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AIR NAVIGATION ACT (CHAPTER 6)

AIR NAVIGATION (125 — COMPLEX GENERAL AVIATION) (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 (125 — Complex General Aviation) (Amendment No. 2) Regulations 2018 and come into operation on 24 November 2018.

Deletion and substitution of regulation 90

2. Regulation 90 of the Air Navigation (125 — Complex General Aviation) Regulations 2018 (G.N. No. S 501/2018) (called in these Regulations the principal Regulations) is deleted and the following regulation substituted therefor:

"Flight recorders — flight data recorders and alternatives

- **90.**—(1) A CGAC holder must ensure that every aeroplane that it operates for complex general aviation operations, and which 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;
- (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 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 32 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 Certificate of Airworthiness was first issued after 1 January 2005 and for which the

- application for type certification was first 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;
- (f) 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) A CGAC holder must ensure that every helicopter, that it operates for complex general aviation operations, and which 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 was 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 helicopter with an MCTOM exceeding 3,175 kg, for which the Certificate of Airworthiness was first issued on or after 1 January 2016 an FDR that records at least the first 48 parameters specified in Table 2-1 of the Aviation Specifications 2 Flight Recorders.
- (3) Where an aircraft that a CGAC holder operates for complex general aviation operations is equipped with any FDR, ADRS, AIR or AIRS, the CGAC 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 91

- 3. Regulation 91 of the principal Regulations is amended
 - (a) by inserting, immediately after the words "with an MCTOM not exceeding 5,700 kg or" in paragraph (1)(b), the word "for";
 - (b) by deleting the words "for which the Certificate of Airworthiness was first issued before 1 January 1987" in paragraph (1)(d); and
 - (c) by deleting paragraph (4) and substituting the following paragraph:
 - "(4) Where an aircraft that a CGAC holder operates for complex general aviation operations is equipped with any cockpit voice recorder or any cockpit audio recording system, the CGAC holder must ensure that the cockpit voice recorder or cockpit audio recording system (as the case may be) does not use any of the following types of recording technology:

- (a) magnetic tape;
- (b) wire.".

Amendment of regulation 92

4. Regulation 92(1) of the principal Regulations is amended by inserting, immediately before the words "flight recorder", the word "crash-protected".

Amendment of regulation 113

5. Regulation 113(3) of the principal Regulations is amended by deleting the word "operator's" in sub-paragraph (*d*) and substituting the words "CGAC holder's".

[G.N. No. S 680/2018]

Made on 19 November 2018.

EDMUND CHENG WAI WING

Chairman, Civil Aviation Authority of Singapore.

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