight hours per aeroplane, whichever period is longer. If the operator aircraft type grouping consists of a single aeroplane, monitoring of that aeroplane shall be accomplished within the specified period.

CHAPTER 8. Aeroplane maintenance

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CHAPTER 9. Aeroplane flight crew

CHAPTER 10. Flight operations officer/flight dispatcher

- 10.1 When the State of the Operator requires that a flight operations officer/flight dispatcher, employed in conjunction with an approved method of control and supervision of flight operations, be licensed, that flight operations officer/flight dispatcher shall be licensed in accordance with the provisions of ASC AIRCREW - 01.
- 10.2 In accepting proof of qualifications other than the option of holding of a flight operations officer/flight dispatcher licence, in accordance with the approved method of control and supervision of flight operations, shall require that, as a minimum, such persons meet the requirements specified in ASC AIRCREW - 01 for the flight operations officer/flight dispatcher licence.

- 10.3 A flight operations officer/flight dispatcher shall not be assigned to duty unless that person has:
- a) satisfactorily completed the operator-specific training course that addresses all the specific components of its approved method of control and supervision of flight operations specified in 4.2.1.3;
 - b) made, within the preceding 12 months, at least a one-way qualification flight in the flight crew compartment of an aeroplane over any area for which that individual is authorized to exercise flight supervision. The flight should include landings at as many aerodromes as practicable;
 - c) demonstrated to the operator a knowledge of:
 - 1) the contents of the operations manual;
 - 2) the radio equipment in the aeroplanes used; and
 - 3) the navigation equipment in the aeroplanes used;
 - d) demonstrated to the operator a knowledge of the following details concerning operations for which the officer is responsible and areas in which that individual is authorized to exercise flight supervision:
 - 1) the seasonal meteorological conditions and the sources of meteorological information;
 - 2) the effects of meteorological conditions on radio reception in the aeroplanes used;
 - 3) the peculiarities and limitations of each navigation system which is used by the operation; and
 - 4) the aeroplane loading instructions;
 - e) demonstrated to the operator knowledge and skills related to human performance relevant to dispatch duties; and
 - f) demonstrated to the operator the ability to perform the duties specified for the flight operations officer/flight dispatcher.
- 10.4 *A flight operations officer/flight dispatcher assigned to duty should maintain complete familiarization with all features of the operation which are pertinent to such duties, including knowledge and skills related to human performance.*
- 10.5 *A flight operations officer/flight dispatcher should not be assigned to duty after 12 consecutive months of absence from such duty, unless the provisions of 10.3 are met.*

CHAPTER 11. Manuals, logs and records

11.4 JOURNEY LOG BOOK

11.4.3 Completed journey log book should be retained to provide a continuous record of the last six months' operations.

11.6 FLIGHT RECORDER RECORDS

11.6 The operator shall ensure, to the extent possible, in the event the aeroplane becomes involved in an accident or incident, the preservation of all related flight recorder records and, if necessary, the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with MCAR 13A.

CHAPTER 12. Cabin crew

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CHAPTER 13. Security

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CHAPTER 14. Dangerous goods

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CHAPTER 15. Cargo compartment safety

15.1 TRANSPORT OF ITEMS IN THE CARGO COMPARTMENT

15.1.1 The operator establishes policies and procedures for the transport of items in the cargo compartment, which include the conduct of a specific safety risk assessment. The risk assessment shall include at least the:

- a) hazards associated with the properties of the items to be transported;
- b) capabilities of the operator;
- c) operational considerations (e.g. area of operations, diversion time);
- d) capabilities of the aeroplane and its systems (e.g. cargo compartment fire suppression capabilities);
- e) containment characteristics of unit load devices;
- f) packing and packaging;
- g) safety of the supply chain for items to be transported; and
- h) quantity and distribution of dangerous goods items to be transported.

15.2 FIRE PROTECTION

15.2.1 The elements of the cargo compartment(s) fire protection system, as approved by the State of Design or State of Registry, and a summary of the demonstrated cargo compartment fire protection certification standards, shall be provided in the aeroplane flight manual or other documentation supporting the operation of the aeroplane.

15.2.2 The Operator shall establish policies and procedures that address the items to be transported in the cargo compartment. These shall ensure, to a reasonable certainty, that in the event of a fire involving those items, it can be detected and sufficiently suppressed or contained by the elements of the aeroplane design associated with cargo compartment fire protection, until the aeroplane makes a safe landing.

