



Australian Government

Civil Aviation Safety Authority

Instrument number CASA EX30/18

I, SHANE PATRICK CARMODY, Director of Aviation Safety, on behalf of CASA, make this instrument under paragraph 157 (4) (b) of the *Civil Aviation Regulations 1988* and regulations 11.160, 11.205 and 11.245 of the *Civil Aviation Safety Regulations 1998*.

[Signed S. Carmody]

Shane Carmody
Director of Aviation Safety

16 March 2018

CASA EX30/18 — Aviation Fire Fighting Using NVIS (Coulson Aviation) Instrument 2018

1 Name

This instrument is the *CASA EX30/18 — Aviation Fire Fighting Using NVIS (Coulson Aviation) Instrument 2018*.

2 Definitions

Note In this instrument certain terms and expressions have the same meaning as they have in the *Civil Aviation Act 1988* and the regulations. These include: *FAA* and *AOC*.

(1) In this instrument:

CAO 82.6 means *Civil Aviation Order 82.6 (Night vision imaging system — helicopters) 2007*, as in force from time to time.

Coulson Aviation means Coulson Aviation Australia Pty Ltd, ARN 786315, as the holder of AOC CASA.TDAOC.0044 and AOC CASA.TDAOC.0048.

Coulson Aviation foreign pilot means the following persons:

- (a) Aaron Lighter, FAA licence number ATP 2709226;
- (b) David Duane Theissen, FAA licence number ATP 3749209;
- (c) Walter James Tarnowski, licence number ATP 321887 issued by Transport Canada.

Coulson Aviation NVIS operation means an operation conducted by Coulson Aviation in a foreign firefighting helicopter piloted by one or more Coulson Aviation foreign pilots using NVIS that involves one or more of the following:

- (a) aerial fire fighting;
- (b) an operation substantially similar to aerial fire fighting, and that uses water collected from an open water source;
- (c) aerial fire fighting support;
- (d) a positioning flight.

foreign firefighting helicopter means the following aircraft:

- (a) Sikorsky S61N model helicopter serial number 61363, registered in the United States of America on the day this instrument is signed as N161CG;
- (b) Sikorsky S61N model helicopter serial number 61257, registered in Canada on the day this instrument is signed as C-FIRX;
- (c) Sikorsky S76B model helicopter serial number 760355, registered in Canada on the day this instrument is signed as C-FIRW.

helicopter underwater escape training means training, for the occupants of a helicopter, in emergency response knowledge and skills required in the event of a helicopter ditching emergency to ensure that the occupant can evacuate from the helicopter.

open water source means a dam, lake, sea or other body of water that is open to the sky.

positioning flight has the same meaning as in subparagraph (i) of the definition of **NVIS operation** in CAO 82.6.

safety case means *Night NVIS suppression operations trial – risk analysis Coulson Aviation (Australia) Pty Ltd*, Revision 1, dated 1 November 2017.

- (2) In this instrument the following terms have the meaning as defined in CAO 82.6: **aerial fire fighting, aerial fire fighting support, conforming HLS, fire mapping, NVIS operation, NVIS pilot.**

3 Application

This instrument applies in relation to Coulson Aviation if it is approved to use NVIS under clause 2 of Appendix 1 to CAO 82.6.

4 Exemptions — Coulson Aviation

- (1) For regulation 11.160 of CASR, Coulson Aviation is exempt from compliance with the following provisions of CAO 82.6 in relation to a Coulson Aviation NVIS operation:
 - (a) paragraphs 8.1 and 9.1, paragraph 1 (a) of Appendix 1, and clause 6 of Appendix 3, to the extent that the provisions require Coulson Aviation to ensure, in relation to the operation:
 - (i) that a Coulson Aviation foreign pilot complies with the requirements of paragraph 5.3 (b), and subclause 11.1, of Appendix 1 to CAO 82.6; and
 - (ii) compliance with the matters mentioned in paragraphs (b) to (g);
 - (b) paragraph 5.3 (a) of Appendix 1, to the extent that the subclause prohibits Coulson Aviation to use a Coulson Aviation foreign pilot in the operation;
 - (c) paragraph 5.4 (b) of Appendix 1;
 - (d) subclause 4.1.1 of Appendix 2;
 - (e) subclause 3A.5 of Appendix 3;
 - (f) subclause 5.1 of Appendix 3;
 - (g) paragraph 8.4A (a) of Appendix 3, to the extent that the paragraph relates to fire mapping.
- (2) For regulation 11.205 of CASR, the exemption in subsection (1) is subject to the conditions in section 7.

