



# Australian Government

## Civil Aviation Safety Authority

I, SHANE PATRICK CARMODY, Director of Aviation Safety, on behalf of CASA, make this instrument under paragraph 28BA (1) (b) and subsection 98 (4A) of the *Civil Aviation Act 1988*, subregulations 5 (1A), 172 (2A) and (3), 207 (2), 215 (3) and 217 (1) of the *Civil Aviation Regulations 1988*, regulations 11.160 and 11.245 of the *Civil Aviation Safety Regulations 1998*, and subsection 33 (3) of the *Acts Interpretation Act 1901*.

### [Signed S. Carmody]

Shane Carmody

Director of Aviation Safety

27 September 2020

## Civil Aviation Order 82.6 Amendment Instrument 2020 (No. 1)

### 1 Name of instrument

This instrument is the *Civil Aviation Order 82.6 Amendment Instrument 2020 (No. 1)*.

### 2 Commencement

This instrument commences on the day it is registered.

### 3 Amendment of Civil Aviation Order 82.6

Schedule 1 amends *Civil Aviation Order 82.6 (Night vision imaging system — helicopters) 2007 (as amended)*.

## Schedule 1 Amendments

### [1] Subsection 1, definition of *LSALT*

*repeal and substitute*

*lowest safe altitude*, or *LSALT*, has the same meaning as in the CASR Dictionary.

*Note* Under Part 1 of the CASR Dictionary, *lowest safe altitude* (LSALT) has the same meaning as in the AIP.

### [2] Subsection 1, definition of *special fire endorsement*

*repeal*

### [3] Subsection 1, Definitions

*insert*

*disaster or emergency relief* means an operation:

- (a) by an operator who has been requested, by the government of a State or Territory which has declared a disaster or a state of emergency, to carry out

an operation requiring use of NVIS to assist in controlling, mitigating or managing the effects of the disaster or emergency; and

(b) that is not otherwise an NVIS operation under this Order.

***IFR capable***, for a helicopter, means that the aircraft is:

- (a) equipped for IFR flight in accordance with the regulations; and
- (b) operated by a crew who meet the relevant requirements for IFR flight under Part 61 of CASR 1998.

***NVFR capable***, for a helicopter, means that the aircraft is:

- (a) equipped for flight in night VMC in accordance with the regulations; and
- (b) operated by a crew who meet the relevant requirements for NVFR flight under Part 61 of CASR 1998.

***NVIS co-pilot*** means a person who:

- (a) is the holder of an NVIS rating with an NVIS endorsement in accordance with Part 61 of CASR 1998; and
- (b) is not an NVIS PIC, an NVIS PICUS or an NVIS pilot dual.

***the regulations*** means CASR 1998 and CAR 1988.

**[4] Subsection 1, definition of *NVIS operation*, the chapeau**

*omit*

under the VFR

*insert*

under the VFR or the IFR

**[5] Subsection 1, definition of *NVIS operation*, after paragraph (e)**

*insert*

(ea) disaster or emergency relief;

**[6] After subsection 1**

*insert*

**1A Clarifying definition**

In this Order, to remove doubt, the abbreviations IFR, IMC, VFR and VMC have the same meaning as I.F.R., I.M.C., V.F.R., and V.M.C., respectively.

**[7] Paragraph 4.2**

*repeal and substitute*

- 4.2 Paragraph 4.1 does not apply to an NVIS operator who uses a Part 142 operator to ensure that each of the NVIS operator's NVIS pilots maintains his or her competency.

**[8] Paragraph 4.3**

*repeal and substitute*

- 4.3 For subregulation 217 (1) of CAR 1988, CASA specifies that an NVIS operator who uses an NVIS aircrew member in an NVIS operation must provide a TCO to ensure that each of the NVIS aircrew members maintains his or her competency.