5 General Aviation – Aeroplanes

CHAPTER 1.1 Definitions

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CHAPTER 1.2 Applicability

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SECTION 2. GENERAL AVIATION OPERATIONS

CHAPTER 2.1 General

2.2.4.7 In-flight fuel management

2.2.4.7.1 The pilot-in-command shall monitor the amount of usable fuel remaining on board to ensure it is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining.

2.2.4.7.2 The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome, or other air traffic delays, may result in landing with less than the planned final reserve fuel.

2.2.4.7.3 The pilot-in-command shall declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL, when the calculated usable fuel estimated to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

2.2.4.8 Instrument approach procedures

2.2.4.8.1 One or more instrument approach procedures designed to support instrument approach operations shall be approved and promulgated by Maldives if the aerodrome is to serve each instrument runway or aerodrome utilized for instrument flight operations.

2.2.4.8.2 Aeroplanes operated in accordance with the instrument flight rules shall comply with the instrument approach procedures approved.

CHAPTER 2.3 Aeroplane performance operating limitations

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CHAPTER 2.4 Aeroplane instruments, equipment and flight documents

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CHAPTER 2.5 Aeroplane communication, navigation and surveillance equipment

2.5.3 Surveillance equipment

2.5.3.1 An aeroplane shall be provided with surveillance equipment which will enable it to operate in accordance with the requirements of air traffic services.

2.5.3.2 For operations where surveillance equipment is required to meet an RSP specification for performance-based surveillance (PBS), an aeroplane shall, in addition to the requirements specified in 2.5.3.1:

- a) be provided with surveillance equipment which will enable it to operate in accordance with the prescribed RSP specification(s);
- b) have information relevant to the aeroplane RSP specification capabilities listed in the flight manual or other aeroplane documentation approved by the State of Design or State of Registry; and
- c) where the aeroplane is operated in accordance with a MEL, have information relevant to the aeroplane RSP specification capabilities included in the MEL.

2.5.3.3 MCAA shall establish criteria for operations where an RSP specification for PBS has been prescribed.

2.5.3.4 In establishing criteria for operations where an RSP specification for PBS has been prescribed, the State of Registry shall require that the operator/owner establish:

- a) normal and abnormal procedures, including contingency procedures;
- b) flight crew qualification and proficiency requirements, in accordance with appropriate RSP specifications;
- c) a training programme for relevant personnel consistent with the intended operations; and
- d) appropriate maintenance procedures to ensure continued airworthiness, in accordance with appropriate RSP specifications.

2.5.3.5 MCAA shall ensure that, in respect of those aeroplanes mentioned in 2.5.3.2, adequate provisions exist for:

- a) receiving the reports of observed surveillance performance issued by monitoring programmes established in accordance with ICAO Annex 11, Chapter 3, 3.3.5.2; and
- b) taking immediate corrective action for individual aircraft, aircraft types or operators, identified in such reports as not complying with the RSP specification.

CHAPTER 2.6 Aeroplane maintenance

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CHAPTER 2.7 Aeroplane flight crew

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CHAPTER 2.8 Manuals, logs and records

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CHAPTER 2.9 Security

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SECTION 3. LARGE AND TURBOJET AEROPLANES

CHAPTER 3.1 Applicability

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CHAPTER 3.2 Corporate aviation operations

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CHAPTER 3.3 General

3.3.2 Safety management

3.3.2.1 Recordings or transcripts of CVR, CARS, Class A AIR and Class A AIRS shall not be used for purposes other than the investigation of an accident or incident as per MCAR 12 except where the recordings or transcripts:

- a) are related to a safety-related event identified in the context of a safety management system; are restricted to the relevant portions of a de-identified transcript of the recording; and are subject to the protections accorded by ICAO Annex 19;
- b) are sought for use in criminal proceedings not related to an event involving an accident or incident investigation and are subject to the protections accorded by ICAO Annex 19; or
- c) are used for inspections of flight recorder systems.

