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AIR NAVIGATION ACT (CHAPTER 6)

AIR NAVIGATION (135 — COMMERCIAL AIR TRANSPORT BY HELICOPTERS AND SMALL AEROPLANES) (AMENDMENT NO. 2) REGULATIONS 2018

In exercise of the powers conferred by section 3A of the Air Navigation Act, the Civil Aviation Authority of Singapore, with the approval of the Minister for Transport, makes the following Regulations:

Citation and commencement

1. These Regulations are the Air Navigation (135 — Commercial Air Transport by Helicopters and Small Aeroplanes) (Amendment No. 2) Regulations 2018 and come into operation on 24 November 2018.

Amendment of regulation 43

2. Regulation 43(1) of the Air Navigation (135 — Commercial Air Transport by Helicopters and Small Aeroplanes) Regulations 2018 (G.N. No. S 445/2018) (called in these Regulations the principal Regulations) is amended by deleting the word “operator” and substituting the word “holder”.

Amendment of regulation 57

3. Regulation 57 of the principal Regulations is amended by deleting paragraph (2) and substituting the following paragraph:

“(2) An AOC holder must ensure that a helicopter (regardless of whether any of its rotors are turning or stationary) is not refuelled or defueled —

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- (a) when a passenger is embarking, disembarking or on board the helicopter; or
 - (b) when the oxygen supply for the helicopter is being replenished,

except under and in accordance with a specific authorisation granted to the AOC holder by the Director-General of Civil Aviation that specifies the conditions under which such refuelling or defuelling may be carried out.”.

Amendment of regulation 68

4. Regulation 68 of the principal Regulations is amended by deleting paragraph (3) and substituting the following paragraph:

“(3) For every flight or sector of a multi-sector flight of a relevant aircraft, the AOC holder must ensure that the load sheet for that flight or sector contains the following information:

- (a) the date of the operation;
- (b) the aircraft registration;
- (c) the flight number;
- (d) the departure aerodrome and the destination aerodrome;
- (e) the total number of crew members;
- (f) evidence that the centre of gravity of the aircraft is within specified limits, except when the AOC holder records this information in another document;
- (g) the actual mass of the aircraft for the operation, including the aircraft’s actual zero fuel mass, take-off mass and landing mass for the operation;
- (h) the maximum allowable mass for the operation, including the maximum allowable zero fuel mass, take-off mass and landing mass for the operation;
- (i) the actual mass of take-off fuel and trip fuel;
- (j) the difference between the allowed traffic load mass and the actual traffic load mass;

- (k) the total number of seats in each class occupied by passengers;
- (l) the total number of passengers on board the aircraft;
- (m) the edition of the load sheet used for that flight, if the load sheet is in an electronic format.”.

Amendment of regulation 92

5. Regulation 92 of the principal Regulations is amended by deleting paragraph (6) and substituting the following paragraph:

“(6) Where an aeroplane to be flown at night, or in accordance with the Instrument Flight Rules, is to be operated by a single pilot pursuant to regulation 129(2), the AOC holder must ensure that the aeroplane is equipped with —

- (a) a serviceable autopilot with at least altitude and heading modes; and
- (b) a means of displaying charts that enables the charts to be readable in the available lighting.”.

Deletion and substitution of regulation 116

6. Regulation 116 of the principal Regulations is deleted and the following regulation substituted therefor:

“Flight recorders — flight data recorders and alternatives

116.—(1) An AOC holder must ensure that every small aeroplane that corresponds to one of the following descriptions is equipped with a flight data recorder of the type specified for an aeroplane of that description:

- (a) for a multi-engine turbine-powered aeroplane with an MCTOM not exceeding 5,700 kg, for which the Certificate of Airworthiness was first issued on or after 1 January 1990 but before 1 January 2016 — an FDR that records at least the first 16 parameters specified in Table 1-1 of the Aviation Specifications 2 — Flight Recorders issued by the Director-General of Civil Aviation;

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- (b) for a turbine-engined aeroplane with an MCTOM not exceeding 5,700 kg, for which the Certificate of Airworthiness was first issued on or after 1 January 2016 — one of the following flight data recorders:
- (i) an FDR that records at least the first 16 parameters specified in Table 1-1 of the Aviation Specifications 2 — Flight Recorders;
 - (ii) a Class C airborne image recorder (AIR) or airborne image recording system (AIRS) that records at least the flight path and speed parameters displayed to the pilot, as defined in the Aviation Specifications 2 — Flight Recorders;
 - (iii) an aircraft data recording system (ADRS) that records at least the first 7 parameters specified in Table 1-3 of the Aviation Specifications 2 — Flight Recorders;
- (c) for an aeroplane with an MCTOM exceeding 5,700 kg but not exceeding 27,000 kg, for which the Certificate of Airworthiness was first issued on or before 1 January 2005 — an FDR that records at least the first 16 parameters specified in Table 1-1 of the Aviation Specifications 2 — Flight Recorders;
- (d) for an aeroplane with an MCTOM exceeding 5,700 kg, for which the Certificate of Airworthiness was first issued after 1 January 2005 and the application for type certification was submitted to a Contracting State before 1 January 2023 — an FDR that records at least the first 78 parameters specified in Table 1-1 of the Aviation Specifications 2 — Flight Recorders;
- (e) for an aeroplane with an MCTOM exceeding 5,700 kg, for which the application for type certification was first submitted to a Contracting State on or after 1 January 2023 — an FDR that records at least the first 82 parameters specified in

Table 1-1 of the Aviation Specifications 2 — Flight Recorders.