**[9] Subsections 6, 7 and 7A**

*repeal and substitute*

**6 Exemption — minimum height for VFR flights at night**

Under regulation 11.160 of CASR 1998, the pilot in command of a helicopter who holds an NVIS rating is exempt from compliance with subregulation 174B (1) of CAR 1988 if:

- (a) he or she is engaged in:
  - (i) an NVIS operation other than aerial fire fighting support; or
  - (ii) aerial fire fighting support that is limited to the carriage of persons to map, locate, or observe fires (***fire mapping***) in an operation based on the operator's safety case and approved in writing by CASA; and

*Note* If acceptable to CASA, an operational safety case may be in the form of, or include, relevant additions or supplements to the operator's operations manual for the aerial fire fighting support.
- (b) he or she uses NVIS for the operation in accordance with this Order and the operator's operations manual; and
- (c) it is operationally necessary to fly below the relevant LSALT that would apply but for this exemption.

**6A Exemption — minimum height for IFR flights at night**

Under regulation 11.160 of CASR 1998, the pilot in command of a helicopter who holds an NVIS rating is exempt from compliance with regulation 178 of CAR 1988 if:

- (a) he or she is engaged in:
  - (i) an NVIS operation under the IFR, other than aerial fire fighting support; or
  - (ii) aerial fire fighting support, under the IFR, that is limited to the carriage of persons to map, locate, or observe fires (***fire mapping***) in an operation, based on the operator's safety case, and approved in writing by CASA; and

*Note* If acceptable to CASA, an operational safety case may be in the form of, or include, relevant additions or supplements to the operator's operations manual for the aerial fire fighting support.
- (b) he or she uses NVIS for the operation in accordance with this Order and the operator's operations manual; and
- (c) it is operationally necessary to fly below the relevant LSALT that would apply but for this exemption; and
- (d) the NVIS operation is conducted in VMC in accordance with:
  - (i) clause 10 in Appendix 3 of this CAO; and
  - (ii) either:
    - (A) instrument CASA 143/10, as if it applied to the operation; or
    - (B) clauses 10A and 11 in Appendix 3 as if they applied to the operation — but only to the extent that such compliance would be inconsistent with a distance for flight visibility, or vertical and horizontal distances from cloud, specified in instrument CASA 143/10.

## **6B Exemption — distance for flight visibility and distance from cloud**

6B.1 Under regulation 11.160 of CASR 1998, the pilot in command of a rotorcraft in an NVIS operation under the VFR is exempt from subregulation 172 (2) of CAR 1988 but only to the extent mentioned in paragraph 6B.2.

6B.2 For paragraph 6B.1, the exemption extends only to the extent that compliance with a distance for flight visibility or vertical and horizontal distances from cloud, under clauses 10A and 11 in Appendix 3, would be inconsistent with a distance for flight visibility, and vertical and horizontal distances from cloud, specified in instrument CASA 143/10.

*Note* Instrument CASA 143/10 is relevantly made under subregulation 172 (2A) of CAR 1988 for paragraphs 172 (2) (a) and (b).

## **7 Exemption — navigation lights**

Under regulation 11.160 of CASR 1998, the NVIS operator and the pilot in command of a helicopter in an NVIS operation are each exempt from compliance with subregulation 195 (1) of CAR 1988 for a navigation lighting requirement of Part 13 of CAR 1988 if he or she is complying with a lighting requirement of this Order that is at variance with the requirement of Part 13.

*Note* The pilot in command should put a note in the free text section of the flight notification to advise air traffic control that he or she is goggle equipped and may be operating without displaying lights.

## **7A Exemption — carriage of passengers in NVIS operations**

Under regulation 11.160 of CASR 1998, the pilot in command of a helicopter in an NVIS operation is exempt from compliance with regulation 249 of CAR 1988 but only to the extent that, if a passenger is carried, the carriage must be solely for the purposes of, and strictly in accordance with, the requirements of this Order.

## **[10] Appendix 1, subclause 5.1**

*repeal and substitute*

5.1 An NVIS operation must be conducted at, or above, LSALT unless permitted otherwise in accordance with this Order.

*Note* Subsection 6 contains an exemption in relation to minimum height for VFR flights at night. Subsection 6A contains an exemption in relation to minimum height for IFR flights at night.