3.3.2.2 Recordings or transcripts of FDR, ADRS as well as Class B and Class C AIR and AIRS shall not be used for purposes other than the investigation of an accident or incident as per MCAR 12, except where the recordings or transcripts are subject to the protections accorded by ICAO Annex 19 and:

- a) are used by the operator for airworthiness or maintenance purposes;
- b) are sought for use in proceedings not related to an event involving an accident or incident investigation;
- c) are de-identified; or
- d) are disclosed under secure procedures.

CHAPTER 3.4 Flight operations

3.4.3.6.3 The pilot-in-command shall request delay information from ATC when unanticipated circumstances may result in landing at the destination aerodrome with less than the final reserve fuel plus any fuel required to proceed to an alternate aerodrome or the fuel required to operate to an isolated aerodrome.

3.4.3.6.4 The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than the planned final reserve fuel.

3.4.3.6.5 The pilot-in-command shall declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL when the calculated usable fuel estimated to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

3.4.4.5 Aeroplane operating procedures for landing performance

An approach to land shall not be continued below 300 m (1 000 ft) above aerodrome elevation unless the pilot-in-command is satisfied that, with the runway surface condition information available, the aeroplane performance information indicates that a safe landing can be made.

CHAPTER 3.5 Aeroplane performance operating limitations

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CHAPTER 3.6 Aeroplane instruments, equipment and flight documents

3.6.3.2.2 Duration of CVR

3.6.3.2.2.1 All aeroplanes of a maximum certificated take-off mass of over 27 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2021 shall be equipped with a CVR capable of retaining the information recorded during at least the last twenty-five hours of its operation.

CHAPTER 3.7 Aeroplane communication, navigation and surveillance equipment

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CHAPTER 3.8 Aeroplane maintenance

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CHAPTER 3.9 Aeroplane flight crew

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CHAPTER 3.10 Flight operations officer/flight dispatcher

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CHAPTER 3.11 Manuals, logs and records

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CHAPTER 3.12 Cabin crew

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CHAPTER 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 5 700 kg, establishes, implements and maintains a written operator security programme that meets the requirements of the national civil aviation security programme of Maldives.

6 Operations - Helicopters

CHAPTER 1. Definitions

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CHAPTER 2. Applicability

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SECTION II. INTERNATIONAL COMMERCIAL AIR TRANSPORT

CHAPTER 1. General

1.3 SAFETY MANAGEMENT

- 1.3.1 *The operator of a helicopter of a certified take-off mass in excess of 7 000 kg or having a passenger seating configuration of more than 9 and fitted with a flight data recorder should establish and maintain a flight data analysis programme as part of its safety management system.*
- 1.3.2 A flight data analysis programme shall be non-punitive and contain adequate safeguards to protect the source(s) of the data.
- 1.3.3 The operator shall establish a flight safety documents system, for the use and guidance of operational personnel, as part of its safety management system.

CHAPTER 2. Flight operations

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CHAPTER 3. Helicopter performance operating limitations

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CHAPTER 4. Helicopter instruments, equipment and flight documents

4.8 ALL HELICOPTERS ON HIGH ALTITUDE FLIGHTS

- 4.8.3 A helicopter intended to be operated at flight altitudes at which the atmospheric pressure is less than 376 hPa, or which, if operated at flight altitudes at which the atmospheric pressure is more than 376 hPa which cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hPa, and for which the individual certificate of airworthiness was issued on or after 9 November 1998, shall be provided with automatically deployable oxygen equipment to satisfy the requirements of 2.3.8.2. The total number of oxygen dispensing units shall exceed the number of passenger and cabin crew seats by at least 10 per cent.
- 4.15 VIBRATION HEALTH MONITORING SYSTEM
- A helicopter which has a maximum certificated take-off mass in excess of 3 175 kg or a maximum passenger seating configuration of more than 9 should be equipped with a vibration health monitoring system.*

CHAPTER 5. Helicopter communication, navigation and surveillance equipment

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CHAPTER 6. Helicopter maintenance

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CHAPTER 7. Helicopter flight crew

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CHAPTER 8. Flight operations officer/flight dispatcher

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CHAPTER 9. Manuals, logs and records

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CHAPTER 10. Cabin crew

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CHAPTER 11. Security

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SECTION III. INTERNATIONAL GENERAL AVIATION

CHAPTER 1. General

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CHAPTER 2. Flight operations

2.9 IN-FLIGHT FUEL MANAGEMENT

- 2.9.1 The pilot-in-command shall monitor the amount of usable fuel remaining on board to ensure it is not less than the fuel required to proceed to a landing site where a safe landing can be made with the planned final reserve fuel remaining.
- 2.9.2 The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific landing site, the pilot calculates that any change to the existing clearance to that landing site, or other air traffic delays, may result in landing with less than the planned final reserve fuel.
- 2.9.3 The pilot-in-command shall declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL, when the usable fuel estimated to be available upon landing at the nearest landing site where a safe landing can be made is less than the required final reserve fuel in compliance with 2.8.