(2) An AOC holder must ensure that every helicopter that corresponds to one of the following descriptions is equipped with a flight data recorder of the type specified for a helicopter of that description:

- (a) for a helicopter with an MCTOM exceeding 3,175 kg but not exceeding 7,000 kg, for which the Certificate of Airworthiness is first issued on or after 1 January 1989 but before 1 January 2016 — an FDR that records at least the first 15 parameters specified in Table 2-1 of the Aviation Specifications 2 — Flight Recorders;
- (b) for a helicopter with an MCTOM exceeding 7,000 kg, for which the Certificate of Airworthiness was first issued on or after 1 January 1989 but before 1 January 2016 — an FDR that records at least the first 30 parameters specified in Table 2-1 of the Aviation Specifications 2 — Flight Recorders;
- (c) for a helicopter with an MAPSC exceeding 19, for which the Certificate of Airworthiness was first issued on or after 1 January 1989 — an FDR that records at least the first 30 parameters specified in Table 2-1 of the Aviation Specifications 2 — Flight Recorders;
- (d) for a turbine-engined helicopter with an MCTOM exceeding 2,250 kg but not exceeding 3,175 kg, for which the application for type certification was first submitted to a Contracting State on or after 1 January 2018 — one of the following flight data recorders:
 - (i) an FDR that records at least the first 48 parameters specified in Table 2-1 of the Aviation Specifications 2 — Flight Recorders;
 - (ii) a Class C AIR or AIRS that records at least the flight path and speed parameters displayed to

the pilot, as defined in the Aviation Specifications 2 — Flight Recorders;

- (iii) an ADRS that records at least the first 7 parameters specified in Table 1-3 of the Aviation Specifications 2 — Flight Recorders;
- (e) for a helicopter with an MCTOM exceeding 3,175 kg, for which the Certificate of Airworthiness was first issued on or after 1 January 2016 and the application for type certification was submitted before 1 January 2023 — an FDR that records at least the first 48 parameters specified in Table 2-1 of the Aviation Specifications 2 — Flight Recorders;
- (f) for a helicopter with an MCTOM exceeding 3,175 kg, for which the application for type certification was first submitted to a Contracting State on or after 1 January 2023 — an FDR that records at least the first 53 parameters specified in Table 2-1 of the Aviation Specifications 2 — Flight Recorders.

(3) Where a relevant aircraft is equipped with any FDR, ADRS, AIR or AIRS, the AOC holder must ensure that the FDR, ADRS, AIR or AIRS (as the case may be) does not use any of the following types of recording technology:

- (a) engraving metal foil;
- (b) frequency modulation;
- (c) photographic film;
- (d) magnetic tape.”.

Amendment of regulation 117

7. Regulation 117 of the principal Regulations is amended —

- (a) by deleting the words “for which the Certificate of Airworthiness was first issued before 1 January 1987” in paragraph (1)(d); and
- (b) by deleting paragraph (4) and substituting the following paragraph:

“(4) Where a relevant aircraft is equipped with any cockpit voice recorder (CVR) or cockpit audio recording system (CARS), the AOC holder must ensure that the CVR or CARS (as the case may be) does not use any of the following types of recording technology:

- (a) magnetic tape;
- (b) wire.”.

Amendment of regulation 118

8. Regulation 118(1) of the principal Regulations is amended by inserting, immediately before the words “flight recorder”, the word “crash-protected”.

Amendment of regulation 153

9. Regulation 153(2) of the principal Regulations is amended by deleting the word “operator’s” and substituting the words “AOC holder’s”.

Amendment of regulation 171

10. Regulation 171(2) of the principal Regulations is amended by deleting the words “duty period and rest period limitations” in sub-paragraph (a) and substituting the words “duty period limitations and rest period requirements”.

Amendment of First Schedule

11. The First Schedule to the principal Regulations is amended by deleting the definition of “Flight duty period” and substituting the following definition:

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

Amendment of Fourth Schedule

12. Paragraph 2 of the Fourth Schedule to the principal Regulations is amended by deleting sub-paragraph (zi) and substituting the following sub-paragraph:

“(zi) the information and instructions on the carriage of dangerous goods;”.

[G.N. No. S 681/2018]

Made on 19 November 2018.

EDMUND CHENG WAI WING
Chairman,
Civil Aviation Authority of
Singapore.

[LE/LGN/A1.8; AG/LLRD/SL/6/2010/11 Vol. 8]

(To be presented to Parliament under section 3A(8) of the Air Navigation Act).