## **[11] Appendix 1, subclause 5.2, including the Note**

*repeal*

## **[12] Appendix 1, subclause 5.4**

*repeal*

## **[13] Appendix 1, clause 11**

*repeal and substitute*

## **11 Requirements before commencing an NVIS operation**

Before commencing an NVIS operation, the operator must ensure that the pilot of the aircraft holds an NVIS rating and an NVIS endorsement for the operation in accordance with Part 61 of CASR 1998.

**[14] Appendix 1, subclause 14.4**

*repeal and substitute*

14.2 A NVIS aircrew member qualification for any particular NVIS operation may only be awarded:

- (a) in accordance with the procedures for such an award set out in the operations manual of an NVIS operator approved for the particular NVIS operation; and
- (b) by an NVIS aircrew member instructor of the NVIS operator's TCO.

*Note* An NVIS aircrew member qualification may be awarded to cover more than one particular NVIS operation but only if the NVIS operator is approved for each of the operations, and the operations manual contains relevant procedures for multiple awards.

**[15] Appendix 2, subclause 4.3.2**

*repeal and substitute*

**4.3.2 Post-NVIS endorsement requirements**

Post-NVIS endorsement experience required before a person may be a pilot in command of any particular NVIS operation, including the following:

- (a) the minimum pilot experience for the particular NVIS operation;
- (b) the training required to ensure that the pilot is competent to conduct the NVIS operation;
- (c) the requirements and authorisations for the pilot who is to conduct the training;

licencing requirements under Part 61 of CASR (e) what (if any) additional recency is required for the particular NVIS operation.

**[16] Appendix 2, after paragraph 4.3.8 (b)**

*insert*

- (c) Appropriate lighting requirements for a relevant alternate HLS to ensure compliance with clause 11A of Appendix 3, including a statement of the operator's policy for, and the risk management procedures for, operations to which clause 11A of Appendix 3 applies.

**[17] Appendix 3, paragraph 7 (f)**

*repeal and substitute*

- (f) other persons whose presence is required for the purpose of the NVIS operation;

**[18] Appendix 3, subparagraph 7 (g) (ii)**

*repeal and substitute*

- (ii) the passenger:
  - (A) is briefed, orally or in writing, on the risks associated with the flight; and
  - (B) signs an acknowledgement that he or she has been briefed, either orally or in writing (as the case may be) on those risks.

**[19] Appendix 3, clause 7, Note 1**

*repeal and substitute*

*Note 1* For paragraph 7 (f), a person whose presence may be required for the purpose of an NVIS operation is to be determined on the basis of the specific nature of the operation and could include, for example, police, fire fighting, rescue, SES, defence, medical, scientific, nursing, or paramedical personnel; marine pilots in transfer; or persons who are apprehended, evacuated, rescued or being transported as an integral part of the operation.

**[20] Appendix 3, subclause 8.3A**

*repeal and substitute*

8.3A If a single NVIS pilot is the only NVIS crew member for an NVIS operation in an NVFR capable aircraft, he or she must comply with night VFR weather minima and clauses 10 and 10A do not apply.

**[21] Appendix 3, subclause 8.4**

*omit*

qualified (wherever occurring)

**[22] Appendix 3, paragraph 8.4A (a)**

*repeal and substitute*

(a) 1 NVIS pilot;

**[23] Appendix 3, paragraph 8.4A (b)**

*omit*

qualified

**[24] Appendix 3, clause 10**

*repeal and substitute*

**10 NVIS in-flight cloud requirements**

10.1 The minimum in-flight cloud requirements for an NVIS flight are determined as set out in Table 10.1.

**Table 10.1 — In-flight cloud requirements for an NVIS flight**

Item	NVIS helicopter and crew	Kind of NVIS flight	Minimum in-flight cloud requirement
1	NVFR capable	Under the VFR	No more than scattered cloud up to 2 000 ft AGL within 2 NM either side of track.
2	IFR capable	Under the VFR	No more than scattered cloud up to 1 000 ft above the highest obstacle within 2 NM either side of track
		Under the IFR below LSALT	

*Note* *NVFR capable* and *IFR capable* are defined in subsection 1, Definitions.