2.17 INSTRUMENT FLIGHT PROCEDURES

- 2.17.1 One or more instrument approach procedures designed to support instrument approach operations shall be approved and promulgated by Maldives if the heliport is located, or by the State which is responsible for the heliport when located outside the territory of Maldives, to serve each final approach and take-off area or heliport utilized for instrument flight operations.

- 2.17.2 All helicopters operated in accordance with IFR shall comply with the instrument approach procedures approved by Maldives in all heliports within Maldives, or by the State which is responsible for the heliport when located outside the territory of Maldives.

CHAPTER 3. Helicopter performance operating limitations

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CHAPTER 4. Helicopter instruments, equipment and flight documents

4.12 ELECTRONIC FLIGHT BAGS (EFBS)

4.12.1 EFB equipment

Where portable EFBs are used on board a helicopter, the operator shall ensure that they do not affect the performance of the helicopter systems, equipment or the ability to operate the helicopter.

4.12.2 EFB functions

4.12.2.1 Where EFBs are used on board a helicopter the operator shall:

- a) assess the safety risk(s) associated with each EFB function;
- b) establish and document the procedures for the use of, and training requirements for, the device and each EFB function; and
- c) ensure that, in the event of an EFB failure, sufficient information is readily available to the flight crew for the flight to be conducted safely.

4.12.2.2 MCAA shall approve the operational use of EFB functions to be used for the safe operation of helicopters.

4.12.3 EFB operational approval

In approving the operational use of EFBs, the Operator shall ensure that:

- a) the EFB equipment and its associated installation hardware, including interaction with helicopter systems if applicable, meet the appropriate airworthiness certification requirements;
- b) the operator has assessed the safety risks associated with the operations supported by the EFB function(s);
- c) the operator has established requirements for redundancy of the information (if appropriate) contained and displayed by the EFB function(s);
- d) the operator has established and documented procedures for the management of the EFB function(s) including any databases it may use; and
- e) the operator has established and documented the procedures for the use of, and training requirements for the EFB function(s).

CHAPTER 5. Helicopter communication, navigation and surveillance equipment

5.5 ELECTRONIC NAVIGATION DATA MANAGEMENT

- 5.5.1 The operator shall not employ electronic navigation data products that have been processed for application in the air and on the ground, unless MCAA has approved the operator's procedures for ensuring that the process applied and the products delivered have met acceptable standards of integrity and that the products are compatible with the intended function of the existing equipment. MCAA shall ensure that the operator continues to monitor both the process and products.
- 5.5.2 The operator shall implement procedures that ensure the timely distribution and insertion of current and unaltered electronic navigation data to all necessary aircraft.

CHAPTER 6. Helicopter maintenance

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CHAPTER 7. Helicopter flight crew

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7 Other Matters

CHAPTER 1. Communicable diseases

- 1.1 The pilot-in-command of an aircraft shall ensure that a suspected communicable disease is reported promptly to air traffic control, in order to facilitate provision for the presence of any special medical personnel and equipment necessary for the management of public health risks on arrival. (*Annex-9 8.15*)
- 1.2 The flight crew of an en-route aircraft shall, upon identifying a suspected case(s) of communicable disease, or other public health risk, on board the aircraft, promptly notify the ATS unit with which the pilot is communicating, the information listed below: (*Doc-4444*)
- a) aircraft identification;
 - b) departure aerodrome;
 - c) destination aerodrome;
 - d) estimated time of arrival;
 - e) number of persons on board;
 - f) number of suspected case(s) on board; and
 - g) nature of the public health risk, if known.

8. Effectivity

This circular will come into force on 01 May 2025.

For the Civil Aviation Authority
Hussain Jaleel
Chief Executive