- (3) For regulation 11.205 of CASR, the exemption in paragraph (1) (g) is also subject to the condition in section 8.
- (4) For regulation 11.160 of CASR, Coulson Aviation is exempt from compliance with subregulation 217 (1) of CAR to the extent that the subregulation requires Coulson Aviation to provide a training and checking organisation in relation to a Coulson Aviation foreign pilot conducting Coulson Aviation NVIS operations.
- (5) For regulation 11.160 of CASR, Coulson Aviation is exempt from compliance with CAO 82.6 to the extent that it prohibits the use of water collected in a foreign firefighting helicopter from an open water source to conduct aerial firefighting in the course of a Coulson Aviation NVIS operation.
- (6) For regulation 11.205 of CASR, the exemption in subsection (5) is subject to the conditions in section 9.

5 Direction

For regulation 11.245 of CASR, during a Coulson Aviation NVIS operation, I direct Coulson Aviation to use only an NVIS that is mentioned as approved or accepted for civil aviation use by CASA in section 4 of Airworthiness Bulletin 25-031, Issue 3, dated 17 February 2017.

6 Exemption and permission — pilot in command of Coulson Aviation NVIS operations

- (1) For regulation 11.160 of CASR, a Coulson Aviation foreign pilot in command of a Coulson Aviation NVIS operation is exempt from compliance with subregulation 174B (1) of CAR if the operation does not involve fire mapping.
- (2) For paragraph 157 (4) (b) of CAR, a Coulson Aviation foreign pilot in command of a Coulson Aviation NVIS operation is permitted to fly the helicopter below the height prescribed in subregulation 157 (1) of CAR.

7 Conditions — general

- (1) Coulson Aviation must ensure that:
 - (a) a Coulson Aviation NVIS operation is conducted in a manner consistent with the safety case, including the risk assessment and mitigation measures; and
 - (b) Coulson Aviation personnel comply with their obligations under subregulation 215 (9) of CAR in relation to a Coulson Aviation NVIS operation; and
 - (c) a Coulson Aviation foreign pilot does not conduct more than 5 hours of flight time in NVIS operations on a particular night.
- (2) Coulson Aviation must:
 - (a) not implement any change to its operations manual that affects the conduct of a Coulson Aviation NVIS operation unless the change has been approved in writing by CASA; and
 - (b) include a copy of this instrument in its operations manual.

Note The operations manual current at the date this instrument is signed is the *Coulson Aircrane Limited Rotary Wing Division, Company Operations Manual*, Revision 2, dated 15 December 2017.

8 Condition — fire mapping

Coulson Aviation must ensure that a foreign firefighting helicopter engaged in fire mapping takes off and lands at a conforming HLS.

9 Conditions — collection from open water sources

- (1) Before using an open water source for the collection of water in a foreign firefighting helicopter, Coulson Aviation must survey the water source:
 - (a) by day in V.M.C.; and
 - (b) on the day of the intended operation; and
 - (c) in order to assess the water source for hazards to the collection operation, and the identification of appropriate approach and departure paths.

Note The survey condition operates with instructions in the Coulson Aviation operations manual to ensure that open water sources are only used when safe to do so after a risk assessment.

- (2) Coulson Aviation must ensure that:
 - (a) water is collected in a foreign firefighting helicopter from an open water source using a collection system that is integrated into the helicopter; and
 - (b) water is not collected in a foreign firefighting helicopter from an open water source into a container that is suspended from the helicopter.
- (3) Coulson Aviation must ensure that a Coulson Aviation foreign pilot collecting water from an open water source has successfully completed helicopter underwater escape training within the period of 3 years preceding the collection operation.
- (4) Coulson Aviation must ensure that a Coulson Aviation NVIS operation that is substantially similar to aerial fire fighting, and that uses water collected from an open water source, is conducted in accordance with the provisions of CAO 82.6 that apply to Coulson Aviation as if the operation was aerial fire fighting.

10 Repeal

This instrument is repealed at the end of 30 April 2019.