- 10.2 An operator may apply in writing to CASA to approve minimum in-flight cloud requirements that are lower than those prescribed under item 1 or item 2 in Table 10.1.
- 10.3 CASA may approve lower minimum in-flight cloud requirements if:
- (a) the operator's application includes a detailed risk assessment; and
  - (b) given the risks, approval of lower minimum in-flight cloud requirements (including subject to conditions if required) would not have an adverse effect on aviation safety.
- 10.4 If CASA approves lower minimum in-flight cloud requirements, the requirements for the operation and the CASA approval must be set out in the operator's operations manual.

#### **10A Lower distance from cloud in VMC — Class C airspace**

For subregulation 172 (2A) of CAR 1988, despite a distance from cloud requirement under section 4 and items 2 and 3 in Schedule 1 of instrument CASA 143/10, for an NVIS operation in VMC in Class C airspace, the following standard is determined:

For vertical and horizontal distance from cloud — clear of cloud.
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#### **[25] Appendix 3, clause 11**

*omit*

For an NVIS operation,

*insert*

- 11.1 Subject to subclause 11.2, for an NVIS operation,

#### **[26] Appendix 3, after subclause 11.1 and the Note**

*insert*

- 11.2 Despite subclause 11.1, for subregulation 172 (2A) of CAR 1988, a minimum in-flight visibility requirement of not less than 3 000 m applies (the ***new minimum***) for an NVIS operation in VMC for a particular class of airspace (a ***relevant NVIS operation***) if CASA approves the new minimum under subclause 11.4.
- 11.3 An operator may apply in writing to CASA to approve the new minimum for the relevant NVIS operation.
- 11.4 CASA may approve the new minimum if:
- (a) the operator's application includes a detailed risk assessment; and
  - (b) given the risks, approval (including subject to conditions if required) would not have an adverse effect on aviation safety.
- 11.5 If CASA approves the new minimum, the requirements for the operation and the CASA approval must be set out in the operator's operations manual.

*Note* For subregulation 172 (2B) of CAR 1988, the applicable distances under clause 10A and subclause 11.2 are notified in the AIP or a NOTAM.

**11A Alternate aerodrome lighting requirements**

11A.1 For an NVIS operation that is conducted by a single NVIS pilot as the only NVIS crew member, the pilot must ensure that an alternate HLS, with suitable lighting, is planned for and available.

11A.2 Subclause 11A.1 does not apply if an NVIS operation has:

- (a) at least 2 NVIS pilots; or
- (b) at least 1 NVIS pilot and 1 NVIS aircrew member.

*Note* For operational risk management plans, see also subclause 4.3.1 in Appendix 2.

**[27] Appendix 3, clause 16**

*repeal*

**[28] Appendix 3, subclause 17.1**

*repeal and substitute*

17.1 For subsection 4 of this Order, the competency of an NVIS operator's NVIS pilots must be maintained by the operator through an NVIS training pilot of a TCO or a Part 142 operator, who is an NVIS flight instructor.

**[29] Appendix 3, paragraphs 17.2 (b) and (c)**

*repeal and substitute*

- (b) the holder of an approval under regulation 61.040 of CASR 1998 to conduct the proficiency check.

**[30] Appendix 3, clause 20**

*repeal*

**[31] Appendix 3, subclause 21.1**

*omit*

more than 50 hours of NVIS flight time as an NVIS pilot in command (**PIC**),

*insert*

more than 50 hours of NVIS flight time as one or more of the following, namely, an NVIS pilot in command (**PIC**), NVIS co-pilot,

**[32] Appendix 3, subclause 21.2**

*omit*

50 hours or less of NVIS flight time as an NVIS PIC,

*insert*

50 hours or less of NVIS flight time as one or more of the following, namely, an NVIS PIC, NVIS co-pilot,

**[33] Appendix 3, clause 22, Table 22.1, each column of the row for NVIS CCF**

*omit*

30 days (wherever occurring)

*insert*

90 days



**[34] Appendix 3, paragraphs 23.1 (b) and (c)**

*repeal and substitute*

- (b) the holder of an approval under regulation 61.040 of CASR 1998 to conduct the proficiency check.
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